

AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2018 Reporting Period

DATA UPDATE

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Acronym List

AB – Assembly Bill

AGL – aboveground live

Board; BOF – California Board of Forestry and Fire Protection

BF – board feet

BLM – Bureau of Land Management

C – carbon

CAL FIRE – California Department of Forestry and Fire Protection

CF – cubic feet

CH₄ - methane

CI – confidence interval

CO - carbon monoxide

CO_{2e} – carbon dioxide equivalent

DBH – diameter at breast height

FF – Forest Land Remaining Forest (IPCC terminology)

FIA – Forest Inventory and Analysis

FIADB – FIA database

FMRL – Forest Management Reference Level

FS – Forest Service

GHG – greenhouse gas

GRM – Growth, Removals and Mortality

HWP – harvested wood product

HWP-use – harvested wood products in use

HWP-SWDS – harvested wood products at a solid waste disposal site

HWP-energy – harvested wood products burned for energy production

HWP-without energy – harvested wood products decayed or burned without energy production

IPCC – Intergovernmental Panel on Climate Change

LF – Forest Land Conversions (IPCC terminology)

MBF – thousand board feet

MMBF – million board feet

MMT – million metric tons

MT – metric tons

NFS – National Forest System

N₂O – nitrous oxide

NO_x - nitrogen oxides

PNW – Pacific Northwest Research Station

SOC – soil organic carbon

SWDS – solid waste disposal site

TBD – to be determined

TPO – Timber Products Output

U-MT BBER - University of Montana's Bureau of Business and Economic Research

USDA – United States Department of Agriculture

USFS – United States Forest Service

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1 Executive summary and key findings

The state of California has enacted a variety of legislation establishing greenhouse gas (GHG) emissions reduction targets. Currently, the state has a net carbon sequestration target for the forest sector of 5 million metric tons (MMT) of carbon dioxide equivalent (CO₂e) annually until 2020, establishing a critical role for California's forests in meeting the state's targets. This data update was provided to inform several elements of the state's effort to meet GHG emissions reduction targets by compiling best-available data on GHG emissions, stock and flux from California's forest sector, identifying critical gaps in data, and suggesting strategies to reduce uncertainty in estimating the magnitude of stocks and flux within the forest sector.

This is the fourth release in a series of annual Assembly Bill (AB) 1504 Forest Ecosystem and Harvested Wood Product (HWP) Carbon Inventory reports to the California Board of Forestry and Fire Protection (also referred to as the Board). Based on the 2018 CA AB 1504 reporting period, California's forests remain net sinks, sequestering 24.9 MMT CO₂e per year. This value includes changes in forest ecosystem pools (26.2 MMT CO₂e per year), harvested wood product pools (0.7 MMT CO₂e per year), non-CO₂ emissions from wildfires (-0.6 MMT CO₂e per year), and forest land conversions (-1.5 MMT CO₂e per year). Net forest carbon sequestration in 2018 is down 3.0 MMT CO₂e when compared to the 2017 reporting period¹.

The 2018 reporting period annual rate of carbon sequestration for just the forest ecosystem pools is 26.2 MMT CO₂e per year. This value is down by approximately 3.0 MMT CO₂e per year from the 2017 reporting period. This reduction in carbon sequestration is the result of several factors including improvements in inventory methodology but is also being driven by two complementary factors; an increased rate of tree mortality and decreased gross growth rate on live trees during the most recent measurement years. Tree mortality regardless of cause, accounted for an additional 2.3 MMT of CO₂e converted to dead wood annually. Gross growth on trees measured 10-years earlier declined by 1.1 MMT CO₂e annually further reducing the net rate of sequestration. Of note, net change in the live tree pool on National Forest System lands decreased by 74% while net change in the standing dead pool increased by 16%. Changes in growth, removals, mortality and flux vary in each region, displaying different patterns amongst each category. Additional work is being completed to assess these differences in more detail.

Forest ecosystem and harvested wood product carbon stocks are approximately 3.2 billion metric tons. For just the forest ecosystem, carbon stocks are approximately 3.1 billion metric

¹ 2017 reporting period: CA net sequestration rate of 27.9 MMT CO₂e per year; includes changes in forest ecosystem pools (29.2 MMT CO₂e per year), harvested wood product pools (0.9 MMT CO₂e per year based on old version of HWP C model), non-CO₂ emissions from wildfires (-0.5 MMT CO₂e per year), and forest land conversions (-1.7 MMT CO₂e per year).

tons. This is a decrease of 0.2 billion metric tons of forest ecosystem carbon compared to the 2017 reporting period primarily due to the improvement of the forest soils estimation methodology. This decrease is attributed to refinements in the Digital General Soil Map of the United States (STATSGO2) dataset where soil orders may have changed in the updated data product, resulting in a structural change in the soil organic carbon estimates for mineral and organic soils across the entire time series (U.S. EPA 2020). However, when the 2017 reporting period is recalculated with the updated SOC method (see table 4.31), 2018 carbon stock represents an increase in line with previous results. Harvested wood products contribute an additional 134.8 MMT C to the forest ecosystem carbon stocks from current and historic harvests going back to 1952. The increase from the previous reporting period's HWP C estimate reflects revisions in input parameters and the model code, discussed further below in the "Improvements" section. When the original 2017 HWP C stocks (133.4 MMT C) are recalculated to reflect the revisions (134.6 MMT C), the 2018 stock represents an increase of 0.2 MMT C.

In many forest types, current stocking levels reflect over a century of fire suppression and may not represent stand densities that are resilient to disturbances common to California forests such as fire or pest outbreaks. Additionally, as the forests age in unharvested stands, growth rates slow. Older forests tend to store more carbon, but they might not accumulate new carbon as quickly as younger, fast-growing stands. Consequently, the stocks and flux represented in this report may not be sustainable into the future without forest management given the uncertainty in potential effects from climate change, the current level of forest disturbances from wildfire and pests, and aging of forests on federal lands. Compared to previous reporting periods, we continue to see drought effects on tree growth and mortality. Forests provide many other services beyond carbon sequestration and storage, so there are many other considerations beyond forest carbon dynamics when developing management actions.

This update includes several minor revisions to correct previous harvested wood product carbon stock and flux estimates. Corrections described below under "Improvements" section.

Key Findings:

FOREST ECOSYSTEM CARBON

Forest land area:

- As of 2018 there are approximately 32 million acres of forest land across all ownerships.
- 16.4 million acres are classified as timberland with an additional 4.2 million acres of productive forest land in reserves.
- The federal government manages 58% of California's forest lands, with the remaining areas under state and local government (3%) or private management (39%) (Figure 2.4).

- Overall there was a net loss of forest land at the rate of 25.9 ± 7.2 thousand acres per year, primarily to developed land-uses (Table 4.8/E1). The confidence interval is high compared to the estimate because it is a relatively rare event at the scale of the inventory.
- Most of the forest land loss occurred on non-productive “other forest” (54%), followed by timberland (41%), with little change occurring on reserved lands (5%).
- Western oak woodlands cover the greatest area of all forest types at approximately 8.8 ± 0.38 million acres, followed by California mixed conifer at approximately 7.9 ± 0.34 million acres (Table 4.11; Appendix 2, Table A17).

Average net annual forest carbon dioxide sequestration - overview:

- Overall California forests are exceeding the 5 MMT CO₂e target rate of annual sequestration established by AB 1504, sequestering 26.9 ± 4.7 MMT CO₂e per year (excludes confidence interval for HWP C flux; Table 7.1). This value includes changes in forest ecosystem pools (26.2 MMT CO₂e per year), harvested wood product pools (0.7 MMT CO₂e per year), non-CO₂ emissions from wildfires (-0.6 MMT CO₂e per year), and forest land conversions (-1.5 MMT CO₂e per year).
- Based on plots initially measured between 2001-2008 and re-measured between 2011-2018, the average statewide rate of forest carbon sequestration is 26.2 ± 4.7 MMT CO₂e per year, excluding net CO₂e contributions from other sources such as, harvested wood products, forest land conversions and non-CO₂ GHG emissions from wildfire (Table 4.1, 4.3).
- Net flux in the soil organic carbon pool is estimated at -0.5 ± 0.6 MMT CO₂e per year (Table 4.1-4.3).
- Combined annual net emissions of non-CO₂ GHGs (methane and nitrous oxide) from wildfire is estimated to be 0.6 ± 0.1 MMT CO₂e per year (Table 4.2a, 4.7).
- Changes in land-use between forest and non-forest land condition is estimated to have a net effect of emitting 1.5 ± 0.9 MMT CO₂e per year (Table 4.2a, 4.9).
- Based on the 2018 measurement period, after accounting for these other CO₂ and greenhouse gas sources the statewide rate of carbon sequestration on all forest land is 27.2 ± 5.0 MMT CO₂e per year (Table 4.2a), down from the 2015 reporting period estimate of 32.8 ± 5.5 MMT CO₂e, the 2016 reporting period estimate of 30.7 ± 5.3 MMT CO₂e and 2017 reporting period estimate of 27.0 ± 5.5 . This value excludes contributions from HWP pools.

Average net annual forest carbon dioxide sequestration – by pool:

- Growth on live trees, including foliage and live roots, makes up 71% of the annual CO₂e flux on all forest land at a net rate of about 19.0 ± 4.1 MMT CO₂e per year (Table 4.3).
- Of the estimated 13.7 MMT CO₂e per year cut within the forest (Table 4.3, 4.6a), approximately 10.0 MMT CO₂e per year in the form of commercial timber was removed from the forest to either be stored long term in durable wood products or emitted from burning (Appendix 3, Table 3.14).

Average net annual forest carbon dioxide sequestration – by owner:

- Individual noncorporate forest land owners provide the largest contribution, accounting for 40% of the statewide annual flux at a rate of 10.4 ± 1.4 MMT CO₂e per year (figure 4.1). While there is only an increase in the rate of 0.1 MMT CO₂e per year from the previous measurement period, this represents a 4% increase in the percent contribution, mainly due to a decrease in the contribution from National Forest System lands.
- The national forests account for 30% of the statewide annual flux at a rate of 7.7 ± 2.7 MMT CO₂e per year (figure 4.1). This represents a decrease of approximately 2.6 MMT CO₂e per year from the previous measurement period, dropping the percent contribution from these lands by 5%.
- Corporate forest land accounts for 19% of the statewide annual flux at a rate of 5.1 ± 3.2 MMT CO₂e per year (figure 4.1). This represents an increase of 0.3 MMT CO₂e per year from the previous measurement period, and a 3% increase in the percent contribution.
- State and local governments contribute 8% of the statewide annual flux at a rate of 2.1 ± 0.7 MMT CO₂e per year (figure 4.1).
- Other federal lands contribute 3% of the statewide annual flux at a rate of 0.9 ± 1.3 MMT CO₂e per year (figure 4.1). This represents a decrease from the previous measurement period of 0.5 MMT CO₂e per year and a 3% decrease in the percent contribution.
- Only on reserved forest lands managed by the Forest Service is live tree growth not currently estimated to exceed carbon losses from the live tree pool due to tree mortality, as in previous measurement cycles (Figure 4.4a, Table 4.4a).
- As in previous measurement cycles, annual gross growth per acre on live trees is currently exceeding all other carbon losses from the live tree pool due to mortality or harvest on unreserved timberland for all ownerships including lands managed by the Forest Service.

- The annual net rate of carbon sequestration per acre in the live tree pool is greatest on timberland owned by state and local government at 4.1 ± 1.9 metric tons of CO₂e per acre per year (Appendix 2, Table B12).
- The next highest annual net rate of carbon sequestration per acre in the live tree pool is on timberland owned by private individuals at 2.5 ± 0.4 metric tons of CO₂e per acre per year (Figure 4.4b, Table 4.4b).
- Trees growing on all ownerships across all of California's forests are sequestering carbon at a net rate of 0.5 ± 0.1 metric tons CO₂e per acre per year (Table 4.4a).

Average net annual forest carbon dioxide sequestration – by region:

- The Sierra/Cascades region has the greatest annual growth in its forests relative to growth from other regions. This region also has the greatest amount of mortality; after accounting for harvest, live trees in the Sierra/Cascades region are still sequestering 3.1 ± 2.6 MMT CO₂e per year. It is no longer the region with the highest net live tree CO₂e flux due to decreases in the growth rate and increases in mortality (figure 4.6). This is down from the 2015 measurement period which estimated a rate of 8.7 ± 3.0 MMT CO₂e per year, the 2016 measurement period which estimated a rate of 7.8 ± 2.7 MMT CO₂e per year, and the 2017 measurement period which estimated a rate of 5.5 ± 2.7 MMT CO₂e per year.
- The North Coast region has the highest net carbon sequestration at 7.7 ± 1.8 MMT CO₂e per year.
- The Southern Coastal Mountains and Deserts region continues to be the only region where tree mortality is exceeding tree growth, resulting in a net carbon reduction of the live tree pool of 0.8 ± 0.4 MMT CO₂e per year (figure 4.6). Further analysis is being conducted to determine why this region is experiencing an annual net loss of CO₂e and will be presented in a later report.

Average net annual forest carbon dioxide sequestration – Forest Practice Districts

- Net annual sequestration from forests in the Northern Forest Practice District is 8.9 ± 2.9 MMT CO₂e (15% lower than 2017 reporting period); in the Southern Forest Practice District net annual forest sequestration is 2.9 ± 1.8 MMT CO₂e (42% lower than 2017 reporting period); and in the Coastal Forest Practice District it is 11.9 ± 2.7 MMT CO₂e (9% lower than 2017 reporting period) (Table 4.2b). These values include change from all forest ecosystem pools and non-CO₂ emissions from wildfires, but does not include change from harvested wood product pools or from forest land use conversions.
- The Southern Forest Practice District is experiencing carbon losses due to mortality primarily on forest land managed by National Forests nearly equaling gross growth on live trees leaving this district susceptible to net carbon loss if the current rate of disturbance increases (Tables 4d, 4e, 4f).

Average net annual forest carbon dioxide sequestration – County

- Mendocino (5.3 ± 1.4 MMT CO₂e per year) and Humboldt (4.9 ± 2.2 MMT CO₂e per year) counties have the highest net carbon sequestration rates for all forest pools (Table 4.6b).
- By county, notable counties estimated in 2018 to have a net loss of forest carbon based on all pools are; Monterey (-0.3 ± 0.6 MMT CO₂e per year), San Bernardino (-0.4 ± 0.3 MMT CO₂e per year), Santa Barbara (-0.2 ± 0.2 MMT CO₂e per year), and Tuolumne (-0.7 ± 1.1 MMT CO₂e per year) (Table 4.6b).

Average net annual forest carbon dioxide sequestration – National Forests

- The Shasta-Trinity National Forest has the highest net annual carbon sequestration rate for all forest pools at approximately 2.2 ± 0.9 MMT CO₂e per year (Table 4.6c).
- There are three national forests in California currently experiencing a net loss of carbon based on all pools; San Bernardino (-0.4 ± 0.3 MMT CO₂e per year), Los Padres (-0.6 ± 0.6 MMT CO₂e per year), Angeles (-0.1 ± 0.2 MMT CO₂e per year) (Table 4.6c).

Carbon stocks for forest land remaining forest land (FF) by pool:

- Currently the is just under 3.1 billion metric tons of carbon stocks stored on forest land including forest soils across all ownerships in California (Table 4.12a, figure 4.9, 4.10).
- Although this number is approximately 173 million metric tons less than the number reported in the previous inventory, the main decrease was due to an improvement in the soil organic carbon pool accounting methodology. When the previous estimates are recalculated with this same improvement, it results in an approximate increase of 4.4 million metric tons of carbon stocks from the prior inventory.
- Approximately one third of this stored carbon is found above ground in the live tree pool (including foliage) ($1,064 \pm 27$ MMT C, Table 4.12a, figure 4.9).
- Forest soils store about 45% of the carbon ($1,400 \pm 17$ MMT C, Table 4.12a, figure 4.9).
- Approximately 7% of the stored carbon is found aboveground in dead wood pools (213 ± 7 MMT C, Table 4.12a, figure 4.9).
- Estimates of carbon on the forest floor was added in 2017 and contributed 136 ± 2 MMT C, Table 4.12a, figure 4.9).

Carbon stocks for forest land remaining forest land (FF) by owner:

- Approximately 65% of the carbon stocks in the state are found on public forest land ($1,992 \pm 40$ MMT C), with approximately 80% of that on National Forest System lands ($1,595 \pm 31$ MMT C) (Table 4.12a, figure 4.8).
- Private corporate forest land contains approximately 17% of the state's carbon stocks (529 ± 28 MMT C, Table 4.12a, figure 4.8).

- Private noncorporate forest land contains approximately 18% of the state's carbon stocks (562 ± 29 MMT C, Table 4.12a, figure 4.8).
- Approximately 60% of the forest carbon stores are found on unreserved timberland (1,843 MMT C, Table 4.12a, Figure 4.10).

Carbon stocks for forest land remaining forest land (FF) by region:

- Nearly half of California's carbon stocks in all carbon pools are found in a single region, the Sierra and Cascade Mountain Ranges. This region represents 47% of the forest land area and contains $1,442 \pm 47$ MMT C (Table 4.19, figure 4.11). The majority of the decrease from the previous reporting period is due to refinements in the SOC accounting method.
- The next largest carbon store, the Klamath Interior and Coast Ranges region has about half the carbon stocks found in the Sierra and Cascades and just over a quarter of those found in the state at 878 ± 44 MMT C (Table 4.17, figure 4.11). The majority of the decrease from the previous reporting period is due to refinements in the SOC accounting method.
- For each of these regions the dead tree and down woody material pools are each about 10% of the live tree carbon pool.

Carbon stocks for forest land remaining forest land (FF) by forest type:

- The California mixed conifer forest type contains the largest carbon stock compared to all other forest types, storing approximately 982 ± 44 MMT C (Table 4.21, Figure 4.12). The decrease from the previous year's estimate is entirely due to refinements in the SOC accounting method; all other pools increased slightly.
- Western oak forests follow with 636 ± 30 MMT C (Table 4.21, Figure 4.12). The decrease from the previous year's estimate is mainly due to refinements in the SOC accounting method; live tree, understory and forest floor pools decreased slightly while the remaining pools increased slightly.
- Notable exceptions of forest types where live tree carbon exceeds soil carbon includes the redwood, Douglas-fir, and tanoak/laurel types.
- Most carbon stocks are found on unreserved timberland for most softwood forest types (Table 4.22, figure 4.13).
- The redwood forest type has the highest carbon density per acre (figure 4.14).
- Regional data by forest type is included in Appendix 1.

Carbon stocks for forest land remaining forest land (FF) by county:

- The counties with the highest carbon stocks are Siskiyou county with 320.5 ± 28.5 MMT C, Humboldt county with 245.7 ± 31.1 MMT C and Trinity county with 224.0 ± 25.7 MMT C.

C (Table 4.12b). Although these numbers are less than the number reported in the previous inventory, the main decrease is likely due to an improvement in the soil organic carbon pool accounting methodology.

Carbon stocks for forest land remaining forest land (FF) by National Forest:

- The Shasta-Trinity National Forest has the highest carbon stocks at 230.7 ± 25.2 MMT C and is also the largest National Forest at approximately 1.9 ± 0.2 million acres. (Table 4.12c) Although these numbers are less than the number reported in the previous inventory, the main decrease is likely due to an improvement in the soil organic carbon pool accounting methodology.

Carbon stocks for forest land remaining forest land (FF) by Forest Practice District:

- The Northern Forest Practice District has the highest carbon stocks at $1,344.7 \pm 45.4$ MMT C (Table 4.12e).
- In the Northern and Southern Forest Practice Districts, carbon on public lands make up the majority of the forest carbon, while in the Coastal Forest Practice District carbon on private lands make up the majority of the forest carbon (Table 4.12d, e, f).

Comparison to the Forest Management Reference Level (FMRL):

- FIA's initial 10-year forest inventory in California installed from 2001 - 2010 is the FMRL basis (i.e., baseline) to evaluate relative changes in California forest carbon stocks between measurement periods.
- Stock-change comparisons to the FMRL cannot determine net flux until the entire 10-year re-measurement period is complete in 2020. The GRM method is used to estimate annual net flux.
- Comparison to the FMRL show that overall California's forest carbon stocks are increasing over time with minor annual variations (table 4.31).

HARVESTED WOOD PRODUCT CARBON

2018 reporting period HWP C estimates for stock and flux reflect revisions in erroneous input parameters (board foot to cubic foot conversion factor for 2013-2018 and end-use ratios for all years) and revisions in the HWP C model code to correct errors resulting in approximately 1% of the carbon disappearing from all storage and emission pools. Revisions are described further below in the "Improvements" section.

HWP C stock

- For the 2018 California AB 1504 reporting period, the average HWP C stock is approximately 78.0 MMT C for products in use (HWP-use), 56.8 MMT C for products in solid waste disposal sites (HWP-SWDS), and approximately 134.8 MMT C for both HWP

pools (see Table 6.5). The majority of the increase from the previous reporting period's estimate of 133.4 MMT C is due to the revisions in the HWP C model. When the 2017 reporting period estimate is recalculated with the revised HWP C model, stocks are slightly higher in the 2018 reporting period. Monte Carlo analysis has not been completed for this data update as the model is currently being revised to correct errors in Monte Carlo analysis.

- For the 2018 California AB 1504 reporting period, carbon stored from privately owned forestland comprises 67% of the HWP C stock at 90.6 MMT C. Carbon stored from harvest originating from USFS forestland comprises 31% of the HWP C stock at 41.7MMT C, with the remainder of the HWP C stocks coming from Tribal, BLM, and State and other public land.

HWP C flux

- For the 2018 California AB 1504 reporting period, the average HWP C flux is approximately -1.3 MMT CO₂e for products in use, 2.0 MMT CO₂e for products in SWDS, and 0.7 MMT CO₂e for all pools (see Table 6.6). The decrease in net HWP C flux from the previous reporting period estimate is due to revisions in the HWP C model. When the 2017 reporting period estimate is recalculated with the revised HWP C model, net flux is slightly higher in the 2018 reporting period.
- For the 2018 California AB 1504 reporting period, for all ownerships, net flux in the products in use pool is negative, representing a shift in HWP C from the products in use pool to the SWDS pool faster than new carbon is being added to the products in use pool.

Harvest

- The weighted average annual harvest values associated with the 2018 California AB 1504 reporting period is approximately 2.7 MMT C (1.6 million MBF). This equates to approximately 10.0 MMT CO₂e per year in the form of commercial timber removed from the forest (Appendix 3, Table 3.14). Based on the forest ecosystem portion of the inventory for the same time period, approximately 13.7 MMT CO₂e per year is cut within the forest (Table 4.6a).

HWP C Emissions

- HWP C emissions data for HWP burned with and without energy capture are not included in forest sector C accounting, but are used in other sectors (i.e., waste, energy). Cumulative emissions associated with these pools (HWP-energy, HWP-without energy) for individual years can be found in table 6.2. However, without a greater understanding

of the reporting timeframes and data needs from these other sectors, additional calculations on HWP emissions are not provided in this report at this time.

Background:

The forest sector carbon data provided in this update comply with the Intergovernmental Panel on Climate Change Tier 3 good practice guidelines for carbon accounting (IPCC 2006, 2014) and are intended to assist the Board in evaluating and monitoring progress on meeting California's forest sector carbon sequestration target. This update can inform policy decision-making, but is not intended to be a complex policy assessment framework. Forest ecosystem carbon stocks and flux are established using direct measurements on forested plots throughout the state of California as part of the United States Department of Agriculture (USDA) Forest Service Forest Inventory and Analysis (FIA) program. Harvested wood product carbon (HWP C) stocks are based on estimates from the California variant of the harvested wood product carbon accounting model based upon the IPCC Tier 3 production accounting approach.

The forest ecosystem data presented in this report are based on the 2009-2018 FIA measurement cycle. Carbon stocks physically present in the forest are based on a 10-year average for the time-period of 2009-2018 and given in metric tons (MT) of carbon (C). The estimates of average annual carbon sequestration (i.e., net flux) is based on plots and trees initially measured between 2001 and 2008 then re-measured 10 years later between 2011 and 2018. Calculating flux based on actual growth, removals and mortality (i.e., the GRM approach) allows for annual reporting and is more statistically robust than a simple stock-change approach.

Harvested wood product carbon estimates include contributions from current and historic harvests going back to 1952, the year annual harvest data was available for all ownerships. Harvested wood product carbon stocks are reported by the HWP C model in the year following harvest, i.e. harvested wood product carbon stock associated with 2018 removals is reported in year 2019. To be consistent with FIA's forest ecosystem ten-year average reporting periods and correspond with 2009-2018 annual harvests, the 10-year average of the HWP C stock for the years 2010-2019 is reported. Harvested wood product carbon flux for the 2018 reporting period is reported as the average annual flux for the eight ten-year intervals of 2002-2012, 2003-2013, 2004-2014, 2005-2015, 2006-2016, 2007-2017, and 2008-2018 2009-2019 to match the removals associated with the 2018 FIA plot remeasurement cycle.

Forest ecosystem and harvested wood product carbon stock and flux results associated with these time periods are referred to as 2018 results, 2018 reporting period results, or 2018 measurement cycle results throughout the report. To more clearly describe the time periods

covered in the stock and flux estimates in this report, please note that the title has been changed to reflect the “2018 reporting period,” rather than specific ranges of years.

In this analysis results of carbon physically present in the forest or in harvested wood products in use or at solid waste disposal sites are given in metric tons (MT) of carbon (C). Results of carbon flux are given in metric tons (MT) of carbon dioxide equivalent (CO₂e). Net changes in individual carbon pools are also shown in units of CO₂e to provide insight into the components of change, even if they aren’t a direct flux with the atmosphere (e.g., tree mortality, which is a conversion from live to dead wood that initially stays in the ecosystem; transition from harvested wood products in use to harvested wood products in solid waste disposal sites). Carbon can be converted to CO₂e by multiplying by 3.667 or the fraction 44/12². Ranges in the text presented for forest ecosystem results (i.e., ±) represent a 95% confidence interval (CI), while values in the tables report the sampling error (SE; CI = 1.96*SE). Confidence intervals around forest ecosystem flux estimates tend to be slightly smaller than in the previous year’s report because estimates are based on more plots (8/10ths of the full cycle compared to 7/10ths).

Reports released to date include:

- [AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2006 – 2015 FINAL REPORT](#) (Christensen et al. 2017).
- [AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2006 – 2015 ERRATUM SHEET](#) (Christensen et al. 2018a).
- [AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2007 – 2016 DATA UPDATE](#) (Christensen et al. 2018b).
- [AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2017 Reporting Period FINAL REPORT](#) (Christensen et al. 2019).
- AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2018 Reporting Period DATA UPDATE (i.e., this report)

Improvements:

Errors found after release of the initial inventory (Christensen et al. 2017) are detailed in Christensen et al. 2018a and are also corrected in subsequent reports. Please note that to compare some results to the initial 2015 report, the erratum must be referred to. Changes to this data update from previous reports include:

² Throughout the forest ecosystem portion of the inventory, results are converted from C to CO₂e by multiplying by 3.667. Throughout the harvested wood product portion of the inventory, results are converted from C to CO₂e by

- Revision of soil organic carbon stock and flux estimates based on refinements in the Digital General Soil Map of the United States (STATSGO2) dataset (U.S. EPA 2020).
- Minor revisions of harvested wood product carbon stock and flux estimates following the discovery of errors in input parameters:
 - The 2013 – 2018 board foot to cubic foot conversion factor was updated to 4.2857 from the value of 3.9594 applied to those years in the previous report – see updated table 5.2; based on information from the most recent 2016 timber products output report (Marcille, et al. in press).
 - Revisions made to end-use product ratios after discovery of rounding errors originating in McKeever (2011). Very small additions and subtractions were made to the “other” end-use category within each primary product category so that the ratios within each primary product category summed to one. This work was completed by Andrew Yost, Oregon Department of Forestry (A. Yost, pers. communication, April 30, 2020).
- Minor revisions of harvested wood product carbon stock and flux estimates following the discovery of errors in the HWP C model code that resulted in two issues: (1) on average, approximately 1% of the initial harvested carbon to disappear from storage pools and remain unaccounted for in emission categories (revisions complete in this update) (2) narrower confidence intervals than expected based on the parameters set for Monte Carlo Uncertainty Analysis (revisions to Monte Carlo Analysis still in progress and not completed in this update). These errors are being corrected through re-coding the model using R-script through an agreement between Oregon Department of Forestry, Oregon State University, and Groom Analytics, LLC.
 - Additionally, in order to allow for better quality assurance of calculations, lag times built into the original model were modified. The model assumes that all trees harvested in a given year are processed within that year and the carbon is distributed according to the end use product ratios of that same year. Most of the carbon is immediately burned or turned into Products in Use. A fraction (the 8% loss factor) is immediately discarded and distributed to the different discard fates using the discarded disposition ratios for the same year. The carbon fate for a given year is reported in the following year. Carbon that enters the model in a given year does not undergo a half-life decay until the following year. For example, the model uses the TPO for 1952 and all product and discard ratios for 1952 to distribute the carbon in Products in Use, products at Solid Waste Disposal Sites (SWDS), and the Burned with and without Energy Capture pools. The sum of those fates for 1952 is recorded in tables as occurring by January 1, 1953. Any carbon from

1952 that was distributed to Products in Use, Landfill, or Dumps was subject to a half-life decay or disposal in 1953 (J. Groom, pers. communication, Aug. 13, 2020). In this way, inputs from harvest into the products in use and solid waste disposal pools, as well as decay from those pools are all reported in the same year. Now, if a single harvest year is being evaluated, sums for all storage and emission pools within an inventory year will sum to the harvested carbon. In the previous iteration of the model, carbon was emitted or wound up in use (e.g., Products in Use) the year after harvest, and that carbon ended up in SWDS the year *after* it was produced as a stock (i.e., shifted two years). Half-life emissions from landfills and dumps occurred the same year as the discarded carbon enters SWDS (the emissions are not lagged a year, just the SWDS stocks). That the fate from one harvest year was recorded the following year and discard and associated decay was not accounted for until the year following that, complicated the ease of verifying the model tracking of harvested carbon through the various fates.

2 Forest ecosystem results: Carbon flux, stock, and trends, select table and figure updates

Table and figure numbers in this section match numbers in the 2017 measurement period report (Christensen et al. 2019). While most of the tables and figures have been replicated here, not all have been as the organization of the report is continuing to be revised. This section is intended to serve as a data update only - detailed discussion associated with the following tables and figures are forthcoming in the next full report.

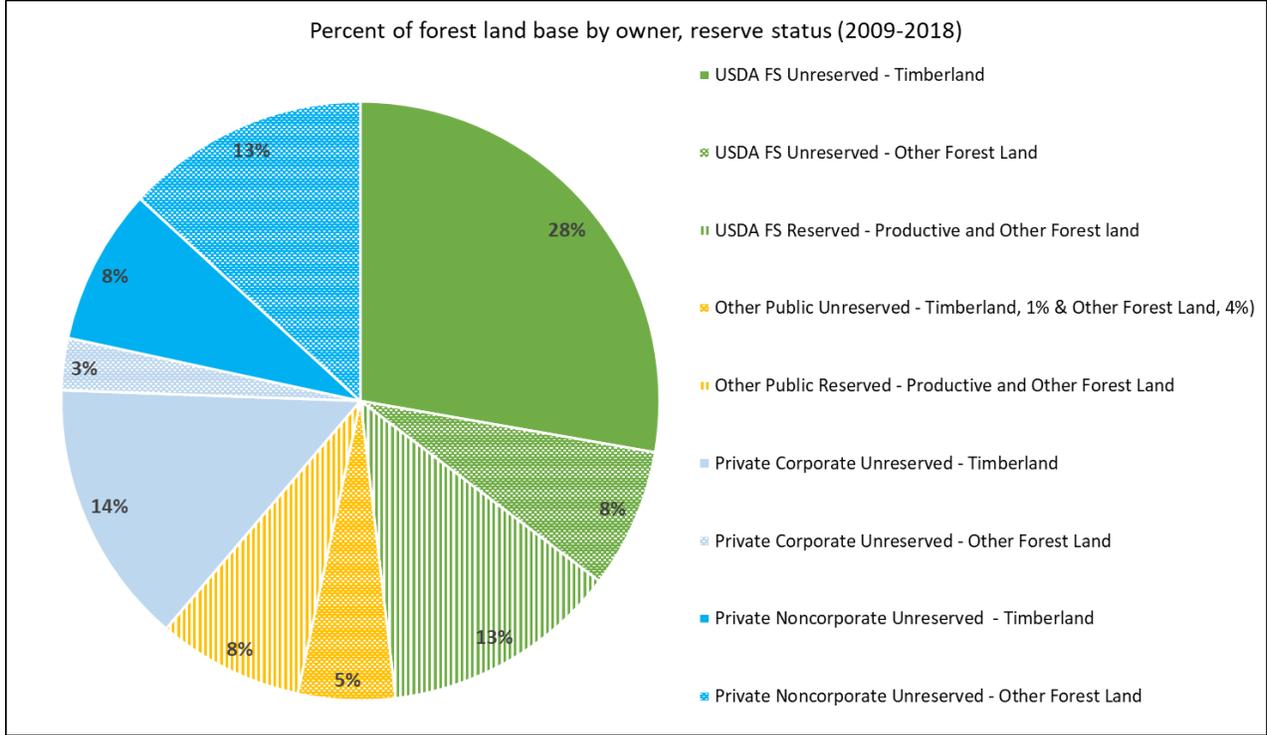


Figure 2.4: Percent of forest land base by owner, reserve status for forest land remaining forest land (2009-2018).

Table 4.1: Statewide average annual net CO₂e flux from forest pools in forest land remaining forest land, 2001-2008 to 2011-2018

	Net flux	
	Total	SE
	<i>million metric tons CO₂ equivalent</i>	
CARBON POOL		
Forest		
Aboveground live¹	15.6	2.1
Aboveground dead²	6.7	1.4
Belowground live³	3.2	0.4
Belowground dead⁴	1.1	0.2
NET FLUX	26.7	2.2
Soil Organic C	-0.5	0.3
TOTAL FOREST NET FLUX	26.2	2.4
¹ includes live trees, foliage, and understory veg		
² includes standing and down dead wood, forest floor		
³ includes live tree and understory veg roots		
⁴ includes dead tree roots		
Totals may be off due to rounding		

Table 4.2a: Statewide average annual net CO₂e flux from forest pools, non-CO₂ emissions from forest fires in Forest land remaining forest land, and changes due to forest land conversions (i.e., by forest land-use and land-use change). Plots initially measured between 2001-2008 and re-measured between 2011-2018.

Land-use category	Net flux	
	Total*	SE
	<i>million metric tons CO₂ equivalent</i>	
Forest land remaining forest land		
Changes in forest carbon	29.7	2.4
Changes in Soil Organic Carbon	-0.5	0.3
Non-CO ₂ emissions from forest fires	-0.5	0.1
<i>net flux</i>	28.7	2.5
Forest land conversions		
Changes in forest carbon, forest to non-forest	-2.9	0.4
Changes in forest carbon, non-forest to forest	1.4	0.2
<i>net flux</i>	-1.5	0.5
<i>total net flux</i>	27.2	2.6

Note: negative numbers are a net emission to the atmosphere

*totals may be off due to rounding

Table 4.2b: Average annual net CO₂e flux from forest ecosystem pools and non-CO₂ emissions from forest fires in Forest land remaining forest land, 2001-2008 to 2011-2018: Forest Practice Districts

Forest Practice District	Net flux		Soil Organic C		Forest Floor		non-CO ₂ emissions from forest fires		net flux	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>million metric tons CO₂ equivalent</i>										
Northern	9.7	1.4	-0.6	0.3	0.1	0.1	-0.3	0.0	8.9	1.5
Southern	3.3	0.9	-0.1	0.1	-0.1	0.1	-0.2	0.0	2.9	0.9
Coastal	11.6	1.4	0.2	0.2	0.1	0.0	0.0	0.0	11.9	1.4
All California	26.7	2.2	-0.5	0.3	0.0	0.2	-0.6	0.1	25.6	2.4

Note: negative numbers are a net emission to the atmosphere

Table 4.3: Statewide estimate of average annual net carbon flux (CO₂e) by pools and owner, 2001-2008 to 2011-2018. Changes in CO₂e due to land-use and non-CO₂ greenhouse gas emissions are not included. See also Appendix 2, Table B1.

	Public						Private				Total		Total	
	National forest		Other federal		State and local gov.		Corporate		Non Corporate		Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO₂ equivalent per year</i>														
Standing Live tree														
Mortality	-27,538	1,256	-3,780	600	-1,388	262	-3,990	274	-4,675	325	-8,665	402	-41,371	1,465
Cut	-2,141	375	-33	22	-129	111	-10,163	1,034	-1,270	265	-11,433	1,056	-13,736	1,126
Gross Growth	30,746	521	4,030	294	3,239	324	18,926	701	13,014	597	31,939	713	69,954	924
Net	1,067	1,386	217	612	1,722	300	4,773	1,170	7,068	593	11,842	1,295	14,847	2,025
Foliage	141	70	19	28	85	16	280	60	321	28	601	66	846	102
Roots														
Live	418	276	83	109	339	67	1,064	242	1,354	123	2,418	268	3,258	408
Dead	988	190	-6	93	-9	31	-12	52	161	54	149	75	1,123	227
Standing Dead	6,046	910	305	506	-35	118	385	202	991	224	1,376	301	7,692	1,090
Dead Woody Debris	-186	590	373	284	108	153	-1,546	440	273	290	-1,273	527	-979	854
Understory Vegetation														
Above Ground	-44	48	6	23	-17	6	1	38	-59	18	-58	42	-112	68
Below Ground	-5	5	1	3	-2	1		4	-7	2	-6	5	-12	8
Total (excluding soils)	8,426	1,284	998	612	2,192	376	4,945	1,551	10,103	726	15,048	1,695	26,663	2,242
Forest Floor	-78	123	-66	57		14	-14	86	161	54	147	102	4	170
Soils	-619	220	-71	80	-44	47	175	228	90	102	265	249	-468	346

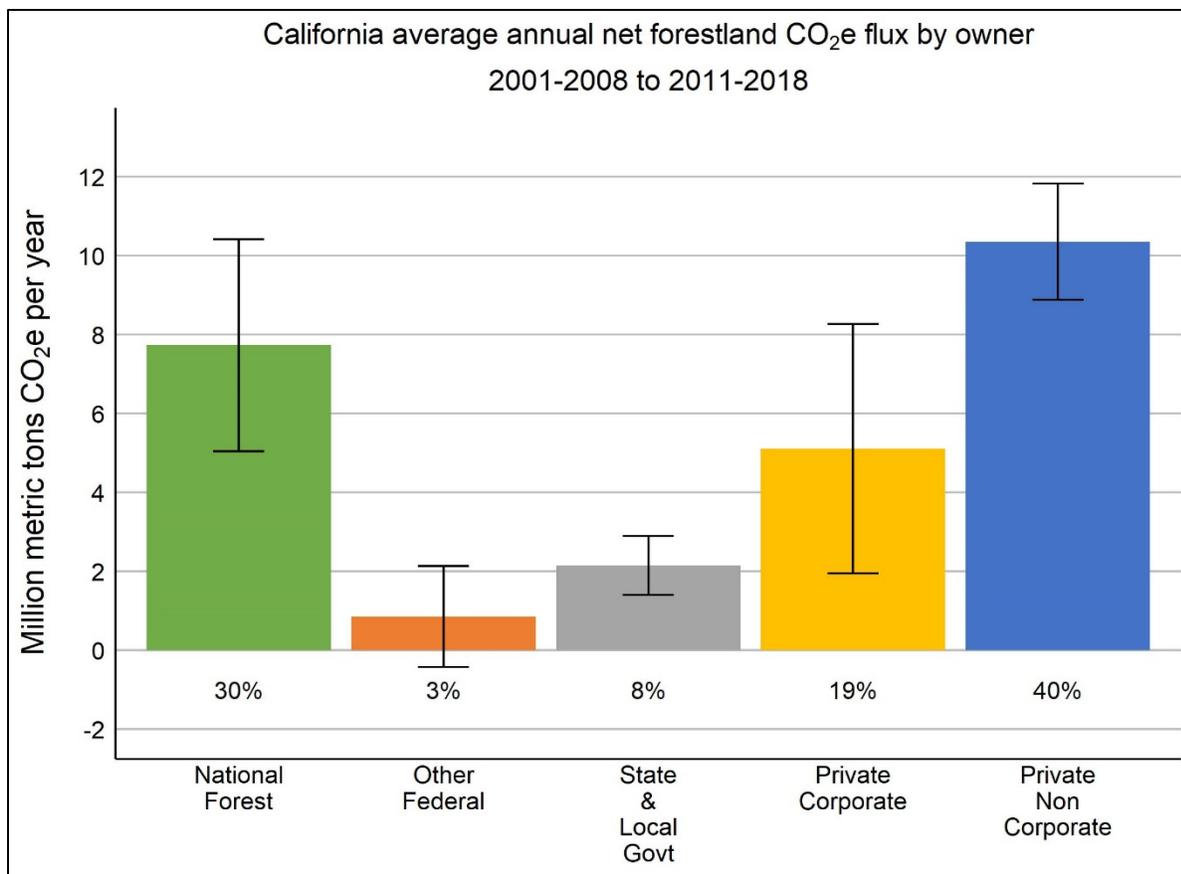


Figure 4.1. California average annual net forest CO₂e flux, all forest ecosystem pools by owner, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Error bars represent the 95% confidence interval of net flux. Percentage contribution by owner based on average value. Figure derived from table 4.3/Appendix 2, Table B1.

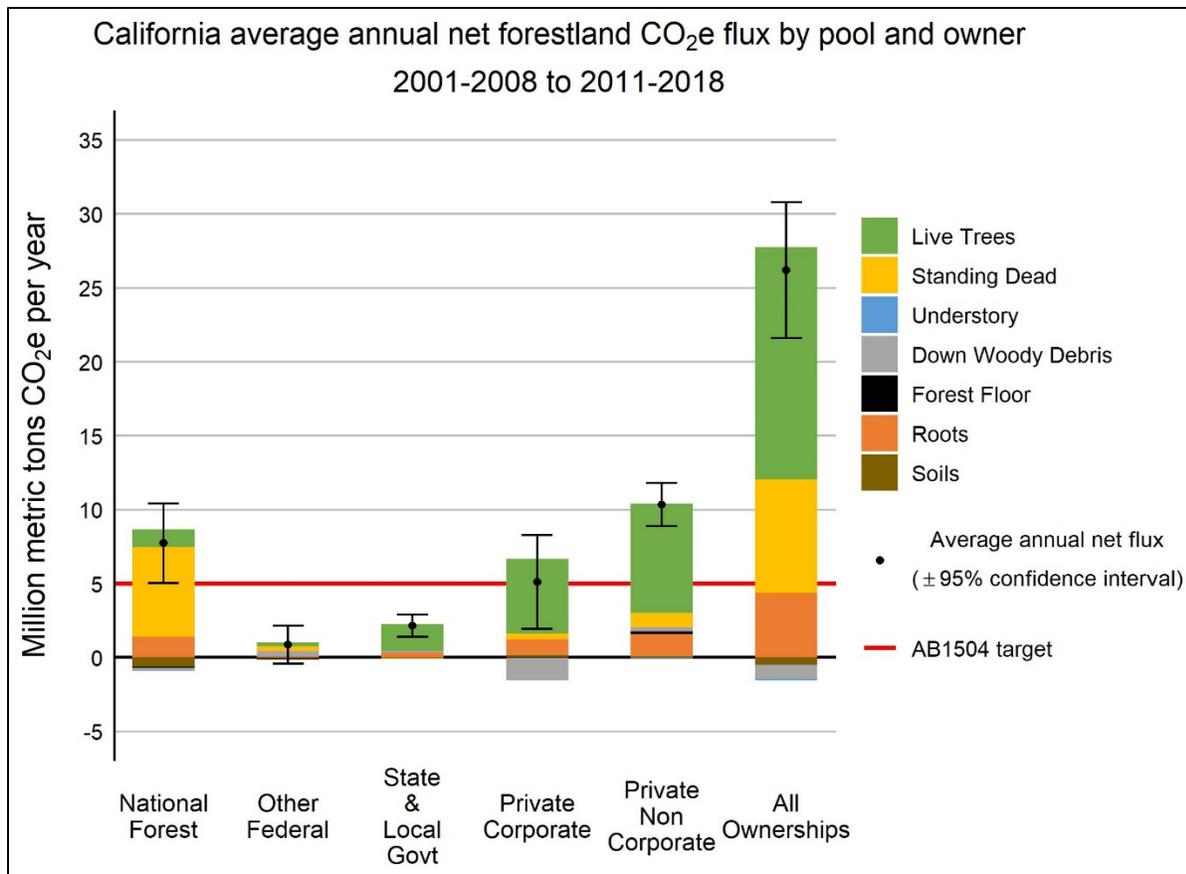


Figure 4.2. California average annual net forestland carbon flux by pool and ownership, 2001-2006 to 2011-2016 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes (1.5 MMT CO₂e/yr) and non-CO₂ greenhouse gases (0.5 MMT CO₂e/yr). Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Table 4.3/Appendix 2, Table B1.

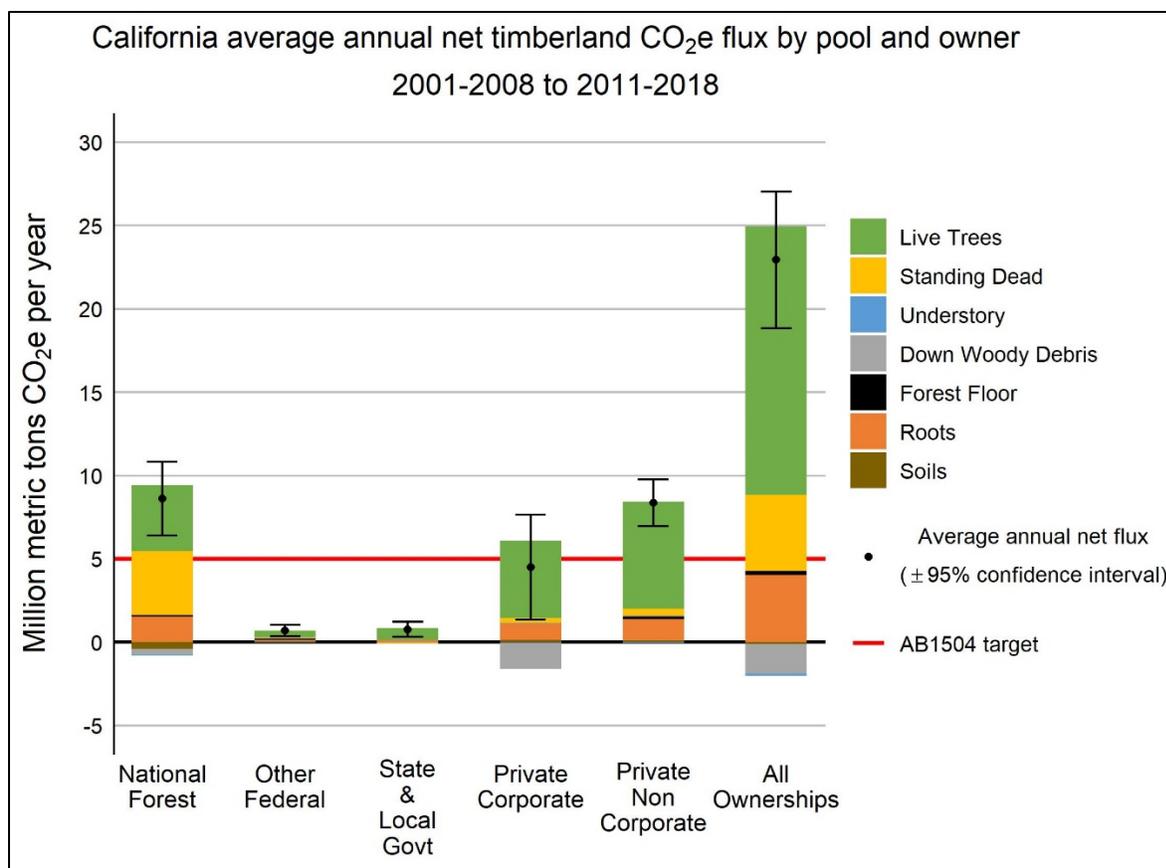


Figure 4.3. California average annual net timberland carbon flux by pool and ownership, 2001-2006 to 2011-2016 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes (1.5 MMT CO₂e/yr) and non-CO₂ greenhouse gases (0.5 MMT CO₂e/yr). Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux.

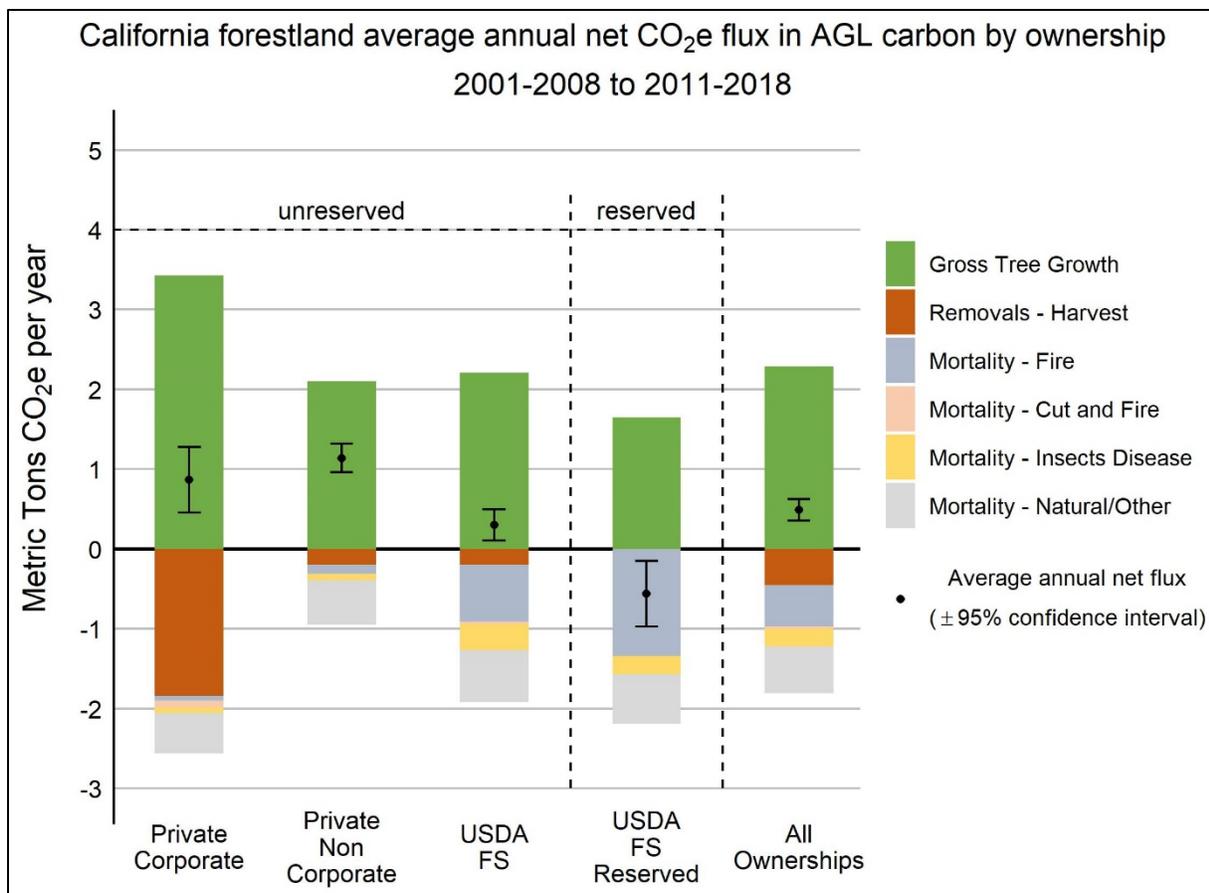


Figure 4.4a. Average annual net CO₂e flux per acre in aboveground live tree carbon pool from growth, mortality and harvest by ownership and land status of California’s forests (MT CO₂e/acre/year), 2001-2005 to 2011-2015. The “all ownerships” category includes all other state and federal agencies managing fewer overall acres of forest land in California. The error bars represent the 95% confidence interval of net change. Figure derived from Appendix 2, Table B12.

Table 4.4A Forest land average annual growth, mortality, harvest, and net change per acre in aboveground live tree carbon pool by ownership and land status of California's forests, 2001-2008 to 2011-2018. The all ownerships category includes all other state and federal agencies managing fewer overall acres of forest land in California.

	Unreserved Forest Land			Reserved Forest Land	All Forest Land
	Private - Corporate	Private - Noncorporate	National Forests	National Forests	All Ownerships
	<i>Metric tons CO₂e/acre/year</i>				
Gross tree growth	3.43	2.10	2.21	1.65	2.29
Removals - harvest	-1.84	-0.20	-0.20	0.00	-0.45
Mortality - fire killed	-0.06	-0.11	-0.71	-1.34	-0.52
Mortality - cut and fire¹	-0.09	0.00	-0.03	--	-0.03
Mortality - insects and disease	-0.07	-0.08	-0.33	-0.23	-0.22
Mortality - natural/other	-0.50	-0.56	-0.65	-0.62	-0.59
Net change (± 95% Confidence Interval)	0.87 (0.41)	1.14 (0.18)	0.3 (0.20)	-0.56 (0.41)	0.49 (0.14)

¹Mortality - Cut and fire: plots where tree mortality has occurred due to both harvest and fire.

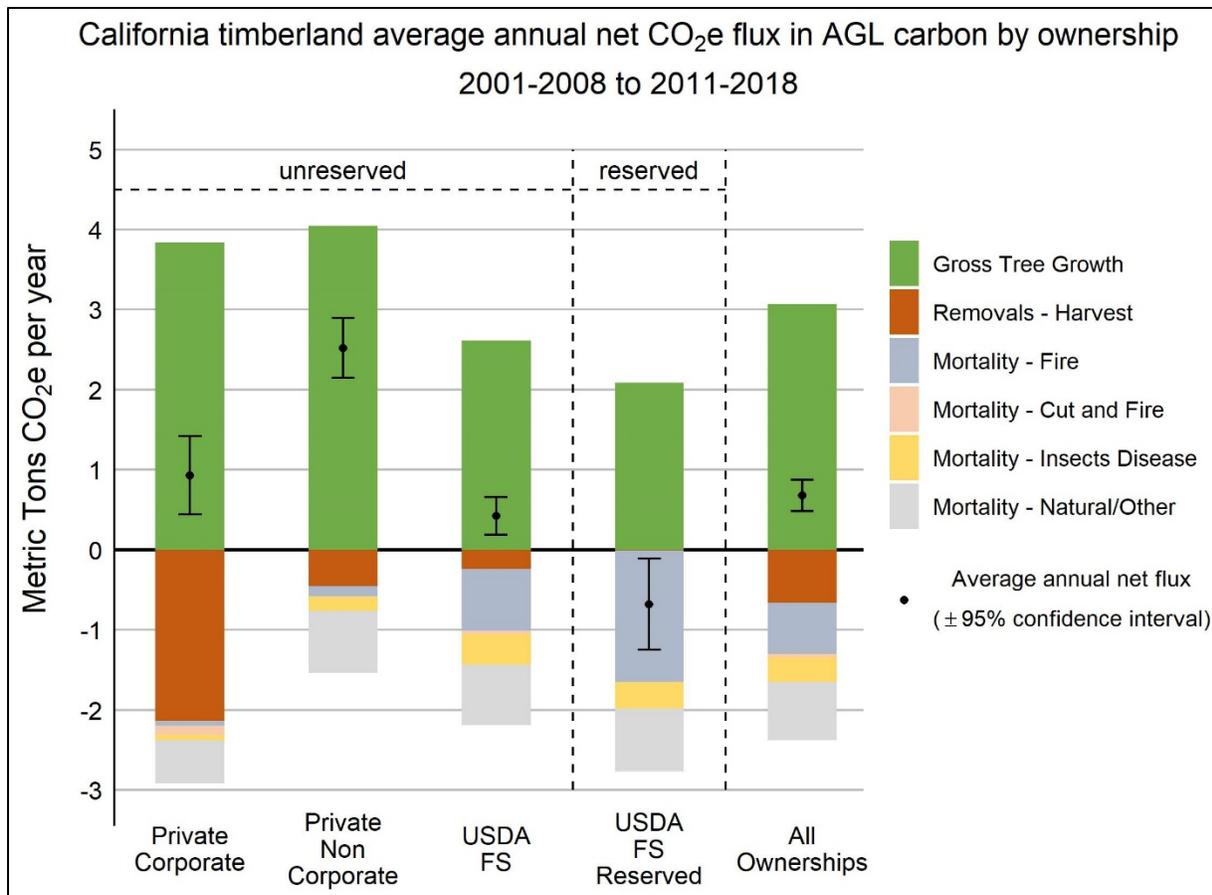


Figure 4.4b. Timberland (productive forest land) average annual net CO₂e flux per acre in aboveground live tree carbon pool from growth, mortality and harvest by ownership and land status of California’s productive forests (MT CO₂e/acre/year), 2001-2008 to 2011-2018. The “all ownerships” category includes all other state and federal agencies managing fewer overall acres of forest land in California. The error bars represent the 95% confidence interval of net change. Figure derived from Appendix 2, Table B12.

Table 4.4B Timberland average annual growth, mortality, harvest, and net change per acre in aboveground live tree carbon pool by ownership and land status of California's productive forests, 2001-2008 to 2011-2018. The all ownerships category includes all other state and federal agencies managing fewer overall acres of forest land in California.

	Timberland			Reserved Productive Forest Land	All Productive Forest Land
	Private - Corporate	Private - Noncorporate	National Forests	National Forests	All Ownerships
	<i>Metric tons CO2e/acre/year</i>				
Gross tree growth	3.84	4.05	2.61	2.09	3.07
Removals - harvest	-2.14	-0.45	-0.24	-0.01	-0.66
Mortality - fire killed	-0.06	-0.13	-0.77	-1.64	-0.64
Mortality - cut and fire¹	-0.11	-0.01	-0.04	--	-0.04
Mortality - insects and disease	-0.07	-0.17	-0.39	-0.33	-0.31
Mortality - natural/other	-0.54	-0.78	-0.75	-0.79	-0.73
Net change	0.93 (0.49)	2.52 (0.37)	0.42 (0.24)	-0.68 (0.57)	0.68 (0.20)

¹Mortality - Cut and fire: plots where tree mortality has occurred due to both harvest and fire.

California (ecoregions) average annual net forestland CO₂e flux by pool and owner
2001-2008 to 2011-2018

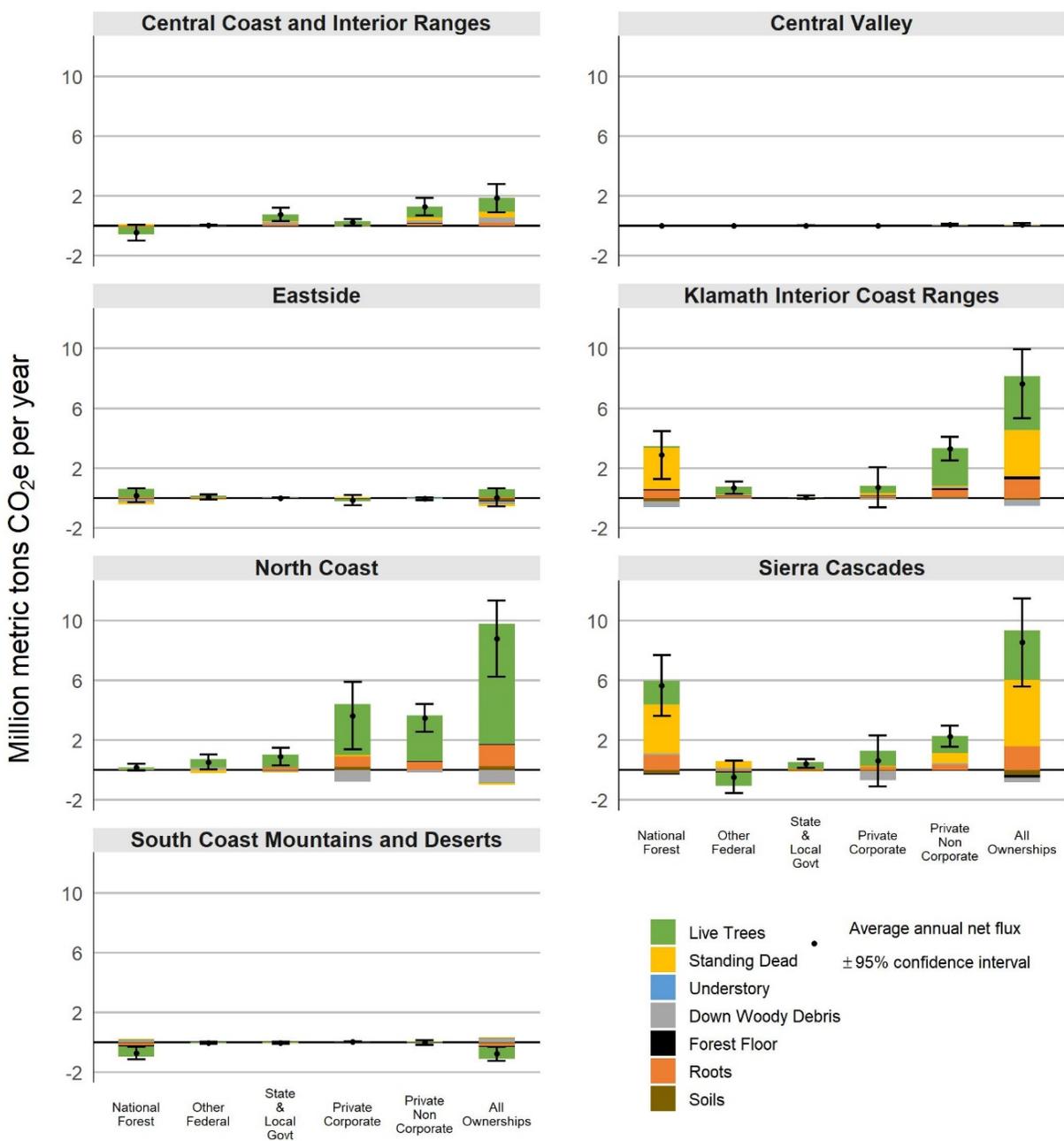


Figure 4.6a. California Ecoregions average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Tables B2-8. For more visible scale, individual ecoregion figures replicated in Appendix 1. **Note, this is a new figure that was not included in the previous report.*

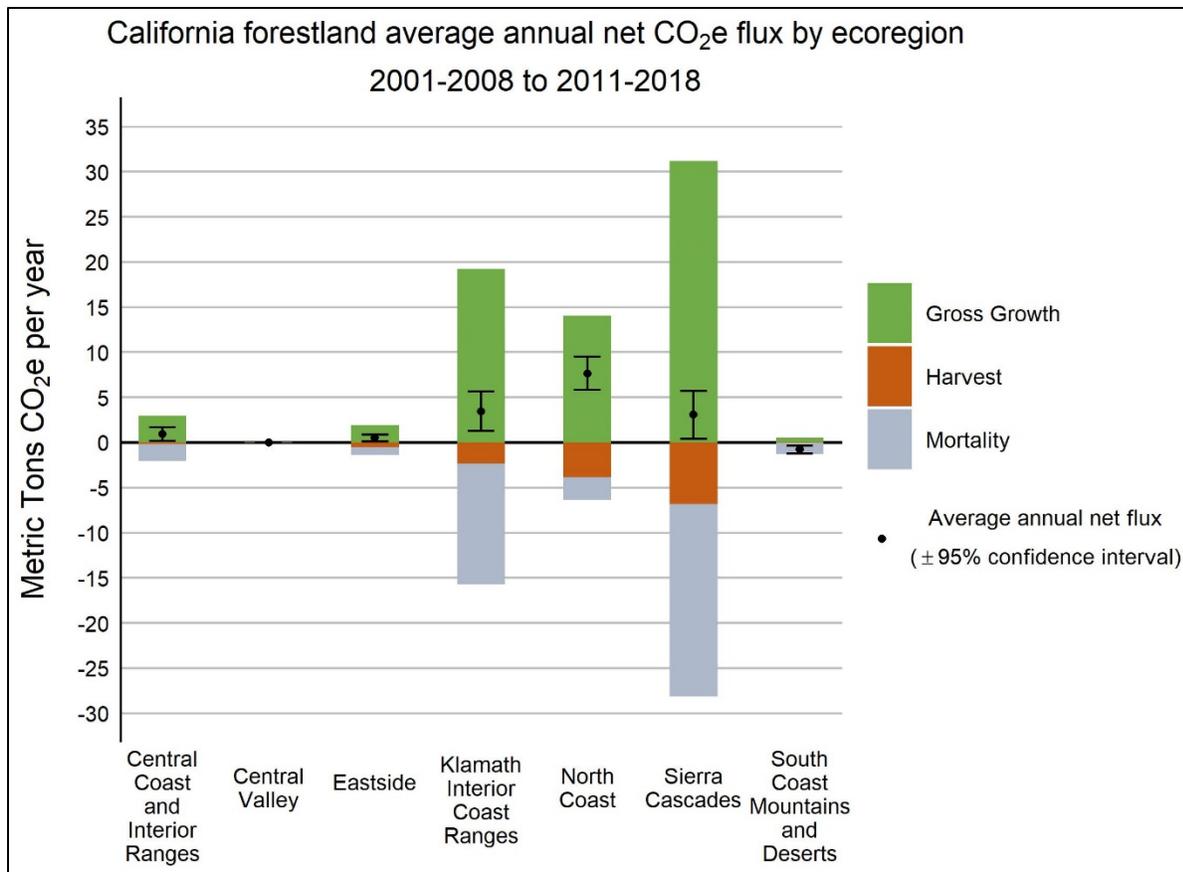


Figure 4.6b. Average annual net CO₂e flux in live trees from growth, harvest and mortality by ecological region, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Table 4.5/Appendix 2, Tables B2-B8.

**Note, figure number changed from 4.6 in the previous report to 4.6b in this data update.*

Table 4.5 Average annual net CO₂e flux in live trees from growth, harvest, mortality by ecological region, 2001-2008 to 2011-2018. Compare to Appendix 2, Tables B2-B8.

	Gross Growth		Harvest		Mortality		Net Flux	
	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Thousand Metric Tons CO₂ equivalent per year</i>							
Central Coast and Interior Ranges	2,981	344	-184	84	-1,881	348	916	392
Central Valley	71	31	-4	4	-42	22	26	21
Eastside	1,909	168	-546	130	-857	146	506	190
Klamath Interior Coast Ranges	19,214	676	-2,313	484	-13,436	967	3,465	1,128
North Coast	14,028	802	-3,834	749	-2,547	297	7,647	940
Sierra Cascades	31,221	759	-6,800	733	-21,357	1,120	3,064	1,342
South Coast Mountains and Deserts	530	69	-55	32	-1,252	238	-777	214
All California	69,954	924	-13,736	1,126	-41,371	1,465	14,847	2,025

Table 4.6a: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: All California. See also Appendix 2, Table B9.1

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	-207	72	-6	6	-3	3	-216	73			-15	12	-415	70	-237	69	-652	97	-883	122
Cut	-1,124	226	-3	3	--	--	-1,127	226	-17	16	-18	19	-8,250	945	-867	249	-9,117	969	-10,279	996
Gross Growth	1,067	163	14	15	1	1	1,081	164	13	12	16	14	3,663	334	971	213	4,634	386	5,743	420
Net Live	-264	188	5	6	-2	2	-261	188	-5	15	-17	17	-5,002	817	-133	215	-5,135	844	-5,418	865
Standing Dead Change	-198	128	--	--	1	1	-197	128	-2	2	4	3	-99	72	52	56	-47	91	-241	157
Dead Woody Debris Change	-3	81	-1	1	7	7	3	82	17	16	13	23	-564	273	93	139	-471	307	-439	319
Total Net ¹	-548	263	5	5	6	5	-537	263	8	13	-2	6	-6,821	1,142	-17	289	-6,838	1,178	-7,370	1,207
Cut and Fire																				
Mortality	-327	129	--	--	--	--	-327	129	--	--	-17	18	-517	154	-30	30	-547	157	-891	204
Cut	-593	239	--	--	--	--	-593	239	--	--	-105	109	-1,144	401	--	--	-1,144	401	-1,842	480
Gross Growth	261	77	--	--	--	--	261	77	--	--	53	55	223	61	5	5	228	61	541	113
Net Live	-660	247	--	--	--	--	-660	247	--	--	-69	72	-1,439	448	-25	25	-1,464	449	-2,192	517
Standing Dead Change	35	60	--	--	--	--	35	60	--	--	-1	1	67	56	-7	7	60	57	94	83
Dead Woody Debris Change	-33	41	--	--	--	--	-33	41	--	--	12	13	82	98	-7	7	75	99	55	107
Total Net ¹	-798	305	--	--	--	--	-798	305	--	--	-69	72	-1,600	499	-44	44	-1,643	501	-2,510	591
Fire																				
Mortality	-6,743	831	-5,407	816	-989	249	-13,139	1,185	-1,328	427	-274	122	-321	95	-667	175	-987	199	-15,728	1,280
Cut	-190	176	--	--	-2	1	-192	176	--	--	--	--	-13	11	-38	22	-50	25	-242	177
Gross Growth	2,016	210	1,200	154	187	44	3,403	264	459	103	42	29	213	61	327	80	540	101	4,444	302
Net Live	-4,917	768	-4,207	737	-804	225	-9,928	1,083	-869	383	-232	103	-120	80	-377	143	-497	164	-11,526	1,165
Standing Dead Change	2,850	547	1,954	463	290	149	5,094	730	20	353	59	32	26	61	191	83	217	103	5,390	819
Dead Woody Debris Change	-378	198	-15	151	-27	44	-420	253	-98	91	38	42	-118	47	148	83	30	95	-450	288
Total Net ¹	-3,004	579	-2,834	551	-689	179	-6,527	817	-1,153	429	-174	98	-227	129	-87	107	-314	168	-8,169	942

Table 4.6a: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: All California. See also Appendix 2, Table B9.1 (Continued)

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE		
<i>thousand metric tons CO2 equivalent per year</i>																				
Insect and Disease																				
Mortality	-3,384	379	-950	240	-159	69	-4,493	453	-1,262	433	-181	80	-379	82	-477	126	-856	149	-6,792	647
Cut	-64	30	--	--	--	--	-64	30	--	--	--	--	-48	19	-78	27	-78	27	-143	41
Gross Growth	4,308	328	706	122	77	24	5,091	350	572	115	284	107	1,090	189	886	186	1,976	263	7,923	462
Net Live	860	330	-244	204	-82	52	534	392	-690	372	103	74	663	139	379	155	1,041	207	989	586
Standing Dead Change	419	279	196	173	53	47	667	332	542	329	-98	96	-27	41	131	103	104	111	1,215	490
Dead Woody Debris Change	238	219	245	184	-7	33	476	288	168	96	21	82	-59	61	7	53	-52	81	612	324
Total Net ¹	1,828	351	202	187	-45	46	1,986	401	-12	156	42	152	722	163	628	174	1,350	237	3,365	513
Other cut and weather																				
Mortality	-876	218	-306	118	-115	45	-1,297	251	-173	85	-5	5	-235	82	-521	137	-756	159	-2,231	309
Cut	-123	52	-12	10	--	--	-135	53	-15	15	-2	3	-246	85	-155	60	-401	103	-554	117
Gross Growth	1,033	165	292	74	71	30	1,395	182	155	58	33	34	725	169	702	139	1,426	217	3,010	291
Net Live	34	184	-26	87	-44	27	-37	206	-33	68	25	31	244	132	26	153	270	202	225	298
Standing Dead Change	418	183	68	123	64	33	551	223	49	29	-7	13	49	21	279	110	328	112	920	251
Dead Woody Debris Change	-7	112	20	63	20	29	33	132	20	32	36	30	-221	129	211	100	-10	163	80	214
Total Net ¹	520	157	66	99	41	35	627	188	39	69	57	38	135	174	585	164	720	239	1,444	314
Less than 25% disturbed																				
Mortality	-5,502	392	-2,216	237	-348	63	-8,067	456	-1,018	171	-896	229	-2,123	179	-2,743	201	-4,866	257	-14,847	594
Cut	-28	14	-1	1	-1	1	-30	14			-3	3	-462	108	-181	61	-643	124	-677	125
Gross Growth	14,192	513	4,443	314	879	114	19,515	571	2,831	289	2,812	341	13,012	678	10,123	541	23,135	756	48,293	1,019
Net Live	8,661	495	2,227	289	530	104	11,418	565	1,813	260	1,912	253	10,427	612	7,199	483	17,626	703	32,769	956
Standing Dead Change	312	287	-342	212	-74	45	-104	359	-305	151	8	58	369	164	345	134	714	211	313	448
Dead Woody Debris Change	-153	329	-41	244	-51	82	-245	418	266	248	-11	115	-668	296	-178	212	-846	364	-836	617
Total Net ¹	10,948	634	2,253	391	474	131	13,676	735	2,116	381	2,338	303	12,735	805	9,037	620	21,773	926	39,902	1,261
Total																				
Mortality	-17,039	941	-8,884	830	-1,615	268	-27,538	1,256	-3,780	600	-1,388	262	-3,990	274	-4,675	325	-8,665	402	-41,371	1,465
Cut	-2,122	375	-16	10	-3	2	-2,141	375	-33	22	-129	111	-10,163	1,034	-1,270	265	-11,433	1,056	-13,736	1,126
Gross Growth	22,876	505	6,654	314	1,215	127	30,746	521	4,030	294	3,239	324	18,926	701	13,014	597	31,939	713	69,954	924
Net Live	3,715	1,073	-2,246	841	-402	256	1,067	1,386	217	612	1,722	300	4,773	1,170	7,068	593	11,842	1,295	14,847	2,025
Standing Dead Change	3,836	709	1,876	553	334	166	6,046	910	305	506	-35	118	385	202	991	224	1,376	301	7,692	1,090
Dead Woody Debris Change	-337	466	208	348	-58	103	-186	590	373	284	108	153	-1,546	440	273	290	-1,273	527	-979	854
Total Net ¹	8,947	1,044	-308	725	-214	231	8,426	1,284	998	612	2,192	376	4,945	1,551	10,103	726	15,048	1,695	26,663	2,242

¹Total Net value includes change from roots and understory vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table 4.6b: Average annual carbon (CO₂e) flux in live trees from growth, harvest, mortality, 2001-2008 to 2011-2018: COUNTY. See also Appendix 2, Table B9.2.

County	Standing Live														All Pools			
	Gross Growth		Harvest		Fire killed		Cut and fire		Insects and disease		Natural/other		Total Mortality		Net Flux		Net Flux	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Thousand Metric Tons CO₂e equivalent per year</i>																	
Alameda	120	40	-5	5	--	--	--	--	--	--	-38	21	-38	21	77	30	103	48
Alpine	515	95	-3	3	-7	7	--	--	-172	58	-164	52	-343	77	169	65	194	131
Amador	490	130	-40	24	-43	34	-95	100	-30	29	-151	61	-320	125	130	130	112	152
Butte	1,839	271	-296	141	-143	73	-49	43	-29	13	-567	113	-788	143	755	251	1,047	310
Calaveras	1,183	195	-260	104	-164	116	--	--	-28	17	-329	163	-521	200	403	217	691	191
Colusa	144	41	-1	1	-257	142	--	--	--	--	-68	36	-326	146	-182	131	-86	87
Contra Costa	55	24	-6	6	--	--	--	--	--	--	-19	14	-19	14	30	22	46	31
Del Norte	2,863	433	-423	251	-259	134	--	--	-16	7	-764	235	-1,039	270	1,401	380	1,285	463
El Dorado	2,571	293	-557	226	-405	207	-97	80	-265	74	-643	109	-1,410	257	604	358	1,221	423
Fresno	1,673	196	-121	94	-436	199	-43	32	-228	128	-1,214	258	-1,921	352	-369	339	409	276
Glenn	377	87	-1	1	-127	106	--	--	-22	14	-114	44	-263	115	113	95	118	130
Humboldt	8,947	672	-2,307	601	-182	111	--	--	-43	25	-1,650	196	-1,876	225	4,764	755	4,903	1,130
Imperial			--	--	--	--	--	--	--	--	--	--	--	--			-1	1
Inyo	96	15	--	--	--	--	--	--			-22	9	-22	9	74	14	6	50
Kern	381	72	--	--	-105	51	--	--	-86	51	-253	75	-444	105	-63	102	-17	157
Lake	654	123	-9	7	-89	70	--	--	-5	7	-190	106	-284	127	361	149	443	152
Lassen	1,785	184	-504	136	-142	66	-14	13	-123	41	-304	66	-582	103	699	185	469	291
Los Angeles	80	25	--	--	-179	101	--	--	--	--	-40	22	-219	103	-139	89	-113	96
Madera	1,164	183	-32	20	-264	180	--	--	-651	250	-668	174	-1,584	353	-452	310	530	259
Marin	314	139	-2	2	--	--	--	--	-155	105	-19	13	-173	106	138	142	94	162
Mariposa	1,284	186	-55	41	-524	206	--	--	-392	149	-394	109	-1,309	272	-81	222	361	284
Mendocino	6,635	532	-1,399	429	-241	111	-20	18	-146	51	-850	113	-1,256	167	3,980	588	5,303	721
Merced	11	7	--	--	--	--	--	--	--	--	--	--	--	--	11	7	-9	23
Modoc	1,348	155	-423	108	-77	55	-159	88	-128	45	-182	49	-546	122	378	158	246	223
Mono	320	55	-45	34	-36	26	--	--	-92	53	-106	28	-234	65	41	71	106	127
Monterey	382	83	-1	1	-701	310	--	--	--	--	-186	75	-887	319	-506	286	-349	282
Napa	398	101	-36	32	-87	66	--	--	--	--	-163	55	-250	86	113	95	287	112
Nevada	1,077	179	-201	100	--	--	--	--	-189	82	-250	72	-439	109	437	146	673	182
Orange	3	3	--	--	--	--	--	--	--	--	--	--	--	--	3	3	9	9
Placer	1,851	238	-339	191	-97	56	-7	7	-255	88	-527	120	-885	159	627	251	950	348
Plumas	3,882	331	-1,075	321	-1,846	516	-89	51	-470	118	-712	123	-3,117	545	-311	621	119	697
Riverside	54	24	--	--	-4	6	--	--	-69	42	-9	9	-83	43	-29	30	14	41

Table 4.6b: Average annual carbon (CO₂e) flux in live trees from growth, harvest, mortality, 2001-2008 to 2011-2018: COUNTY. See also Appendix 2, Table B9.2. (CONTINUED)

County	Standing Live														All Pools			
	Gross Growth		Harvest		Fire killed		Cut and fire		Insects and disease		Natural/other		Total Mortality		Net Flux		Net Flux	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Thousand Metric Tons CO₂ equivalent per year</i>																	
Sacramento	6	5	--	--	--	--	--	--	--	--	-1	1	-1	1	5	4	5	5
San Benito	107	46	--	--	--	--	--	--	--	--	-34	19	-34	19	73	44	108	45
San Bernardino	165	43	-37	29	-220	122	-14	15	-15	11	-140	54	-389	134	-262	132	-355	156
San Diego	56	21	-14	13	-59	34	--	--	--	--	-38	21	-97	40	-55	42	-84	54
San Joaquin	22	23	-4	4	--	--	--	--	--	--	-15	15	-15	15	4	4	18	16
San Luis Obispo	192	39	--	--	--	--	--	--	--	--	-130	42	-130	42	62	34	251	58
San Mateo	482	166	-65	49	--	--	--	--	-30	39	-151	60	-181	74	236	134	496	193
Santa Barbara	80	29	--	--	-268	143	--	--	--	--	-61	25	-329	145	-250	121	-189	113
Santa Clara	347	83	--	--	-24	25	--	--	--	--	-176	59	-200	64	147	62	202	66
Santa Cruz	1,245	274	-108	67	-8	7	--	--	-85	52	-257	73	-350	90	787	216	966	314
Shasta	4,458	345	-1,780	430	-860	242	-202	90	-224	66	-1,036	168	-2,322	326	356	583	1,419	656
Sierra	1,292	182	-389	163	-78	80	--	--	-153	47	-219	54	-450	106	452	171	179	278
Siskiyou	6,939	411	-1,539	401	-3,068	684	-88	61	-529	127	-1,466	180	-5,151	714	250	782	1,457	791
Solano	10	8	--	--	--	--	--	--	--	--	--	--	--	--	10	8	9	7
Sonoma	1,421	225	-143	79	-7	6	--	--	-161	71	-200	48	-368	86	910	161	1,169	241
Stanislaus	28	9	--	--	-6	6	--	--	--	--	-12	9	-18	11	10	8	25	31
Sutter	19	18	--	--	--	--	--	--	--	--	-1	1	-1	1	19	18	23	22
Tehama	1,685	205	-329	142	-308	152	--	--	-184	67	-639	147	-1,131	220	225	212	499	303
Trinity	4,514	334	-745	259	-2,373	542	-14	13	-237	81	-1,241	172	-3,865	565	-96	581	990	583
Tulare	1,583	192	-3	4	-787	263	--	--	-390	184	-696	144	-1,873	350	-294	315	212	300
Tuolumne	2,205	243	-392	176	-1,135	422	-1	1	-1,187	446	-646	142	-2,969	627	-1,156	576	-735	536
Ventura	68	19	-4	4	-114	62	--	--	-1	1	-27	15	-142	64	-78	57	-78	62
Yolo	25	9	--	--	--	--	--	--	--	--	-12	10	-12	10	13	9	26	11
Yuba	511	133	-43	37	--	--	--	--	--	--	-169	55	-169	55	299	99	417	160
All counties	69,954	924	-13,736	1,126	-15,728	1,280	-891	204	-6,792	647	-17,961	659	-41,371	1,465	14,847	2,025	26,199	2,352

Table 4.6c: Average annual carbon (CO₂e) flux in live trees from growth, harvest, mortality, 2001-2008 to 2011-2018: NATIONAL FOREST. See also Appendix 2, Table B9.3.

	Standing Live																All Pools		
	Gross Growth		Harvest		Fire killed		Cut and fire		Insects and disease		Natural/other		Total Mortality		Net Flux		Net Flux		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
	<i>Thousand Metric Tons CO₂ equivalent per year</i>																		
Region 5																			
Angeles	89	27	--	--	-179	101	--	--	--	--	-40	22	-219	103	-131	90	-114	97	
Cleveland	8	6	--	--	-6	6	--	--	--	--	--	--	-6	6	2	8	5	13	
Eldorado	1,932	249	-331	213	-434	209	-108	100	-241	68	-469	101	-1,253	259	347	342	639	387	
Inyo	439	80	-45	34	-2	2	--	--	-51	31	-160	45	-213	54	180	69	136	175	
Klamath	2,818	253	-160	76	-2,656	670	-66	58	-314	102	-777	127	-3,814	689	-1,156	638	42	462	
Lake Tahoe Basin	247	75	-32	29	--	--	-7	6	-84	44	-71	54	-161	70	54	65	5	103	
Lassen	2,443	251	-315	121	-1,073	390	-36	22	-324	96	-689	140	-2,122	423	6	406	377	429	
Los Padres	329	65	--	--	-917	329	--	--	-1	1	-143	42	-1,061	331	-732	297	-637	294	
Mendocino	1,649	192	-13	8	-1,043	389	--	--	-126	52	-480	127	-1,649	411	-13	379	360	334	
Modoc	1,196	138	-94	48	-23	13	-37	39	-182	52	-233	62	-475	90	627	111	434	165	
Plumas	3,033	286	-378	193	-1,359	403	--	--	-296	85	-658	122	-2,313	427	341	479	786	551	
San Bernardino	161	42	-37	29	-184	117	-14	15	-77	43	-126	52	-401	136	-278	130	-388	150	
Sequoia	1,238	175	-9	5	-925	270	--	--	-272	163	-578	148	-1,774	347	-544	323	19	303	
Shasta-Trinity	4,719	336	-213	79	-2,055	437	-1	2	-277	87	-1,442	193	-3,776	473	731	455	2,197	461	
Sierra	2,198	240	-131	96	-625	259	-43	32	-800	276	-1,446	277	-2,914	469	-847	425	470	328	
Six Rivers	3,300	322	-54	51	-969	254	-14	13	-125	63	-904	167	-2,012	308	1,234	338	1,335	440	
Stanislaus	1,937	230	-77	46	-531	201	--	--	-671	209	-628	201	-1,829	350	30	287	496	266	
Tahoe	2,373	259	-250	123	-102	81	--	--	-523	126	-532	110	-1,156	184	967	220	1,212	316	
Toiyabe	320	56	--	--	-43	27	--	--	-128	58	-101	38	-271	74	49	67	51	106	
Total	30,427	517	-2,139	375	-13,124	1,184	-327	129	-4,492	453	-9,479	508	-27,422	1,255	866	1,384	7,424	1,367	
Region 6																			
Rogue River / Siskiyou	319	72	-2	4	-15	26	--	--	-1	2	-101	43	-116	47	200	84	305	104	
Total	319	72	-2	4	-15	26	--	--	-1	2	-101	43	-116	47	200	84	305	104	
All National Forests	30,746	521	-2,141	375	-13,139	1,185	-327	129	-4,493	453	-9,580	509	-27,538	1,256	1,067	1,386	7,729	1,371	

Table 4.6d: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Coastal Forest Practice District. See also Appendix 2, Table B9.4.

	USDA Forest Service						Other Public				Private				Total					
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE		
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	--	--	--	--	--	--	--	--	--	--	--	--	-105	33	-111	42	-216	53	-216	53
Cut	--	--	--	--	--	--	--	--	--	--	--	--	-3,048	715	-510	228	-3,558	747	-3,558	747
Gross Growth	--	--	--	--	--	--	--	--	--	--	--	--	954	199	525	175	1,480	263	1,480	263
Net Live	--	--	--	--	--	--	--	--	--	--	--	--	-2,199	610	-96	203	-2,295	642	-2,295	642
Standing Dead Change	--	--	--	--	--	--	--	--	--	--	--	--	-5	56	30	30	25	64	25	64
Dead Woody Debris Change	--	--	--	--	--	--	--	--	--	--	--	--	-370	242	-44	97	-414	261	-414	261
Total Net ¹	--	--	--	--	--	--	--	--	--	--	--	--	-3,129	901	-131	255	-3,260	936	-3,260	936
Cut and Fire																				
Mortality	--	--	--	--	--	--	--	--	--	--	-17	18	-3	2	--	--	-3	2	-20	18
Cut	--	--	--	--	--	--	--	--	--	--	-105	109	-67	62	--	--	-67	62	-171	126
Gross Growth	--	--	--	--	--	--	--	--	--	--	53	55	14	13	--	--	14	13	67	57
Net Live	--	--	--	--	--	--	--	--	--	--	-69	72	-55	51	--	--	-55	51	-124	88
Standing Dead Change	--	--	--	--	--	--	--	--	--	--	-1	1	1	1	--	--	1	1		1
Dead Woody Debris Change	--	--	--	--	--	--	--	--	--	--	12	13	13	9	--	--	13	9	25	15
Total Net ¹	--	--	--	--	--	--	--	--	--	--	-69	72	-53	58	--	--	-53	58	-122	92
Fire																				
Mortality	-277	122	-259	134	--	--	-535	181	--	--	-73	77	-70	52	-46	33	-116	61	-725	206
Cut	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-1	1	-1	1	-1	1
Gross Growth	114	46	121	54	--	--	235	71	--	--	26	27	66	41	67	38	133	56	393	95
Net Live	-162	91	-138	91	--	--	-301	129	--	--	-48	50	-4	36	20	38	16	52	-332	148
Standing Dead Change	52	43	15	46	--	--	67	63	--	--	9	10	25	25	14	8	39	27	115	69
Dead Woody Debris Change	53	43	62	55	--	--	115	70	--	--	-24	25	-49	32	32	29	-17	43	74	86
Total Net ¹	-112	57	-95	105	--	--	-207	119	--	--	-71	74	-21	46	76	44	55	64	-223	154

Table 4.6d: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Coastal Forest Practice District. See also Appendix 2, Table B9.4. (CONTINUED)

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE		
<i>thousand metric tons CO2 equivalent per year</i>																				
Insect and Disease																				
Mortality	-22	21	-15	7	--	--	-37	22	-30	39	-119	73	-100	43	-187	75	-288	86	-474	121
Cut	--	--	--	--	--	--	--	--	--	--	--	--	-14	13	-13	11	-26	17	-26	17
Gross Growth	65	39	55	27	--	--	120	47	4	5	82	51	235	107	403	153	638	187	844	199
Net Live	43	25	40	22	--	--	83	34	-26	34	-38	29	121	65	203	122	324	138	343	148
Standing Dead Change	-1	2	-7	6	--	--	-8	6	5	6	-74	91	3	20	29	25	31	32	-45	97
Dead Woody Debris Change	-9	6	-15	20	--	--	-24	21	15	19	60	72	1	9	19	34	20	36	71	84
Total Net ¹	36	25	28	17	--	--	64	30	-8	10	-65	121	166	95	297	131	463	162	454	205
Other cut and weather																				
Mortality	-67	40	-14	11	--	--	-81	42	--	--	--	--	-87	60	-46	28	-132	66	-213	78
Cut	--	--	--	--	--	--	--	--	--	--	--	--	-125	74	-45	26	-170	78	-170	78
Gross Growth	150	73	22	16	--	--	172	75	--	--	--	--	285	118	236	101	521	154	693	171
Net Live	83	54	8	6	--	--	91	55	--	--	--	--	73	91	146	68	219	114	310	126
Standing Dead Change	21	17	6	5	--	--	27	18	--	--	--	--	14	8	6	4	20	9	48	20
Dead Woody Debris Change	16	16	3	3	--	--	18	16	--	--	--	--	-36	45	44	43	8	62	26	65
Total Net ¹	145	74	18	14	--	--	163	75	--	--	--	--	76	130	234	107	310	168	473	184
Less than 25% disturbed																				
Mortality	-433	113	-247	80	--	--	-681	138	-255	97	-550	222	-784	112	-847	117	-1,631	159	-3,117	320
Cut	--	--	--	--	--	--	--	--	--	--	-3	3	-255	90	-63	40	-319	98	-321	98
Gross Growth	1,222	209	870	182	--	--	2,092	275	923	220	1,874	323	5,991	568	4,596	451	10,587	689	15,476	833
Net Live	789	175	622	154	--	--	1,411	232	667	166	1,321	230	4,952	500	3,687	393	8,638	607	12,038	705
Standing Dead Change	8	63	37	38	--	--	45	74	-73	58	29	36	215	116	93	59	308	130	309	164
Dead Woody Debris Change	-80	58	-71	59	--	--	-151	83	-77	136	-47	67	-472	241	-242	147	-714	282	-988	331
Total Net ¹	908	206	708	191	--	--	1,616	279	633	228	1,612	283	6,004	665	4,399	487	10,403	793	14,263	912
Total																				
Mortality	-800	171	-535	156	--	--	-1,335	230	-285	106	-760	241	-1,149	145	-1,237	150	-2,386	204	-4,765	403
Cut	--	--	--	--	--	--	--	--	--	--	-107	110	-3,509	736	-631	232	-4,140	767	-4,248	775
Gross Growth	1,552	227	1,067	192	--	--	2,619	294	926	220	2,034	321	7,545	610	5,828	508	13,372	742	18,952	881
Net Live	752	207	532	182	--	--	1,285	274	641	168	1,167	262	2,887	806	3,959	463	6,847	920	9,940	1,007
Standing Dead Change	80	78	51	61	--	--	132	99	-68	59	-36	99	254	133	171	71	425	150	452	214
Dead Woody Debris Change	-21	75	-21	86	--	--	-42	114	-62	137	2	102	-913	344	-192	187	-1,105	392	-1,206	442
Total Net ¹	976	227	660	219	--	--	1,636	314	625	228	1,407	348	3,043	1,137	4,874	573	7,917	1,268	11,585	1,368

¹ Total Net value includes change from roots and understory vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table 4.6e: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Northern Forest Practice District. See also Appendix 2, Table B9.5.

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	-85	39	--	--	--	--	-85	39	--	--	--	--	-210	53	-18	9	-229	53	-314	66
Cut	-786	188	--	--	--	--	-786	188	-5	5	--	--	-4,106	591	-260	95	-4,366	597	-5,156	626
Gross Growth	704	138	--	--	--	--	704	138	11	12	--	--	1,979	236	239	84	2,218	248	2,933	284
Net Live	-167	124	--	--	--	--	-167	124	6	7	--	--	-2,337	513	-39	64	-2,376	517	-2,537	532
Standing Dead Change	-69	34	--	--	--	--	-69	34	--	--	--	--	-75	43	-18	15	-93	45	-162	56
Dead Woody Debris Change	-10	48	--	--	--	--	-10	48	3	4	--	--	-161	113	-4	23	-165	115	-172	125
Total Net ¹	-277	195	--	--	--	--	-277	195	11	12	--	--	-3,074	674	-83	84	-3,158	679	-3,423	707
Cut and Fire																				
Mortality	-104	48	--	--	--	--	-104	48	--	--	--	--	-314	112	-30	30	-344	116	-448	125
Cut	-344	201	--	--	--	--	-344	201	--	--	--	--	-862	352	--	--	-862	352	-1,206	405
Gross Growth	111	45	--	--	--	--	111	45	--	--	--	--	127	45	5	5	132	45	244	64
Net Live	-336	197	--	--	--	--	-336	197	--	--	--	--	-1,049	376	-25	25	-1,074	377	-1,410	425
Standing Dead Change	32	42	--	--	--	--	32	42	--	--	--	--	67	56	-7	7	60	56	92	70
Dead Woody Debris Change	-40	31	--	--	--	--	-40	31	--	--	--	--	75	95	-7	7	67	95	27	100
Total Net ¹	-414	248	--	--	--	--	-414	248	--	--	--	--	-1,128	402	-44	44	-1,172	404	-1,586	474
Fire																				
Mortality	-4,435	705	-2,824	670	-221	97	-7,481	977	-166	94	-76	65	-205	77	-165	74	-369	106	-8,092	990
Cut	-13	13	--	--	-2	1	-15	13	--	--	--	--	-13	11	-22	18	-34	21	-49	25
Gross Growth	1,461	190	717	134	69	25	2,248	234	155	58	8	7	115	44	112	51	227	67	2,638	250
Net Live	-2,987	622	-2,107	604	-153	87	-5,248	870	-12	68	-68	58	-102	70	-74	42	-176	81	-5,503	879
Standing Dead Change	1,790	457	1,197	408	31	41	3,019	613	38	29	18	16	-12	54	8	42	-4	69	3,072	618
Dead Woody Debris Change	-242	158	-30	104	13	26	-259	191	19	24	21	18	-59	34	56	57	-3	66	-221	205
Total Net ¹	-1,740	430	-1,185	388	-142	85	-3,066	585	48	61	-38	33	-188	120	-26	65	-215	137	-3,271	604

Table 4.6e: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Northern Forest Practice District. See also Appendix 2, Table B9.5. (CONTINUED)

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate		Total		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>																				
Insect and Disease																				
Mortality	-1,600	207	-208	76	-9	9	-1,817	220	-91	39	-5	7	-238	66	-89	26	-328	71	-2,241	234
Cut	-51	27	--	--	--	--	-51	27	--	--	--	--	-28	13	--	--	-28	13	-78	30
Gross Growth	2,552	258	259	85	18	13	2,829	272	93	44	13	16	742	148	228	59	970	158	3,904	317
Net Live	901	189	52	54	9	14	962	197	1	37	7	9	476	118	138	45	615	126	1,585	237
Standing Dead Change	-121	135	34	48	-1	7	-88	143	34	16	3	4	-7	26	-10	39	-17	47	-68	151
Dead Woody Debris Change	266	141	18	44	-25	25	258	150	-9	23			-103	54	-23	26	-126	60	123	163
Total Net ¹	1,259	253	128	64	-14	23	1,373	262	44	44	13	17	464	124	144	72	608	143	2,037	302
Other cut and weather																				
Mortality	-200	73	-22	11	--	--	-222	74				1	-121	53	-2	1	-123	53	-345	91
Cut	-79	47	-10	9	--	--	-90	48	--	--	-2	3	-113	42	-51	45	-164	61	-257	78
Gross Growth	503	119	39	20	1	2	542	121	41	40	30	34	421	122	116	47	537	130	1,150	185
Net Live	224	91	6	23	1	2	231	94	41	40	27	31	187	95	63	50	250	107	548	151
Standing Dead Change	-34	51	-49	46			-83	69	4	4	-11	12	22	16	-8	6	15	17	-75	72
Dead Woody Debris Change	30	105	27	26	-3	3	54	108	-5	5			-179	120	2	24	-177	123	-129	163
Total Net ¹	261	124	-23	51	-3	5	236	133	52	51	19	22	69	115	70	72	138	136	445	198
Less than 25% disturbed																				
Mortality	-2,984	260	-764	138	-107	33	-3,856	294	-276	118	-94	31	-840	115	-830	107	-1,670	156	-5,896	355
Cut	-26	13	--	--	-1	1	-27	13			-1	1	-129	40	-30	18	-159	43	-187	46
Gross Growth	8,615	434	1,309	175	451	84	10,375	465	564	113	323	87	4,632	356	2,865	260	7,497	425	18,760	643
Net Live	5,605	378	545	135	343	69	6,492	403	288	126	229	76	3,663	314	2,005	222	5,668	374	12,677	566
Standing Dead Change	22	173	-215	158	-50	24	-243	236	83	45	26	14	131	91	18	95	149	132	14	275
Dead Woody Debris Change	-124	275	106	84	-55	67	-73	295	85	42	-31	17	-124	140	-4	110	-128	178	-147	347
Total Net ¹	6,813	510	529	242	275	89	7,617	564	559	131	280	88	4,553	407	2,469	317	7,023	504	15,479	770
Total																				
Mortality	-9,408	755	-3,819	672	-337	103	-13,565	1,013	-534	156	-175	72	-1,928	199	-1,134	144	-3,063	242	-17,337	1,054
Cut	-1,298	280	-10	9	-3	2	-1,312	280	-5	5	-3	3	-5,250	687	-363	109	-5,613	694	-6,933	748
Gross Growth	13,946	495	2,325	208	540	89	16,810	530	863	137	374	95	8,017	441	3,565	285	11,582	493	29,629	733
Net Live	3,239	809	-1,505	629	199	112	1,934	1,030	324	154	195	101	838	732	2,068	248	2,906	773	5,359	1,300
Standing Dead Change	1,620	511	968	442	-20	48	2,567	678	159	56	37	25	126	131	-17	113	109	173	2,873	702
Dead Woody Debris Change	-120	367	120	141	-70	77	-69	400	94	54	-10	25	-552	245	19	131	-533	278	-518	491
Total Net ¹	5,903	798	-551	470	117	126	5,468	931	714	159	274	98	696	911	2,529	357	3,225	979	9,682	1,363

¹ Total Net value includes change from roots and understorey vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table 4.6f: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Southern Forest Practice District. See also Appendix 2, Table B9.6

	USDA Forest Service						Other Public				Private				Total					
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate				Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE				
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	-53	44	-6	6	--	--	-59	45	--	--	-3	3	-36	21	-74	48	-110	52	-172	69
Cut	-65	30	-3	3	--	--	-68	30	--	--	--	--	-604	215	-43	21	-647	216	-716	218
Gross Growth	219	73	14	15	--	--	233	74	--	--	3	2	341	106	122	77	463	130	699	152
Net Live	101	56	5	6	--	--	106	56	--	--	-1	1	-299	168	5	28	-294	171	-188	180
Standing Dead Change	-54	52	--	--	--	--	-54	52	--	--	3	2	-12	13	50	42	38	44	-13	68
Dead Woody Debris Change	-55	42	-1	1	--	--	-57	42	--	--	-8	7	8	40	69	65	77	76	12	88
Total Net ¹		96	5	5	--	--	4	96	--	--	-6	5	-368	194	140	92	-228	215	-229	235
Cut and Fire																				
Mortality	-159	106	--	--	--	--	-159	106	--	--	--	--	-85	80	--	--	-85	80	-244	133
Cut	-98	47	--	--	--	--	-98	47	--	--	--	--	-18	16	--	--	-18	16	-116	49
Gross Growth	91	46	--	--	--	--	91	46	--	--	--	--	42	33	--	--	42	33	133	57
Net Live	-166	97	--	--	--	--	-166	97	--	--	--	--	-61	77	--	--	-61	77	-227	124
Standing Dead Change	8	33	--	--	--	--	8	33	--	--	--	--	7	6	--	--	7	6	15	33
Dead Woody Debris Change	-7	19	--	--	--	--	-7	19	--	--	--	--	1		--	--	1		-6	19
Total Net ¹	-194	106	--	--	--	--	-194	106	--	--	--	--	-64	88	--	--	-64	88	-258	138
Fire																				
Mortality	-1,056	302	-1,761	432	-428	138	-3,245	543	-978	403	-114	69	-4	3	-274	104	-278	104	-4,615	687
Cut	-11	12	--	--	--	--	-11	12	--	--	--	--	--	--	-14	13	-14	13	-25	18
Gross Growth	233	67	288	70	67	29	588	101	269	85	8	6	3	2	62	24	64	24	930	135
Net Live	-834	262	-1,473	383	-361	125	-2,668	478	-709	362	-106	69	-1	1	-226	89	-227	89	-3,710	610
Standing Dead Change	526	235	609	201	73	89	1,208	321	24	335	29	26	--	--	76	40	76	40	1,338	466
Dead Woody Debris Change	-115	66	-20	86	-25	35	-160	114	-77	83	39	28	1	1	24	36	25	36	-173	148
Total Net ¹	-506	173	-1,069	312	-390	138	-1,966	382	-928	382	-55	55	-1	1	-165	65	-166	65	-3,115	547

Table 4.6f: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Southern Forest Practice District. See also Appendix 2, Table B9.6 (CONTINUED)

	USDA Forest Service						Other Public				Private				Total					
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate				Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE				
<i>thousand metric tons CO2 equivalent per year</i>																				
Insect and Disease																				
Mortality	-946	217	-521	172	-125	63	-1,592	284	-884	412	-51	34	-5	4	-125	83	-130	83	-2,657	509
Cut	-14	14	--	--	--	--	-14	14	--	--	--	--	--	--	-16	16	-16	16	-30	21
Gross Growth	1,118	183	313	83	50	19	1,481	201	347	94	178	94	48	30	147	68	195	74	2,201	252
Net Live	158	190	-208	138	-75	47	-125	240	-537	362	127	66	44	30	6	74	49	80	-486	446
Standing Dead Change	148	157	40	81	46	45	235	182	490	320	-21	32	-25	22	52	82	27	85	731	379
Dead Woody Debris Change	9	149	289	169	31	17	330	226	128	85	-20	25	24	22	-16	19	8	29	445	244
Total Net ¹	387	213	99	165	-8	33	478	272	52	105	114	82	45	28	53	51	98	58	743	308
Other cut and weather																				
Mortality	-449	155	-258	116	-96	41	-802	198	-129	78	-5	5	-7	5	-392	128	-398	128	-1,335	249
Cut	-18	17	-2	2	--	--	-20	17	--	--	--	--	--	--	-51	29	-51	29	-71	34
Gross Growth	278	81	209	69	65	30	552	110	82	36	3	2	9	7	287	78	297	78	934	140
Net Live	-189	100	-50	84	-31	21	-270	132	-47	44	-2	4	3	7	-156	122	-153	123	-472	186
Standing Dead Change	296	125	121	114	55	32	472	172	38	28	4	3	-1	1	242	107	241	107	755	204
Dead Woody Debris Change	-53	32	34	44	20	28	61		24	36	30	-10	12	131	83	120	84	156	111	
Total Net ¹	55	50	111	77	47	32	214	98	-15	41	39	31	-9	10	234	93	225	94	462	145
Less than 25% disturbed																				
Mortality	-1,434	266	-827	145	-179	45	-2,440	306	-330	71	-99	30	-102	33	-752	106	-854	110	-3,723	334
Cut	-3	2			--	--	-3	2	--	--	--	--	-72	46	-88	43	-160	63	-163	63
Gross Growth	2,811	288	1,622	180	339	72	4,772	343	952	130	284	80	807	178	1,630	159	2,438	237	8,445	442
Net Live	1,374	280	794	173	160	74	2,328	336	622	125	185	76	633	164	790	140	1,424	214	4,559	424
Standing Dead Change	286	184	-159	117	-26	37	101	221	-271	109	-57	42	50	23	195	59	246	63	19	258
Dead Woody Debris Change	-53	130	-34	189	17	45	-70	234	173	158	91	45	-93	36	-54	90	-147	97	47	302
Total Net ¹	2,037	318	761	208	181	90	2,980	388	611	225	231	91	742	189	1,112	183	1,854	261	5,675	527
Total																				
Mortality	-4,098	486	-3,373	490	-828	163	-8,298	703	-2,321	570	-272	82	-238	89	-1,617	216	-1,856	233	-12,746	937
Cut	-209	61	-5	4	--	--	-215	61	--	--	--	--	-695	229	-212	59	-907	236	-1,121	244
Gross Growth	4,751	354	2,446	211	520	84	7,718	410	1,649	170	476	120	1,251	213	2,249	203	3,500	291	13,342	542
Net Live	444	458	-932	453	-307	154	-794	662	-672	529	204	121	318	249	420	221	737	334	-525	920
Standing Dead Change	1,209	363	612	272	149	111	1,970	466	281	474	-42	59	19	35	616	157	635	160	2,845	687
Dead Woody Debris Change	-273	218	267	274	43	66	37	356	222	199	138	67	-71	61	155	144	84	157	481	442
Total Net ¹	1,780	450	-93	417	-169	172	1,517	636	-280	462	322	136	344	284	1,374	239	1,719	371	3,277	880

¹ Total Net value includes change from roots and understory vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table 4.7 - Annual Net Emissions of Non-CO2 Greenhouse Gases from Fire, 2001-2008 to 2011-2018: All California. CO2 values are from table 4.6 and were used to calculate the other gases. See also Appendix 2, Table F1.

	Public						Private						Total	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>														
Cut and Fire														
CO2	-798	305	--	--	-69	72	-1,600	499	-44	44	-1,643	501	-2,510	591
CH4	-26	10	--	--	-2	2	-51	16	-1	1	-53	16	-80	19
N2O	-17	6	--	--	-1	2	-34	11	-1	1	-35	11	-53	12
Fire														
CO2	-6,527	817	-1,153	429	-174	98	-227	129	-87	107	-314	168	-8,169	942
CH4	-209	26	-37	14	-6	3	-7	4	-3	3	-10	5	-262	30
N2O	-138	17	-24	9	-4	2	-5	3	-2	2	-7	4	-172	20
Total Fire														
CO2	-7,325	869	-1,153	429	-243	120	-1,827	512	-131	132	-1,957	529	-10,679	1,119
CH4	-235	28	-37	14	-8	4	-58	16	-4	4	-63	17	-342	36
N2O	-155	18	-24	9	-5	3	-39	11	-3	3	-41	11	-225	24

Table 4.8: Annual change in forest land area to/from other IPCC land-use classes in California, 2001-8 to 2011-18. See also Appendix table E1.

	Timberland ¹		Other forest ²		Reserved		All forest land	
	Total	SE	Total	SE	Total	SE	Total	SE
<i>Acres per year</i>								
Forest to nonforest:								
Cropland	936	740	3,071	1,347	--	--	4,007	1,536
Developed	7,589	1,872	5,257	1,352	455	272	13,301	2,324
Grassland	1,358	959	5,590	2,008	640	633	7,587	2,312
Other	20	21			8	7	28	22
Water	758	521	90	68	111	107	959	536
Total	10,661	2,293	14,007	2,777	1,214	697	25,882	3,665
Nonforest to forest:								
Cropland	206	111	--	--	--	--	206	111
Developed	4,140	941	868	302	41	31	5,048	989
Grassland	3,812	1,318	2,743	1,205	169	105	6,724	1,788
Other			124	128	--	--	124	128
Water	16	17	231	201	--	--	247	202
Total	8,174	1,623	3,966	1,264	210	110	12,349	2,055
Net change to forest land:								
Cropland	-730	747	-3,071	1,347	--	--	-3,801	1,540
Developed	-3,449	2,096	-4,389	1,374	-414	274	-8,253	2,524
Grassland	2,455	1,635	-2,847	2,341	-471	641	-863	2,926
Other	-20	21	124	128	-8	7	96	130
Water	-742	521	142	212	-111	107	-712	573
Total	-2,487	2,819	-10,042	3,048	-1,004	706	-13,533	4,211

Note: Totals may be off because of rounding

¹ Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

² Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table 4.9: Annual change in carbon pools due to change in land use between forest and nonforest in California, 2001-8 to 2011-18. See also Appendix table E2.

Carbon pool	Forest to nonforest		Nonforest to forest		Net change	
	Total	SE	Total	SE	Total	SE
	<i>Thousand metric tons CO2 equivalent per year</i>					
Live tree	-1,890	309	1,001	194	-889	365
Standing dead	-205	112	29	8	-176	113
Down wood	-215	49	93	31	-123	58
Understory veg	-272	39	149	25	-123	47
Litter	-321	51	157	23	-164	56
Soil*	-4,347	573	1,980	314	-2,368	654
All pools	-2,903	416	1,429	234	-1,474	478

* No changes in landuse involved cultivated land so soil organic carbon change was assumed to be zero (Ogle et al. 2003)

Table 4.10: Area of forest land remaining forest land by ownership group and region in California, 2009-2018. Table derived from Appendix 2, Tables A10-A16.

	Public		Private		All Ownerships	
	Total	SE	Total	SE	Total	SE
<i>Thousand acres</i>						
Central Coast and Interior Ranges:						
Unreserved forest land	252	37	1,067	74	1,318	82
Reserved forest land	477	48	--	--	477	48
Total forest land	729	60	1,067	74	1,796	95
Central Valley:						
Unreserved forest land	4	3	78	20	83	20
Reserved forest land	6	5	--	--	6	5
Total forest land	10	6	78	20	89	21
Eastside:						
Unreserved forest land	1,965	100	540	57	2,505	115
Reserved forest land	298	43	--	--	298	43
Total forest land	2,263	108	540	57	2,803	122
Klamath Interior Coast Ranges:						
Unreserved forest land	3,244	120	2,929	121	6,173	170
Reserved forest land	1,782	87	--	--	1,782	87
Total forest land	5,026	143	2,929	121	7,955	187
North Coast:						
Unreserved forest land	159	30	2,210	101	2,369	105
Reserved forest land	327	42	--	--	327	42
Total forest land	486	49	2,210	101	2,696	111
Sierra Cascades:						
Unreserved forest land	6,672	149	5,169	146	11,842	206
Reserved forest land	3,229	116	--	--	3,229	116
Total forest land	9,902	177	5,169	146	15,071	225
South Coast Mountains and Deserts:						
Unreserved forest land	539	54	279	39	818	66
Reserved forest land	443	51	--	--	443	51
Total forest land	982	74	279	39	1,260	84
All California:						
Unreserved forest land	12,836	149	12,272	153	25,107	203
Reserved forest land	6,563	136	--	--	6,563	136
Total forest land	19,398	159	12,272	153	31,670	201

Table 4.11: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: All California. See also Appendix 2, Table A17.

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owners	
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand acres</i>																						
Softwoods:																						
California mixed conifer	4,111	120	1,056	70	52	17	396	45	30	13	49	17	1,761	92	--	--	442	50	3	3	7,899	173
Douglas-fir	173	31	161	31	19	11	50	18	29	13	29	14	331	43	--	--	334	43	--	--	1,126	78
Fir / spruce / mountain hemlock	1,117	76	429	49	--	--	200	34	11	8	11	8	192	33	--	--	61	20	--	--	2,020	104
Western Hemlock / Sitka spruce	--	--	--	--	--	--	1	1	1	1	1	1	22	12	--	--	3	2	--	--	28	12
Lodgepole pine	221	35	487	50	--	--	230	35	9	8	6	6	24	12	--	--	29	13	--	--	1,005	74
Pinyon / juniper	11	8	713	60	--	--	540	55	--	--	73	21	--	--	41	16	--	--	122	26	1,499	89
Ponderosa pine	1,257	76	219	35	29	13	46	16	4	4	18	10	535	54	4	3	253	37	2	2	2,367	108
Redwood	3	3	16	10	--	--	31	14	44	15	65	19	428	49	--	--	191	33	--	--	778	65
Western juniper	127	27	615	57	22	11	320	42	--	--	17	11	11	7	66	20	23	11	264	39	1,465	90
Western white pine	30	13	117	27	--	--	13	9	--	--	--	--	--	--	--	--	--	--	--	--	160	31
Other western softwoods	37	14	327	42	3	2	151	29	--	--	17	11	16	10	--	--	15	10	6	6	572	57
Total	7,087	129	4,140	117	124	27	1,976	89	128	26	286	39	3,319	114	111	26	1,351	83	397	47	18,919	219
Hardwoods:																						
Alder / maple	34	13	15	8	12	7	28	13	--	--	7	6	90	22	1	1	26	12	12	6	226	34
Aspen / birch	8	6	54	17	--	--	9	7	--	--	1	1	4	4	--	--	--	--	--	--	77	20
Elm / ash / cottonwood	--	--	5	5	--	--	1	1	--	--	8	6	--	--	3	2	--	--	17	8	34	11
Tanoak / laurel	185	32	230	37	13	7	57	19	10	8	150	30	510	54	24	11	546	56	90	22	1,816	98
Western oak	891	69	1,588	90	95	24	531	53	13	9	435	44	334	44	742	63	627	60	3,496	121	8,753	192
Woodland hardwoods	14	9	48	16	--	--	55	17	--	--	9	7	--	--	6	6	--	--	29	12	160	29
Exotic hardwoods	--	--	--	--	2	2	--	--	--	--	--	--	--	--	--	--	--	--	2	2	5	3
Other hardwoods	131	27	78	21	11	7	16	10	4	4	36	15	70	19	3	3	90	23	103	24	543	55
Total	1,263	81	2,018	100	133	28	696	60	28	12	646	54	1,008	73	780	65	1,290	83	3,751	123	11,614	212
Nonstocked	437	48	293	41	15	9	112	26	--	--	15	9	207	32			28	12	29	12	1,138	78
All forest types	8,787	121	6,451	132	273	40	2,785	95	156	29	946	61	4,534	122	891	69	2,669	111	4,178	130	31,670	201

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table 4.12a. Forest land carbon stock by ownership and land status, 2009-2018: All California. Table derived from Appendix 2, C tables.

	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres		
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE											
	<i>Million metric tons C¹</i>																				<i>Thousand acres</i>		
National Forests																							
Timberland	382.57	8.17	72.72	1.57	42.65	1.97	9.79	0.44	7.70	0.16	0.86	0.02	39.44	1.18	50.13	0.78	413.41	5.86	1,019.25	15.98	8,787.08	120.73	
Other forest	25.38	2.04	5.02	0.41	2.78	0.40	0.68	0.10	4.16	0.19	0.46	0.02	3.92	0.34	5.92	0.28	98.30	4.18	146.62	6.82	2,385.40	98.74	
Reserved - productive	128.73	5.99	24.16	1.11	19.46	1.41	4.41	0.31	2.38	0.10	0.26	0.01	13.18	0.89	14.85	0.52	134.10	4.39	341.54	11.96	2,793.51	91.19	
Reserved - other	16.79	1.65	3.37	0.33	2.34	0.34	0.56	0.08	1.73	0.12	0.19	0.01	2.91	0.32	4.15	0.28	55.43	3.42	87.48	5.66	1,266.04	76.71	
Total	553.47	9.00	105.27	1.72	67.23	2.39	15.44	0.53	15.99	0.24	1.78	0.03	59.48	1.46	75.06	0.76	701.52	5.86	1,595.22	15.67	15,238.31	122.90	
Other Federal																							
Timberland	9.21	2.03	1.90	0.43	0.33	0.10	0.09	0.03	0.34	0.05	0.04	0.01	0.69	0.14	1.10	0.18	11.51	1.70	25.22	4.21	273.17	39.84	
Other forest	7.88	1.00	1.57	0.20	0.37	0.07	0.10	0.02	1.96	0.15	0.22	0.02	1.18	0.15	2.13	0.16	42.10	2.99	57.51	4.25	1,038.60	72.33	
Reserved - productive	61.83	5.80	11.31	1.02	9.39	1.26	2.00	0.24	0.84	0.06	0.09	0.01	7.12	0.75	6.80	0.43	49.13	2.89	148.52	10.50	1,062.62	62.50	
Reserved - other	8.33	1.26	1.67	0.25	0.66	0.14	0.17	0.04	0.97	0.09	0.11	0.01	1.72	0.32	2.02	0.22	26.22	2.38	41.87	4.14	683.46	60.73	
Total	87.26	5.94	16.45	1.07	10.75	1.26	2.35	0.24	4.12	0.17	0.46	0.02	10.71	0.81	12.05	0.47	128.96	4.16	273.12	11.09	3,057.85	97.86	
State and Local Government																							
Timberland	11.28	2.39	2.15	0.45	0.48	0.17	0.12	0.04	0.14	0.03	0.02	0.00	0.80	0.26	0.79	0.15	7.25	1.34	23.03	4.51	155.74	28.56	
Other forest	2.54	0.60	0.51	0.12	0.10	0.03	0.03	0.01	0.31	0.05	0.03	0.01	0.30	0.10	0.40	0.07	7.58	1.28	11.79	2.08	195.73	32.74	
Reserved - productive	33.79	6.73	6.39	1.23	1.16	0.23	0.33	0.06	0.37	0.05	0.04	0.01	2.15	0.35	1.51	0.17	14.58	1.62	60.33	9.45	327.97	35.95	
Reserved - other	7.91	1.36	1.48	0.26	0.34	0.09	0.09	0.02	0.65	0.07	0.07	0.01	0.82	0.18	0.96	0.11	16.31	1.74	28.62	3.36	422.65	44.53	
Total	55.52	6.50	10.53	1.18	2.07	0.28	0.56	0.07	1.47	0.09	0.16	0.01	4.08	0.43	3.66	0.22	45.72	2.53	123.77	9.37	1,102.10	61.52	
Total Public																							
Timberland	403.06	8.69	76.76	1.68	43.46	1.97	10.00	0.44	8.18	0.17	0.91	0.02	40.94	1.21	52.02	0.81	432.16	6.18	1,067.51	16.96	9,215.99	128.87	
Other forest	35.80	2.35	7.10	0.48	3.24	0.41	0.80	0.10	6.44	0.25	0.72	0.03	5.39	0.39	8.44	0.33	147.98	5.28	215.92	8.28	3,619.73	126.31	
Reserved - productive	224.36	10.70	41.86	1.95	30.00	1.90	6.74	0.39	3.60	0.13	0.40	0.01	22.46	1.21	23.17	0.70	197.81	5.48	550.39	18.48	4,184.10	115.95	
Reserved - other	33.03	2.47	6.52	0.49	3.34	0.38	0.81	0.09	3.35	0.16	0.37	0.02	5.46	0.49	7.12	0.37	97.97	4.51	157.97	7.76	2,372.15	107.32	
Total	696.25	12.25	132.25	2.28	80.05	2.70	18.35	0.58	21.58	0.30	2.40	0.03	74.27	1.70	90.77	0.87	876.19	7.15	1,992.11	20.19	19,398.26	159.45	
Private Corporate																							
Timberland	169.89	6.50	32.63	1.25	8.77	0.70	2.28	0.18	4.87	0.17	0.54	0.02	24.10	1.12	23.39	0.70	203.41	5.58	469.87	13.91	4,534.23	122.04	
Other forest	14.19	1.54	2.69	0.29	0.53	0.09	0.13	0.02	1.40	0.11	0.16	0.01	1.20	0.16	1.91	0.16	36.47	2.87	58.69	4.80	890.96	69.39	
Total	184.08	6.61	35.32	1.27	9.31	0.70	2.41	0.18	6.27	0.20	0.70	0.02	25.30	1.13	25.29	0.71	239.88	6.10	528.56	14.41	5,425.19	136.26	
Private Noncorporate																							
Timberland	129.78	6.70	25.55	1.31	5.07	0.48	1.25	0.11	3.00	0.14	0.33	0.02	11.22	0.79	12.00	0.54	117.51	4.94	305.71	13.66	2,668.86	110.98	
Other forest	54.68	2.36	10.57	0.46	2.67	0.30	0.65	0.07	6.63	0.21	0.74	0.02	5.14	0.34	8.39	0.28	166.37	5.24	255.82	8.26	4,177.64	129.85	
Total	184.45	6.86	36.12	1.34	7.73	0.56	1.90	0.13	9.62	0.24	1.07	0.03	16.36	0.85	20.39	0.58	283.88	6.73	561.53	15.02	6,846.50	159.67	
Total Private																							
Timberland	299.67	7.60	58.18	1.47	13.84	0.81	3.53	0.21	7.87	0.18	0.87	0.02	35.32	1.24	35.39	0.68	320.91	5.44	775.58	14.44	7,203.09	118.85	
Other forest	68.86	2.72	13.26	0.53	3.20	0.31	0.78	0.07	8.03	0.23	0.89	0.03	6.35	0.37	10.30	0.31	202.84	5.65	314.51	9.05	5,068.61	138.99	
Total	368.53	7.51	71.45	1.45	17.04	0.86	4.30	0.22	15.89	0.26	1.77	0.03	41.66	1.26	45.69	0.66	523.76	6.54	1,090.09	14.54	12,271.69	152.61	
All Ownerships																							
Timberland	702.73	11.35	134.95	2.19	57.30	2.13	13.52	0.49	16.05	0.24	1.78	0.03	76.26	1.72	87.42	1.03	753.07	7.94	1,843.09	21.63	16,419.08	168.59	
Other forest	104.66	3.59	20.37	0.71	6.44	0.52	1.58	0.12	14.46	0.33	1.61	0.04	11.74	0.54	18.74	0.45	350.82	7.65	530.43	12.15	8,688.34	185.41	
Reserved - productive	224.36	10.70	41.86	1.95	30.00	1.90	6.74	0.39	3.60	0.13	0.40	0.01	22.46	1.21	23.17	0.70	197.81	5.48	550.39	18.48	4,184.10	115.95	
Reserved - other	33.03	2.47	6.52	0.49	3.34	0.38	0.81	0.09	3.35	0.16	0.37	0.02	5.46	0.49	7.12	0.37	97.97	4.51	157.97	7.76	2,372.15	107.32	
Total	1,064.78	13.95	203.69	2.62	97.09	2.83	22.65	0.62	37.47	0.38	4.16	0.04	115.94	2.09	136.46	1.02	1,399.95	8.86	3,082.20	23.17	31,669.95	200.99	

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

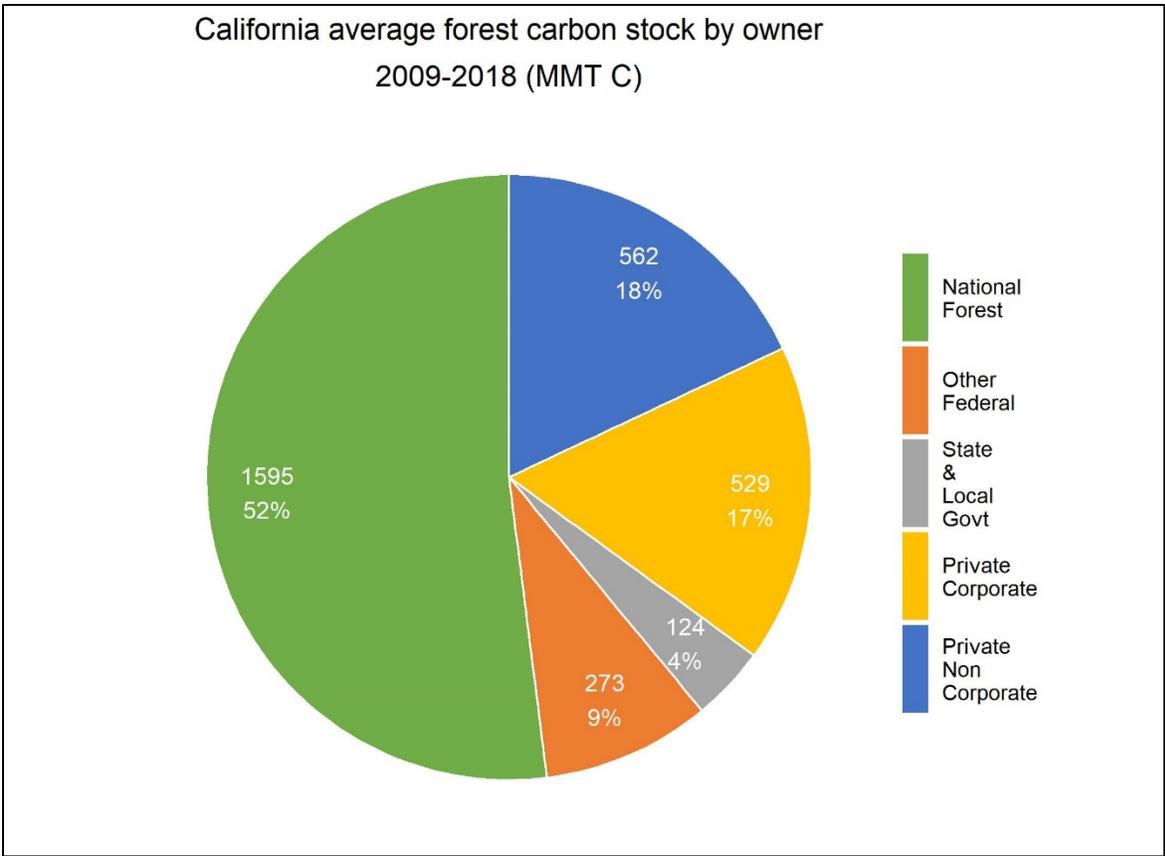


Figure 4.8. California statewide average forest carbon stock by owner, 2009-2018 (MMT C). Figure derived from Table 4.12.

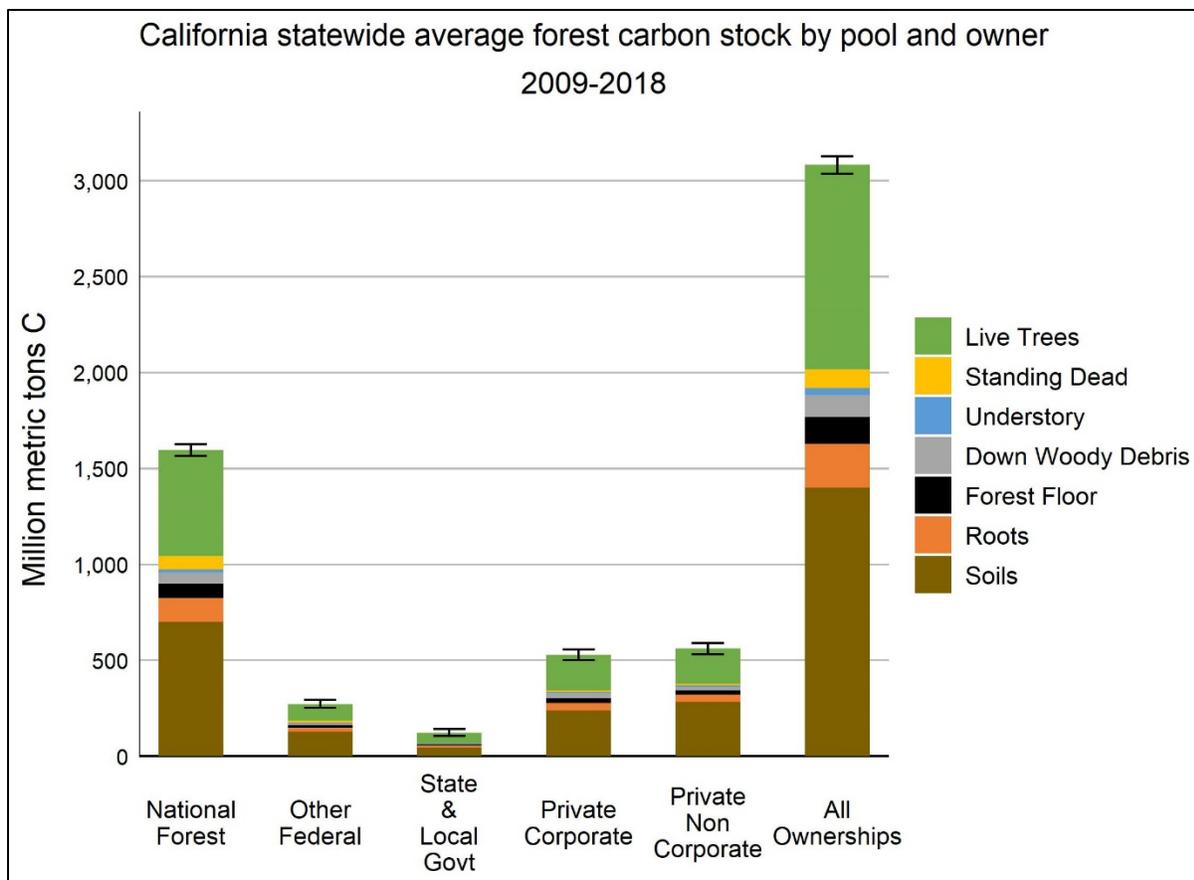


Figure 4.9. California statewide average forest carbon stock by pool and ownership, 2009-2018 (MMT C). Error bars represent 95% interval of estimated total stock for each ownership. Figure derived from table 4.12.

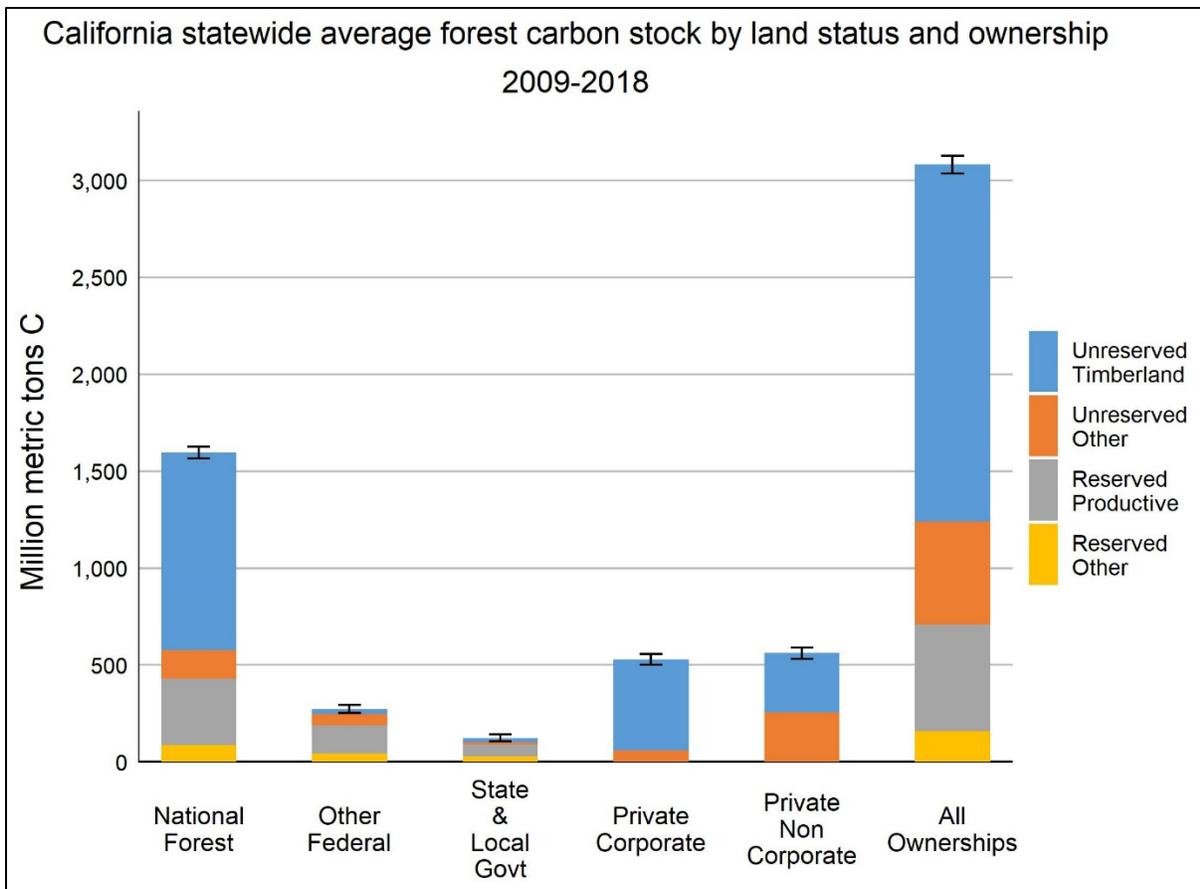


Figure 4.10. California statewide average forest carbon stock by land status and ownership, 2009-2018 (MMT C). Error bars represent 95% confidence interval of estimated total stock for each ownership.

Table 4.12b. Forest land carbon stock by county, 2009-2018: COUNTY

County	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C	
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE								
	<i>Million metric tons C¹</i>																			
Alameda	2.83	0.67	0.52	0.12	0.07	0.03	0.02	0.01	0.18	0.04	0.02	0.00	0.27	0.10	0.30	0.07	4.87	1.07	9.08	2.01
Alpine	11.28	1.85	1.98	0.32	1.13	0.21	0.25	0.05	0.36	0.05	0.04	0.01	1.25	0.26	2.06	0.27	18.25	2.33	36.60	4.97
Amador	5.62	1.30	1.08	0.24	0.65	0.26	0.14	0.05	0.27	0.05	0.03	0.01	0.58	0.14	0.83	0.16	9.87	1.64	19.06	3.48
Butte	23.16	3.14	4.45	0.60	1.11	0.22	0.27	0.05	0.64	0.07	0.07	0.01	2.03	0.29	2.28	0.26	24.85	2.62	58.86	6.76
Calaveras	14.55	2.21	2.74	0.41	1.12	0.40	0.23	0.06	0.61	0.07	0.07	0.01	1.31	0.21	2.00	0.27	22.85	2.49	45.48	5.49
Colusa	2.32	0.67	0.46	0.13	0.45	0.22	0.11	0.05	0.32	0.05	0.04	0.01	0.38	0.11	0.42	0.08	9.23	1.58	13.73	2.49
Contra Costa	1.44	0.47	0.26	0.08	0.00	0.00	0.00	0.00	0.09	0.02	0.01	0.00	0.06	0.03	0.16	0.05	2.76	0.79	4.79	1.38
Del Norte	39.33	6.92	7.65	1.30	2.49	0.43	0.65	0.11	0.83	0.08	0.09	0.01	2.74	0.40	2.43	0.23	33.03	3.16	89.24	11.16
El Dorado	38.33	4.04	7.25	0.76	3.49	0.54	0.78	0.12	0.75	0.07	0.08	0.01	3.87	0.49	5.26	0.47	39.71	3.32	99.52	8.92
Fresno	36.88	3.84	6.91	0.70	4.85	0.69	1.10	0.15	1.22	0.10	0.14	0.01	3.47	0.49	5.61	0.44	50.30	3.54	110.48	8.75
Glenn	5.85	1.38	1.16	0.27	0.51	0.21	0.11	0.04	0.24	0.04	0.03	0.00	0.51	0.13	0.81	0.16	8.91	1.54	18.12	3.44
Humboldt	114.64	8.67	22.40	1.66	6.80	0.82	1.85	0.22	2.07	0.12	0.23	0.01	13.37	1.17	6.61	0.39	77.70	4.49	245.69	15.88
Imperial	0.04	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.18	0.13	0.26	0.20
Inyo	3.01	0.45	0.65	0.10	0.27	0.07	0.07	0.02	0.75	0.08	0.08	0.01	0.76	0.15	1.29	0.16	18.47	2.01	25.35	2.82
Kern	9.39	1.27	1.79	0.24	0.96	0.20	0.21	0.05	1.07	0.10	0.12	0.01	1.60	0.26	1.60	0.18	28.73	2.60	45.47	4.39
Lake	9.20	1.54	1.83	0.31	0.77	0.25	0.20	0.06	0.50	0.07	0.06	0.01	0.99	0.19	1.43	0.20	17.59	2.21	32.55	4.32
Lassen	23.05	2.15	4.34	0.40	1.40	0.22	0.30	0.05	1.90	0.16	0.21	0.02	3.81	0.41	5.80	0.43	58.34	3.85	99.14	6.88
Los Angeles	1.77	0.45	0.33	0.08	0.26	0.09	0.07	0.02	0.27	0.05	0.03	0.01	0.29	0.08	0.39	0.08	7.36	1.28	10.77	1.92
Madera	23.26	3.26	4.18	0.57	3.86	0.78	0.83	0.16	0.66	0.07	0.07	0.01	2.85	0.60	3.15	0.36	25.79	2.55	64.66	7.38
Marin	5.28	1.91	0.99	0.35	0.16	0.07	0.05	0.02	0.13	0.03	0.01	0.00	0.48	0.24	0.36	0.09	4.50	1.10	11.97	3.45
Mariposa	19.60	2.63	3.69	0.48	3.05	0.58	0.66	0.12	0.74	0.08	0.08	0.01	2.72	0.44	2.90	0.34	26.93	2.61	60.38	6.57
Mendocino	82.89	5.77	16.26	1.13	3.17	0.39	0.85	0.10	2.18	0.13	0.24	0.01	7.12	0.64	6.31	0.37	74.42	4.33	193.45	11.86
Merced	0.36	0.18	0.07	0.03	0.01	0.01	0.00	0.00	0.04	0.02	0.00	0.00	0.01	0.01	0.05	0.02	0.96	0.42	1.52	0.65
Modoc	16.79	1.78	3.06	0.31	1.13	0.21	0.24	0.04	2.17	0.17	0.24	0.02	2.54	0.28	4.55	0.34	55.55	3.65	86.28	6.04
Mono	9.67	1.20	1.96	0.24	0.72	0.17	0.17	0.04	1.05	0.10	0.12	0.01	1.89	0.25	2.61	0.25	31.74	2.69	49.93	4.46
Monterey	10.24	2.42	1.85	0.42	0.81	0.27	0.18	0.06	0.65	0.07	0.07	0.01	1.13	0.33	1.10	0.13	19.02	2.14	35.06	4.89
Napa	5.16	1.12	1.02	0.22	0.22	0.07	0.05	0.02	0.28	0.05	0.03	0.01	0.48	0.20	0.50	0.09	7.81	1.35	15.54	2.83
Nevada	14.62	2.22	2.79	0.42	0.98	0.25	0.23	0.06	0.42	0.06	0.05	0.01	1.47	0.34	1.90	0.24	18.52	2.25	40.98	5.29
Orange	0.02	0.02	0.00	0.00	--	--	--	--	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.09	0.09	0.13	0.13
Placer	24.05	2.98	4.49	0.56	2.04	0.36	0.45	0.08	0.65	0.07	0.07	0.01	2.39	0.34	3.21	0.34	30.08	2.96	67.43	7.04
Plumas	54.24	4.40	9.99	0.80	6.77	0.95	1.53	0.21	1.30	0.10	0.14	0.01	6.45	0.57	9.06	0.59	66.36	4.09	155.85	10.29
Riverside	0.70	0.32	0.14	0.06	0.04	0.03	0.01	0.01	0.13	0.03	0.01	0.00	0.19	0.08	0.20	0.06	3.19	0.83	4.61	1.29

Table 4.12b. Forest land carbon stock by county, 2009-2018: COUNTY (CONTINUED)

County	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres	
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>																					
Sacramento	0.15	0.13	0.03	0.03	--	--	--	--	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.48	0.33	0.70	0.50	11.91	7.71
San Benito	1.71	0.60	0.29	0.10	0.03	0.02	0.01	0.00	0.21	0.04	0.02	0.00	0.12	0.04	0.26	0.06	5.36	1.12	8.02	1.77	130.59	27.25
San Bernardino	4.34	0.97	0.78	0.16	0.90	0.25	0.21	0.06	0.60	0.07	0.07	0.01	1.12	0.24	0.99	0.16	16.06	1.92	25.08	3.29	429.50	50.45
San Diego	1.42	0.55	0.25	0.10	0.17	0.07	0.04	0.02	0.20	0.04	0.02	0.00	0.29	0.10	0.25	0.06	4.50	0.92	7.13	1.57	126.25	25.42
San Joaquin	0.35	0.27	0.07	0.05	0.01	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.03	0.03	0.04	0.02	0.54	0.34	1.07	0.73	13.74	8.05
San Luis Obispo	4.10	0.80	0.73	0.14	0.18	0.05	0.04	0.01	0.37	0.05	0.04	0.01	0.49	0.13	0.49	0.08	9.78	1.45	16.21	2.49	241.68	35.08
San Mateo	7.11	2.31	1.33	0.43	0.32	0.11	0.09	0.03	0.11	0.03	0.01	0.00	0.71	0.27	0.31	0.08	4.07	1.05	14.05	4.07	85.58	21.82
Santa Barbara	2.03	0.55	0.36	0.10	0.43	0.15	0.09	0.03	0.36	0.06	0.04	0.01	0.34	0.09	0.39	0.07	8.39	1.34	12.43	2.07	229.01	36.11
Santa Clara	6.93	1.26	1.29	0.24	0.25	0.09	0.08	0.03	0.41	0.06	0.05	0.01	0.57	0.12	0.79	0.12	10.15	1.44	20.52	3.07	279.01	39.25
Santa Cruz	18.56	3.64	3.50	0.68	0.43	0.10	0.11	0.03	0.25	0.04	0.03	0.00	0.98	0.23	0.90	0.15	9.96	1.65	34.71	6.23	211.38	34.85
Shasta	54.20	3.87	10.60	0.77	4.02	0.55	0.91	0.12	2.02	0.13	0.22	0.01	5.97	0.51	9.25	0.58	81.03	4.54	168.24	9.99	1,843.98	102.21
Sierra	21.11	2.90	3.96	0.55	1.54	0.27	0.35	0.06	0.47	0.06	0.05	0.01	2.00	0.28	2.88	0.31	25.75	2.72	58.11	6.60	534.91	55.49
Siskiyou	106.61	6.03	20.46	1.17	12.72	1.47	3.01	0.34	3.20	0.16	0.36	0.02	11.97	0.78	15.71	0.70	146.46	6.16	320.50	14.54	3,083.01	128.71
Solano	0.41	0.21	0.07	0.04	--	--	--	--	0.04	0.02	0.00	0.00	0.06	0.03	0.06	0.02	1.18	0.54	1.83	0.80	28.36	12.70
Sonoma	24.28	3.71	4.70	0.71	0.78	0.19	0.21	0.06	0.57	0.07	0.06	0.01	1.77	0.30	1.44	0.17	18.60	2.16	52.41	6.84	439.77	50.70
Stanislaus	0.67	0.20	0.13	0.04	0.01	0.01	0.00	0.00	0.15	0.04	0.02	0.00	0.09	0.04	0.18	0.05	3.04	0.76	4.30	1.08	93.26	23.10
Sutter	0.19	0.17	0.04	0.03	--	--	--	--	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.02	0.35	0.24	0.62	0.48	9.74	6.80
Tehama	26.18	2.93	5.00	0.55	2.38	0.41	0.57	0.10	1.19	0.11	0.13	0.01	3.50	0.50	3.82	0.36	41.80	3.31	84.57	7.46	965.51	74.96
Trinity	83.78	5.65	16.92	1.15	9.63	1.03	2.35	0.25	1.69	0.11	0.19	0.01	8.51	0.66	9.78	0.57	91.15	5.04	223.99	13.12	1,837.36	100.80
Tulare	42.74	4.21	7.81	0.74	6.50	0.86	1.38	0.18	1.37	0.10	0.15	0.01	4.90	0.59	6.11	0.46	55.69	3.73	126.65	9.60	1,341.09	89.18
Tuolumne	38.33	3.86	7.07	0.69	6.79	1.23	1.39	0.22	1.05	0.09	0.12	0.01	4.45	0.49	6.22	0.51	48.94	3.59	114.35	9.30	1,079.04	78.48
Ventura	1.46	0.40	0.28	0.08	0.38	0.16	0.09	0.04	0.35	0.06	0.04	0.01	0.28	0.07	0.42	0.08	8.54	1.39	11.84	1.98	230.43	36.79
Yolo	0.50	0.16	0.10	0.03	0.03	0.02	0.01	0.00	0.10	0.03	0.01	0.00	0.04	0.02	0.10	0.03	2.52	0.75	3.40	1.01	65.33	19.09
Yuba	8.05	1.87	1.63	0.38	0.27	0.09	0.08	0.02	0.21	0.04	0.02	0.00	0.72	0.25	0.82	0.17	7.65	1.36	19.45	3.85	186.40	33.02
All counties	1,064.78	13.95	203.69	2.62	97.09	2.83	22.65	0.62	37.47	0.38	4.16	0.04	115.94	2.09	136.46	1.02	1,399.95	8.86	3,082.20	23.17	31,669.95	200.99

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.12c. Forest land carbon stock by National Forest, 2009-2018: NATIONAL FOREST.

	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres	
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>																					
Region 5																						
Angeles	1.98	0.60	0.35	0.10	0.21	0.08	0.06	0.02	0.20	0.04	0.02	0.00	0.30	0.09	0.38	0.09	6.11	1.22	9.61	2.01	146.13	28.75
Cleveland	0.17	0.11	0.02	0.02	0.01	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.01	0.04	0.02	0.62	0.35	0.90	0.49	16.23	8.86
Eldorado	32.09	3.76	6.04	0.72	3.51	0.56	0.77	0.12	0.46	0.05	0.05	0.01	2.99	0.42	4.07	0.41	30.51	3.00	80.49	8.30	605.58	59.10
Inyo	14.21	1.71	2.90	0.34	1.14	0.19	0.28	0.05	1.13	0.10	0.13	0.01	2.47	0.38	3.40	0.29	37.84	2.88	63.49	5.23	954.64	71.92
Klamath	55.78	4.73	10.83	0.92	9.33	1.39	2.20	0.32	1.28	0.10	0.14	0.01	6.14	0.60	6.81	0.46	64.17	4.17	156.69	11.02	1,316.40	84.38
Lake Tahoe Basin	4.77	1.68	0.83	0.29	0.49	0.19	0.11	0.04	0.11	0.03	0.01	0.00	0.48	0.16	0.66	0.16	4.89	1.14	12.36	3.36	111.74	25.81
Lassen	35.48	3.40	6.38	0.60	4.34	0.79	0.93	0.16	0.95	0.08	0.11	0.01	4.38	0.52	5.73	0.45	46.53	3.41	104.83	8.34	1,034.80	75.06
Los Padres	8.72	2.12	1.59	0.36	1.32	0.32	0.29	0.07	0.90	0.09	0.10	0.01	1.41	0.32	1.37	0.15	23.51	2.30	39.20	4.63	598.05	57.22
Mendocino	27.20	2.99	5.43	0.60	3.69	0.66	0.87	0.15	0.92	0.09	0.10	0.01	3.11	0.38	3.55	0.33	39.03	3.31	83.90	7.57	814.86	68.32
Modoc	17.58	2.02	3.18	0.35	1.24	0.21	0.27	0.05	1.78	0.15	0.20	0.02	2.37	0.28	4.11	0.32	48.13	3.34	78.86	6.00	1,120.87	76.74
Plumas	50.38	4.58	9.43	0.85	5.34	0.72	1.26	0.17	1.05	0.09	0.12	0.01	5.45	0.54	6.98	0.50	52.14	3.56	132.15	9.81	1,154.81	78.09
San Bernardino	3.51	0.84	0.65	0.15	0.75	0.24	0.18	0.06	0.32	0.05	0.04	0.01	0.86	0.18	0.78	0.14	9.91	1.53	17.01	2.82	250.32	38.42
Sequoia	27.06	3.37	4.89	0.59	4.85	0.72	1.03	0.15	0.96	0.09	0.11	0.01	2.84	0.45	3.97	0.37	38.11	3.11	83.82	7.68	889.59	72.16
Shasta-Trinity	86.27	5.49	17.12	1.11	9.20	0.92	2.23	0.22	1.64	0.10	0.18	0.01	8.69	0.67	10.91	0.60	94.42	4.98	230.67	12.84	1,925.54	100.46
Sierra	45.03	4.30	8.30	0.77	6.96	0.97	1.51	0.20	0.96	0.08	0.11	0.01	4.86	0.68	6.19	0.49	47.36	3.42	121.28	9.71	1,086.97	78.07
Six Rivers	65.57	5.85	12.98	1.17	6.49	0.84	1.62	0.21	1.28	0.10	0.14	0.01	5.03	0.53	4.66	0.34	58.03	4.10	155.80	11.91	1,105.77	77.74
Stanislaus	31.26	3.47	5.64	0.61	4.16	0.72	0.87	0.14	0.71	0.07	0.08	0.01	2.98	0.36	4.75	0.44	37.48	3.25	87.93	8.26	781.32	66.83
Tahoe	35.19	3.67	6.59	0.69	3.07	0.43	0.70	0.09	0.75	0.07	0.08	0.01	3.54	0.47	4.57	0.39	41.17	3.41	95.65	8.38	833.19	67.86
Toiyabe	6.53	1.06	1.21	0.19	0.74	0.19	0.17	0.04	0.48	0.07	0.05	0.01	1.17	0.23	1.71	0.22	17.30	2.07	29.35	3.69	409.56	48.41
Total	548.77	8.98	104.34	1.71	66.84	2.39	15.34	0.53	15.91	0.24	1.77	0.03	59.08	1.45	74.65	0.76	697.25	5.86	1,583.95	15.67	15,156.36	123.04
Region 6																						
Rogue River / Siskiyou	4.70	0.92	0.93	0.19	0.39	0.13	0.10	0.04	0.08	0.01	0.01	0.00	0.40	0.09	0.41	0.04	4.26	0.39	11.26	1.44	81.95	6.62
Total	4.70	0.92	0.93	0.19	0.39	0.13	0.10	0.04	0.08	0.01	0.01	0.00	0.40	0.09	0.41	0.04	4.26	0.39	11.26	1.44	81.95	6.62
All National Forests	553.47	9.00	105.27	1.72	67.23	2.39	15.44	0.53	15.99	0.24	1.78	0.03	59.48	1.46	75.06	0.76	701.52	5.86	1,595.22	15.67	15,238.31	122.90

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.12d. Forest land carbon stock by ownership and land status, 2009–2018: Coastal Forest Practice District

	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres	
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	Million metric tons C ¹																					
National Forests																						
Timberland	30.60	4.11	6.05	0.82	2.92	0.81	0.73	0.20	0.43	0.05	0.05	0.01	2.25	0.35	2.12	0.25	22.40	2.54	67.55	8.16	437.48	49.32
Other forest	0.65	0.43	0.13	0.09	0.03	0.02	0.01	0.01	0.02	0.01	0.00	0.00	0.02	0.02	0.05	0.03	0.85	0.49	1.76	1.03	16.83	9.63
Reserved - productive	19.55	3.44	3.85	0.69	1.48	0.35	0.39	0.09	0.42	0.06	0.05	0.01	1.33	0.28	1.32	0.18	17.81	2.35	46.20	6.83	340.51	44.76
Reserved - other	0.56	0.22	0.10	0.04	0.11	0.06	0.02	0.01	0.08	0.03	0.01	0.00	0.04	0.02	0.18	0.06	3.06	1.02	4.15	1.40	54.23	18.09
Total	51.36	5.33	10.12	1.07	4.53	0.88	1.15	0.22	0.95	0.08	0.11	0.01	3.64	0.44	3.67	0.31	44.12	3.58	119.66	10.64	849.05	68.60
Other Federal																						
Timberland	3.27	1.57	0.67	0.33	0.04	0.03	0.01	0.01	0.07	0.02	0.01	0.00	0.13	0.06	0.17	0.06	2.09	0.75	6.46	2.69	50.50	17.78
Other forest	0.12	0.12	0.02	0.03	--	--	--	--	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.31	0.32	0.48	0.49	6.13	6.25
Reserved - productive	14.56	4.62	2.70	0.82	0.74	0.24	0.20	0.07	0.16	0.04	0.02	0.00	1.05	0.35	0.54	0.12	6.04	1.32	26.00	7.02	131.09	28.13
Reserved - other	0.47	0.28	0.09	0.05	0.02	0.03	0.01	0.01	0.03	0.02	0.00	0.00	0.11	0.12	0.06	0.04	0.77	0.46	1.57	0.94	18.12	10.81
Total	18.41	4.86	3.48	0.88	0.80	0.24	0.22	0.07	0.26	0.05	0.03	0.01	1.30	0.38	0.79	0.14	9.21	1.58	34.51	7.52	205.83	34.75
State and Local Government																						
Timberland	7.33	2.11	1.39	0.40	0.22	0.09	0.08	0.03	0.08	0.02	0.01	0.00	0.60	0.25	0.34	0.09	3.64	0.96	13.69	3.78	77.62	20.25
Other forest	0.20	0.12	0.04	0.02	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.03	0.01	0.49	0.24	0.79	0.38	11.15	5.52
Reserved - productive	26.76	6.90	5.04	1.26	0.84	0.22	0.24	0.06	0.26	0.04	0.03	0.00	1.45	0.34	0.83	0.13	9.02	1.43	44.46	9.68	205.25	32.20
Reserved - other	2.66	1.07	0.51	0.21	0.07	0.04	0.02	0.02	0.14	0.04	0.02	0.00	0.11	0.04	0.26	0.07	3.96	0.99	7.76	2.19	90.93	22.88
Total	36.95	6.87	6.98	1.25	1.14	0.23	0.34	0.06	0.50	0.06	0.06	0.01	2.17	0.40	1.45	0.15	17.11	1.76	66.70	9.75	384.95	39.53
Total Public																						
Timberland	41.20	4.88	8.11	0.97	3.19	0.81	0.82	0.20	0.58	0.06	0.06	0.01	2.98	0.44	2.63	0.27	28.13	2.81	87.70	9.38	565.60	56.20
Other forest	0.96	0.46	0.19	0.09	0.03	0.02	0.01	0.01	0.05	0.02	0.01	0.00	0.03	0.02	0.09	0.04	1.66	0.63	3.03	1.21	34.11	12.73
Reserved - productive	60.87	8.99	11.58	1.65	3.05	0.48	0.83	0.13	0.84	0.08	0.09	0.01	3.83	0.56	2.69	0.25	32.88	3.05	116.66	13.78	676.85	61.95
Reserved - other	3.69	1.13	0.69	0.22	0.20	0.08	0.05	0.02	0.25	0.05	0.03	0.01	0.26	0.13	0.50	0.10	7.79	1.50	13.48	2.77	163.28	31.10
Total	106.72	9.96	20.58	1.87	6.48	0.94	1.71	0.23	1.71	0.11	0.19	0.01	7.11	0.70	5.92	0.37	70.45	4.29	220.87	16.27	1,439.83	86.42
Private Corporate																						
Timberland	71.58	5.31	13.94	1.03	3.93	0.57	1.14	0.16	1.53	0.10	0.17	0.01	10.30	0.97	4.92	0.32	55.36	3.59	162.86	11.03	1,262.66	80.68
Other forest	2.19	0.67	0.41	0.13	0.08	0.04	0.02	0.01	0.09	0.03	0.01	0.00	0.18	0.07	0.19	0.05	2.78	0.79	5.95	1.68	63.44	18.12
Total	73.77	5.35	14.35	1.04	4.01	0.57	1.16	0.16	1.62	0.10	0.18	0.01	10.48	0.97	5.10	0.33	58.14	3.67	168.81	11.16	1,326.10	82.61
Private Noncorporate																						
Timberland	71.37	5.71	13.90	1.11	2.27	0.29	0.57	0.07	1.38	0.10	0.15	0.01	5.36	0.57	4.33	0.31	48.73	3.45	148.06	10.91	1,097.54	76.85
Other forest	8.21	1.23	1.61	0.24	0.22	0.08	0.06	0.02	0.44	0.06	0.05	0.01	0.62	0.13	0.89	0.12	13.03	1.69	25.14	3.35	296.00	38.43
Total	79.58	5.81	15.51	1.13	2.49	0.30	0.63	0.07	1.81	0.11	0.20	0.01	5.98	0.58	5.22	0.33	61.76	3.80	173.19	11.31	1,393.54	84.94
Total Private																						
Timberland	142.95	7.24	27.84	1.41	6.20	0.63	1.71	0.17	2.91	0.13	0.32	0.01	15.66	1.08	9.25	0.41	104.09	4.57	310.92	14.27	2,360.20	102.25
Other forest	10.40	1.40	2.02	0.27	0.31	0.09	0.08	0.02	0.53	0.06	0.06	0.01	0.80	0.15	1.08	0.13	15.82	1.87	31.09	3.74	359.43	42.39
Total	153.35	7.33	29.86	1.42	6.50	0.64	1.79	0.17	3.44	0.14	0.38	0.02	16.46	1.08	10.32	0.43	119.90	4.87	342.00	14.61	2,719.63	109.07
All Ownerships																						
Timberland	184.14	8.72	35.95	1.71	9.39	1.03	2.53	0.26	3.48	0.14	0.39	0.02	18.64	1.16	11.87	0.49	132.22	5.35	398.62	17.04	2,925.80	116.23
Other forest	11.36	1.47	2.21	0.29	0.34	0.09	0.09	0.02	0.58	0.07	0.06	0.01	0.83	0.15	1.17	0.14	17.47	1.98	34.12	3.93	393.54	44.35
Reserved - productive	60.87	8.99	11.58	1.65	3.05	0.48	0.83	0.13	0.84	0.08	0.09	0.01	3.83	0.56	2.69	0.25	32.88	3.05	116.66	13.78	676.85	61.95
Reserved - other	3.69	1.13	0.69	0.22	0.20	0.08	0.05	0.02	0.25	0.05	0.03	0.01	0.26	0.13	0.50	0.10	7.79	1.50	13.48	2.77	163.28	31.10
Total	260.07	12.33	50.44	2.34	12.98	1.13	3.50	0.29	5.15	0.18	0.57	0.02	23.57	1.29	16.24	0.56	190.35	6.43	562.88	21.73	4,159.47	137.43

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.12e. Forest land carbon stock by ownership and land status, 2009–2018: Northern Forest Practice District

	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres		
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Million metric tons C ¹		Total	SE	Total	SE	Total	SE	Total	SE	
National Forests																							
Timberland	230.43	7.63	44.39	1.49	23.27	1.43	5.51	0.33	4.93	0.15	0.55	0.02	24.51	1.02	31.38	0.82	262.44	6.45	627.41	16.73	5,560.17	133.91	
Other forest	10.98	1.48	2.16	0.30	0.59	0.12	0.15	0.03	1.79	0.15	0.20	0.02	1.44	0.25	2.29	0.19	39.29	3.00	58.89	4.84	907.46	68.69	
Reserved - productive	43.62	3.51	8.31	0.67	8.93	1.17	2.06	0.26	0.83	0.07	0.09	0.01	5.06	0.51	5.26	0.37	49.17	3.28	123.34	8.40	969.45	64.33	
Reserved - other	3.25	0.81	0.66	0.17	0.33	0.10	0.08	0.02	0.27	0.05	0.03	0.01	0.55	0.16	0.56	0.10	8.84	1.56	14.57	2.69	182.97	32.21	
Total	288.28	8.33	55.52	1.62	33.13	1.85	7.79	0.42	7.82	0.22	0.87	0.02	31.56	1.16	39.49	0.89	359.75	7.51	824.20	18.66	7,620.05	155.96	
Other Federal																							
Timberland	5.12	1.24	1.06	0.26	0.24	0.09	0.06	0.02	0.20	0.04	0.02	0.00	0.39	0.09	0.75	0.16	7.24	1.36	15.09	3.00	170.81	31.78	
Other forest	3.48	0.69	0.68	0.14	0.12	0.04	0.04	0.01	1.06	0.13	0.12	0.01	0.43	0.09	1.10	0.12	21.13	2.28	28.14	3.12	477.05	50.99	
Reserved - productive	4.49	1.10	0.83	0.21	0.74	0.24	0.16	0.05	0.08	0.02	0.01	0.00	0.59	0.21	0.72	0.17	5.84	1.30	13.45	3.07	114.89	25.46	
Reserved - other	1.07	0.42	0.21	0.08	0.02	0.01	0.00	0.00	0.09	0.03	0.01	0.00	0.20	0.09	0.16	0.05	2.77	0.84	4.52	1.43	61.72	18.43	
Total	14.15	1.78	2.77	0.36	1.11	0.26	0.26	0.06	1.43	0.14	0.16	0.02	1.62	0.25	2.73	0.26	36.97	3.01	61.21	5.35	824.47	66.42	
State and Local Government																							
Timberland	2.49	0.93	0.48	0.17	0.07	0.04	0.02	0.01	0.04	0.01	0.00	0.00	0.10	0.04	0.28	0.11	2.21	0.77	5.69	2.03	47.17	16.14	
Other forest	0.32	0.15	0.06	0.03	0.02	0.02	0.01	0.00	0.06	0.02	0.01	0.00	0.01	0.00	0.08	0.03	1.56	0.60	2.13	0.83	38.53	14.61	
Reserved - productive	1.56	0.71	0.31	0.14	0.01	0.01	0.00	0.00	0.03	0.01	0.00	0.00	0.10	0.04	0.22	0.09	1.80	0.72	4.04	1.66	37.80	14.73	
Reserved - other	1.25	0.36	0.24	0.07	0.09	0.04	0.02	0.01	0.13	0.03	0.01	0.00	0.16	0.07	0.14	0.04	3.33	0.87	5.36	1.41	81.99	21.46	
Total	5.63	1.25	1.09	0.24	0.19	0.06	0.04	0.01	0.26	0.05	0.03	0.01	0.37	0.09	0.72	0.15	8.90	1.50	17.23	3.10	205.49	34.07	
Total Public																							
Timberland	238.04	7.75	45.93	1.51	23.59	1.44	5.59	0.33	5.16	0.16	0.57	0.02	25.00	1.03	32.41	0.84	271.89	6.60	648.19	17.01	5,778.15	137.75	
Other forest	14.78	1.64	2.90	0.33	0.73	0.13	0.19	0.03	2.91	0.20	0.32	0.02	1.89	0.26	3.47	0.22	61.99	3.82	89.16	5.83	1,423.05	86.86	
Reserved - productive	49.67	3.74	9.45	0.72	9.69	1.20	2.22	0.27	0.94	0.07	0.10	0.01	5.75	0.55	6.20	0.42	56.81	3.60	140.83	9.11	1,122.14	70.79	
Reserved - other	5.57	0.98	1.10	0.20	0.44	0.11	0.10	0.03	0.49	0.06	0.05	0.01	0.92	0.19	0.86	0.12	14.93	1.98	24.46	3.36	326.67	42.85	
Total	308.06	8.55	59.38	1.66	34.44	1.87	8.10	0.43	9.51	0.26	1.06	0.03	33.55	1.19	42.94	0.93	405.62	8.14	902.64	19.46	8,650.01	171.24	
Private Corporate																							
Timberland	70.90	4.02	13.52	0.77	3.47	0.37	0.82	0.09	2.64	0.15	0.29	0.02	10.67	0.66	14.35	0.66	114.64	4.93	231.30	10.48	2,544.76	108.09	
Other forest	5.36	0.84	1.07	0.17	0.13	0.04	0.03	0.01	0.65	0.08	0.07	0.01	0.43	0.08	0.85	0.11	17.14	2.06	25.73	3.18	401.10	47.93	
Total	76.26	4.1	14.6	0.78	3.6	0.37	0.86	0.09	3.28	0.16	0.36	0.02	11.1	0.67	15.19	0.66	131.78	5.28	257.04	10.86	2945.86	116.81	
Private Noncorporate																							
Timberland	32.88	2.89	6.67	0.59	1.18	0.18	0.29	0.04	1.01	0.08	0.11	0.01	2.91	0.33	4.96	0.40	44.16	3.30	94.18	7.29	1,004.73	74.10	
Other forest	18.21	1.39	3.59	0.27	0.52	0.08	0.13	0.02	2.52	0.16	0.28	0.02	1.69	0.20	2.97	0.19	60.95	3.64	90.86	5.52	1,502.28	88.82	
Total	51.09	3.18	10.27	0.65	1.7	0.2	0.42	0.05	3.53	0.18	0.39	0.02	4.6	0.39	7.93	0.43	105.11	4.85	185.04	9.05	2507.01	114.14	
Total Private																							
Timberland	103.78	4.69	20.20	0.91	4.65	0.40	1.12	0.10	3.64	0.16	0.40	0.02	13.58	0.71	19.30	0.72	158.80	5.48	325.48	11.84	3,549.49	120.78	
Other forest	23.57	1.60	4.66	0.32	0.65	0.09	0.16	0.02	3.17	0.17	0.35	0.02	2.12	0.22	3.82	0.21	78.09	4.11	116.60	6.26	1,903.37	98.99	
Total	127.36	4.87	24.86	0.95	5.30	0.41	1.28	0.10	6.81	0.23	0.76	0.03	15.70	0.74	23.12	0.73	236.89	6.60	442.08	12.99	5,452.87	150.36	
All Ownerships																							
Timberland	341.83	9.01	66.13	1.76	28.23	1.49	6.71	0.34	8.81	0.22	0.98	0.02	38.58	1.25	51.72	1.09	430.70	8.49	973.68	20.55	9,327.64	181.23	
Other forest	38.35	2.30	7.56	0.46	1.38	0.16	0.35	0.04	6.08	0.26	0.68	0.03	4.01	0.34	7.28	0.31	140.08	5.61	205.76	8.56	3,326.42	131.65	
Reserved - productive	49.67	3.74	9.45	0.72	9.69	1.20	2.22	0.27	0.94	0.07	0.10	0.01	5.75	0.55	6.20	0.42	56.81	3.60	140.83	9.11	1,122.14	70.79	
Reserved - other	5.57	0.98	1.10	0.20	0.44	0.11	0.10	0.03	0.49	0.06	0.05	0.01	0.92	0.19	0.86	0.12	14.93	1.98	24.46	3.36	326.67	42.85	
Total	435.41	9.78	84.24	1.90	39.74	1.91	9.38	0.44	16.32	0.34	1.81	0.04	49.26	1.39	66.06	1.17	642.51	10.37	1,344.72	23.17	14,102.87	225.30	

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.12f. Forest land carbon stock by ownership and land status, 2009-2018: Southern Forest Practice District

	Live trees				Dead trees				Understory vegetation				Down wood		Forest Floor		Soil		Total C		Acres	
	Aboveground		Belowground		Aboveground		Belowground		Aboveground		Belowground		Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE										
	<i>Million metric tons C¹</i>																					
	<i>Thousand acres</i>																					
National Forests																						
Timberland	83.44	5.41	15.10	0.97	10.47	1.03	2.23	0.21	1.62	0.10	0.18	0.01	8.72	0.69	11.93	0.65	89.14	4.52	222.84	12.22	1,958.31	98.36
Other forest	11.35	1.27	2.26	0.25	1.56	0.27	0.38	0.06	1.88	0.12	0.21	0.01	2.09	0.23	2.92	0.21	47.56	3.00	70.18	4.72	1,201.47	74.07
Reserved - productive	53.06	4.85	9.69	0.86	6.73	0.81	1.46	0.17	0.92	0.07	0.10	0.01	5.76	0.75	6.78	0.47	53.15	3.47	137.65	10.07	1,205.79	77.84
Reserved - other	10.25	1.26	2.11	0.26	1.79	0.32	0.42	0.07	1.14	0.10	0.13	0.01	1.86	0.25	2.86	0.25	36.22	2.78	56.78	4.59	867.07	65.79
Total	158.09	7.23	29.16	1.30	20.54	1.35	4.49	0.28	5.57	0.19	0.62	0.02	18.46	1.06	24.50	0.81	226.34	6.40	487.77	16.07	5,238.93	145.15
Other Federal																						
Timberland	0.54	0.41	0.11	0.09	0.02	0.02	0.01	0.00	0.03	0.01	0.00	0.00	0.12	0.09	0.10	0.06	1.01	0.49	1.94	1.04	24.26	11.48
Other forest	2.62	0.47	0.53	0.09	0.21	0.06	0.05	0.01	0.74	0.08	0.08	0.01	0.59	0.11	0.77	0.10	16.70	1.86	22.27	2.54	460.32	50.57
Reserved - productive	36.24	3.83	6.58	0.67	6.58	1.19	1.33	0.22	0.49	0.05	0.05	0.01	4.36	0.57	4.80	0.42	31.74	2.62	92.18	8.34	694.42	57.12
Reserved - other	5.85	1.05	1.21	0.22	0.60	0.14	0.15	0.03	0.77	0.08	0.09	0.01	1.33	0.28	1.59	0.20	20.52	2.12	32.11	3.61	547.06	55.06
Total	45.25	3.92	8.43	0.69	7.41	1.20	1.54	0.22	2.03	0.12	0.23	0.01	6.40	0.64	7.25	0.45	69.97	3.53	148.50	8.95	1,726.06	85.86
State and Local Government																						
Timberland	0.90	0.63	0.16	0.11	0.18	0.15	0.03	0.02	0.02	0.01	0.00	0.00	0.08	0.05	0.14	0.08	1.10	0.55	2.61	1.50	23.87	11.97
Other forest	1.85	0.56	0.37	0.12	0.05	0.02	0.01	0.01	0.19	0.04	0.02	0.00	0.26	0.10	0.24	0.06	4.37	0.98	7.36	1.74	118.48	26.03
Reserved - productive	3.16	1.46	0.58	0.28	0.22	0.09	0.05	0.02	0.04	0.02	0.00	0.00	0.34	0.14	0.33	0.12	2.28	0.77	7.00	2.69	52.51	17.53
Reserved - other	3.21	0.68	0.59	0.12	0.16	0.07	0.04	0.02	0.33	0.05	0.04	0.01	0.45	0.15	0.48	0.08	7.70	1.17	12.98	2.09	214.38	32.54
Total	9.12	1.74	1.69	0.33	0.61	0.19	0.13	0.03	0.57	0.07	0.06	0.01	1.12	0.23	1.19	0.17	15.44	1.75	29.95	3.95	409.25	45.53
Total Public																						
Timberland	84.87	5.46	15.37	0.98	10.67	1.04	2.27	0.21	1.67	0.10	0.19	0.01	8.92	0.70	12.17	0.66	91.26	4.58	227.39	12.35	2,006.45	99.74
Other forest	15.81	1.47	3.16	0.29	1.81	0.28	0.44	0.07	2.80	0.15	0.31	0.02	2.93	0.28	3.93	0.24	68.62	3.66	99.82	5.64	1,780.27	93.32
Reserved - productive	92.47	6.35	16.85	1.12	13.53	1.45	2.84	0.27	1.45	0.09	0.16	0.01	10.46	0.96	11.91	0.64	87.17	4.41	236.83	13.34	1,952.72	98.08
Reserved - other	19.31	1.77	3.90	0.36	2.54	0.35	0.61	0.08	2.24	0.14	0.25	0.02	3.64	0.40	4.92	0.33	64.44	3.69	101.86	6.20	1,628.51	91.73
Total	212.46	8.40	39.28	1.50	28.55	1.82	6.16	0.36	8.17	0.23	0.91	0.03	25.98	1.26	32.95	0.94	311.76	7.50	666.22	18.79	7,374.24	174.19
Private Corporate																						
Timberland	9.86	1.74	1.84	0.33	0.44	0.11	0.10	0.03	0.25	0.04	0.03	0.00	1.20	0.23	1.95	0.29	13.90	2.01	29.57	4.46	294.29	42.06
Other forest	5.16	0.93	0.92	0.16	0.22	0.05	0.05	0.01	0.50	0.06	0.06	0.01	0.47	0.10	0.66	0.09	12.67	1.65	20.70	2.81	326.76	42.07
Total	15.02	1.97	2.76	0.37	0.66	0.12	0.15	0.03	0.75	0.08	0.08	0.01	1.67	0.25	2.61	0.31	26.57	2.59	50.27	5.25	621.05	59.34
Private Noncorporate																						
Timberland	13.65	2.19	2.63	0.41	0.82	0.23	0.19	0.05	0.36	0.05	0.04	0.01	1.61	0.30	1.73	0.25	14.86	1.92	35.90	4.94	347.09	44.70
Other forest	22.91	1.52	4.33	0.29	1.61	0.27	0.39	0.06	3.05	0.15	0.34	0.02	2.24	0.22	3.75	0.19	76.79	3.74	115.42	5.76	1,979.77	95.62
Total	36.57	2.64	6.96	0.49	2.44	0.35	0.58	0.08	3.41	0.16	0.38	0.02	3.85	0.39	5.48	0.32	91.65	4.17	151.31	7.51	2,326.86	104.70
Total Private																						
Timberland	23.51	2.77	4.47	0.52	1.26	0.25	0.29	0.06	0.61	0.07	0.07	0.01	2.80	0.37	3.68	0.38	28.76	2.74	65.46	6.56	641.38	60.49
Other forest	28.08	1.75	5.24	0.32	1.84	0.27	0.44	0.06	3.55	0.16	0.39	0.02	2.71	0.24	4.41	0.21	89.46	4.00	136.12	6.27	2,306.53	102.18
Total	51.59	3.23	9.71	0.60	3.10	0.37	0.73	0.09	4.17	0.17	0.46	0.02	5.52	0.45	8.09	0.43	118.22	4.78	201.58	8.94	2,947.92	117.24
All Ownerships																						
Timberland	108.38	6.13	19.84	1.11	11.94	1.07	2.56	0.22	2.29	0.12	0.25	0.01	11.72	0.79	15.86	0.76	120.02	5.34	292.86	14.00	2,647.83	116.87
Other forest	43.89	2.28	8.40	0.43	3.65	0.39	0.88	0.09	6.35	0.22	0.71	0.02	5.65	0.36	8.34	0.32	158.08	5.38	235.93	8.36	4,086.81	137.22
Reserved - productive	92.47	6.35	16.85	1.12	13.53	1.45	2.84	0.27	1.45	0.09	0.16	0.01	10.46	0.96	11.91	0.64	87.17	4.41	236.83	13.34	1,952.72	98.08
Reserved - other	19.31	1.77	3.90	0.36	2.54	0.35	0.61	0.08	2.24	0.14	0.25	0.02	3.64	0.40	4.92	0.33	64.44	3.69	101.86	6.20	1,628.51	91.73
Total	264.05	8.98	48.99	1.62	31.65	1.85	6.89	0.37	12.34	0.28	1.37	0.03	31.49	1.34	41.04	1.03	429.97	8.82	867.80	20.68	10,322.16	207.93

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.13: Forest land carbon stocks by ownership and pool, 2009-2018: All California. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	305.8	12.7	40.9	2.3	7.7	0.2	27.9	1.3	30.3	0.7	296.1	6.1	708.7	18.6	6,562.5	135.7
Public unreserved	522.7	10.2	57.5	2.4	16.2	0.3	46.3	1.2	60.5	0.8	580.1	6.8	1,283.4	16.7	12,835.7	149.4
Private corporate	219.4	7.9	11.7	0.9	7.0	0.2	25.3	1.1	25.3	0.7	239.9	6.1	528.6	14.4	5,425.2	136.3
Private noncorporate	220.6	8.2	9.6	0.7	10.7	0.3	16.4	0.9	20.4	0.6	283.9	6.7	561.5	15.0	6,846.5	159.7
Total	1,268.5	16.5	119.7	3.4	41.6	0.4	115.9	2.1	136.5	1.0	1,400.0	8.9	3,082.2	23.2	31,670.0	201.0

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.14: Forest land carbon stocks by ownership and pool, 2009-2018: Central Coast/Interior Ranges. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	21.7	4.1	1.0	0.3	0.8	0.1	1.6	0.4	1.4	0.2	19.8	2.0	46.2	6.1	477.2	48.3
Public unreserved	4.5	1.3	0.2	0.1	0.4	0.1	0.4	0.1	0.5	0.1	9.4	1.4	15.3	2.6	251.6	36.9
Private corporate	7.5	1.8	0.2	0.1	0.3	0.1	0.5	0.2	0.5	0.1	7.5	1.3	16.6	3.2	177.8	30.7
Private noncorporate	30.6	3.9	1.3	0.2	1.4	0.1	2.0	0.3	2.3	0.2	36.7	2.8	74.3	6.7	889.0	67.8
Total	64.3	6.1	2.7	0.4	2.9	0.2	4.5	0.5	4.7	0.3	73.4	3.9	152.5	9.9	1,795.6	94.7

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.15: Forest land carbon stocks by ownership and pool, 2009-2018: Central Valley. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.5	0.4	5.6	4.7
Public unreserved	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	4.4	3.1
Private corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Private noncorporate	1.2	0.4	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	2.7	0.7	4.4	1.2	78.5	20.2
Total	1.5	0.5	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.0	3.1	0.8	5.1	1.3	88.5	21.0

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.16: Forest land carbon stocks by ownership and pool, 2009-2018: Eastside. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	5.0	1.2	0.4	0.1	0.4	0.1	0.6	0.1	1.0	0.2	11.5	1.7	18.9	3.1	298.4	43.2
Public unreserved	23.5	1.9	1.7	0.3	3.7	0.2	3.3	0.3	5.9	0.3	81.7	4.2	119.9	6.5	1,965.1	100.2
Private corporate	3.9	0.8	0.3	0.1	0.5	0.1	0.8	0.1	1.2	0.2	13.6	1.9	20.4	2.9	318.6	43.9
Private noncorporate	2.1	0.5	0.1	0.0	0.4	0.1	0.3	0.1	0.6	0.1	9.3	1.6	12.9	2.2	221.4	36.7
Total	34.5	2.5	2.4	0.3	5.2	0.3	4.9	0.4	8.7	0.4	116.2	5.1	172.0	8.0	2,803.4	122.2

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.17: Forest land carbon stocks by ownership and pool, 2009-2018: Klamath Interior/Coast Ranges. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	96.4	7.1	14.9	1.5	2.1	0.1	8.2	0.7	8.1	0.4	90.2	4.4	219.8	11.9	1,782.2	86.8
Public unreserved	182.7	8.6	20.1	1.7	3.7	0.2	14.4	0.8	16.1	0.6	159.1	5.9	396.1	15.7	3,244.2	119.9
Private corporate	40.8	3.5	2.5	0.5	1.6	0.1	5.4	0.6	5.5	0.4	56.2	3.8	112.0	8.0	1,213.2	81.8
Private noncorporate	60.8	4.8	2.2	0.3	2.6	0.1	4.4	0.5	5.3	0.3	75.0	4.3	150.2	9.4	1,715.3	95.6
Total	380.7	12.3	39.7	2.4	10.0	0.3	32.4	1.3	34.9	0.9	380.4	9.0	878.0	22.4	7,954.9	186.7

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.18: Forest land carbon stocks by ownership and pool, 2009-2018: North Coast. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	38.7	8.8	2.0	0.5	0.5	0.1	2.3	0.5	1.3	0.2	14.5	1.9	59.2	10.8	326.9	42.2
Public unreserved	13.2	3.2	0.5	0.1	0.2	0.0	0.8	0.3	0.6	0.1	7.1	1.4	22.4	4.8	159.1	30.2
Private corporate	86.3	6.7	4.9	0.7	1.7	0.1	9.5	0.9	4.8	0.3	54.2	3.6	161.4	11.2	1,247.7	80.7
Private noncorporate	64.8	5.6	2.0	0.3	1.4	0.1	4.1	0.5	3.6	0.3	40.8	3.1	116.7	9.2	962.2	72.0
Total	203.0	12.1	9.4	0.9	3.7	0.2	16.7	1.2	10.2	0.4	116.6	4.9	359.7	17.5	2,695.9	111.2

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.19: Forest land carbon stocks by ownership and pool, 2009-2018: Sierra/Cascades. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	139.2	7.5	21.4	1.8	3.2	0.1	14.1	1.0	17.6	0.7	143.0	5.2	338.6	14.0	3,229.5	115.5
Public unreserved	292.4	9.4	33.8	1.9	7.3	0.2	26.5	1.1	36.1	0.9	302.3	6.8	698.4	17.3	6,672.4	149.3
Private corporate	80.5	4.8	3.8	0.4	2.8	0.2	9.0	0.6	13.2	0.7	106.2	4.9	215.6	10.4	2,411.0	109.2
Private noncorporate	57.8	3.5	3.7	0.5	4.3	0.2	4.9	0.4	8.1	0.4	110.9	4.7	189.7	8.6	2,758.4	115.6
Total	569.9	12.6	62.8	2.7	17.6	0.3	54.6	1.6	75.0	1.3	662.4	10.0	1,442.3	23.8	15,071.3	225.4

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.20: Forest land carbon stocks by ownership and pool, 2009-2018: South Coast Mountains and Deserts. Compare to appendix 2, C tables.

	Live Trees		Dead Trees		Understory		Down wood		Forest Floor		Soil		Total C		Acres	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
	<i>x1000</i>															
Public reserved	4.7	1.0	1.1	0.3	0.7	0.1	1.1	0.2	1.0	0.1	16.9	2.0	25.5	3.2	442.8	51.3
Public unreserved	6.4	1.1	1.2	0.3	0.9	0.1	1.1	0.2	1.3	0.2	20.4	2.1	31.1	3.4	539.0	53.7
Private corporate	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.0	0.7	2.6	0.9	56.9	18.8
Private noncorporate	3.2	0.9	0.3	0.1	0.4	0.1	0.5	0.2	0.4	0.1	8.4	1.3	13.3	2.3	221.6	34.4
Total	14.7	1.7	2.7	0.4	2.1	0.1	2.7	0.3	2.7	0.2	47.7	3.2	72.6	5.2	1,260.3	83.5

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

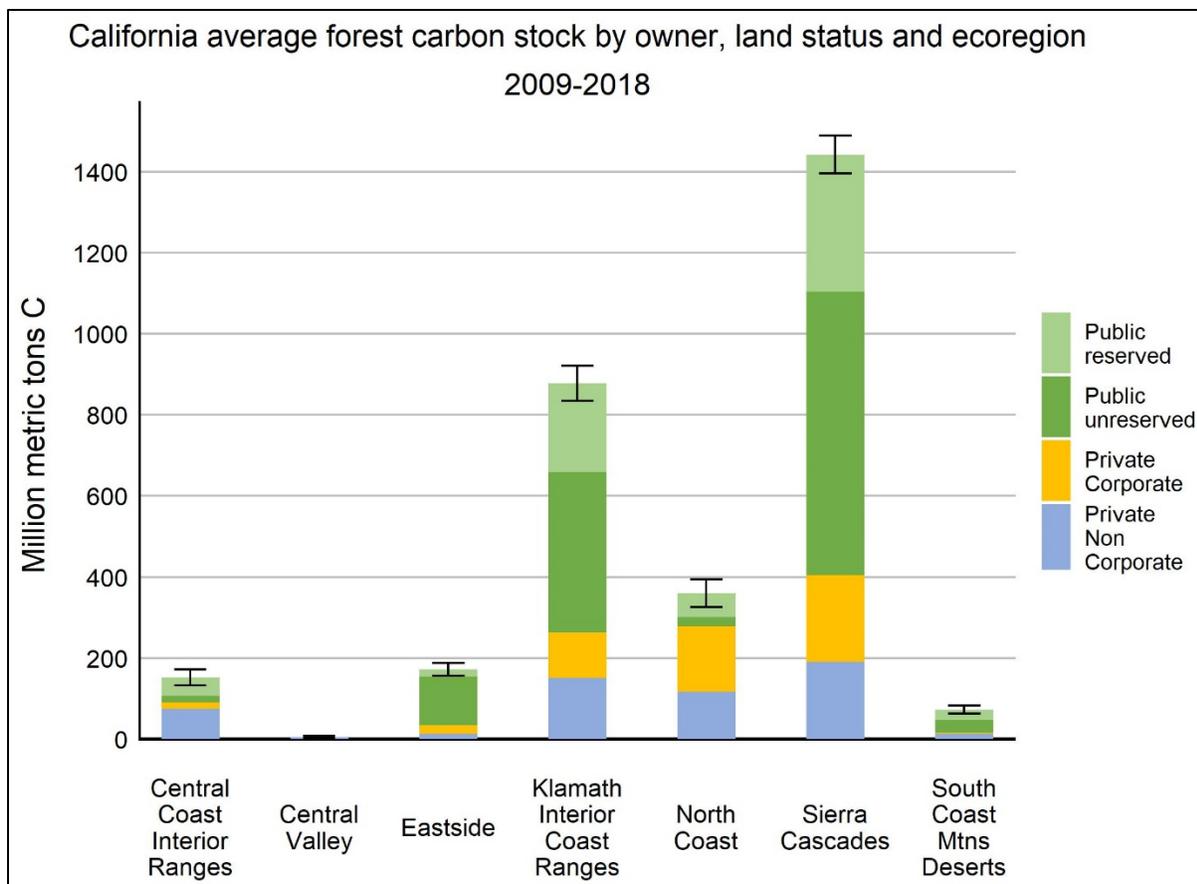


Figure 4.11. Average forest carbon stock by owner, land status and ecological region, 2009-2018 (MMT C). Error bars represent 95% confidence interval of estimated total stock for each ecological region.

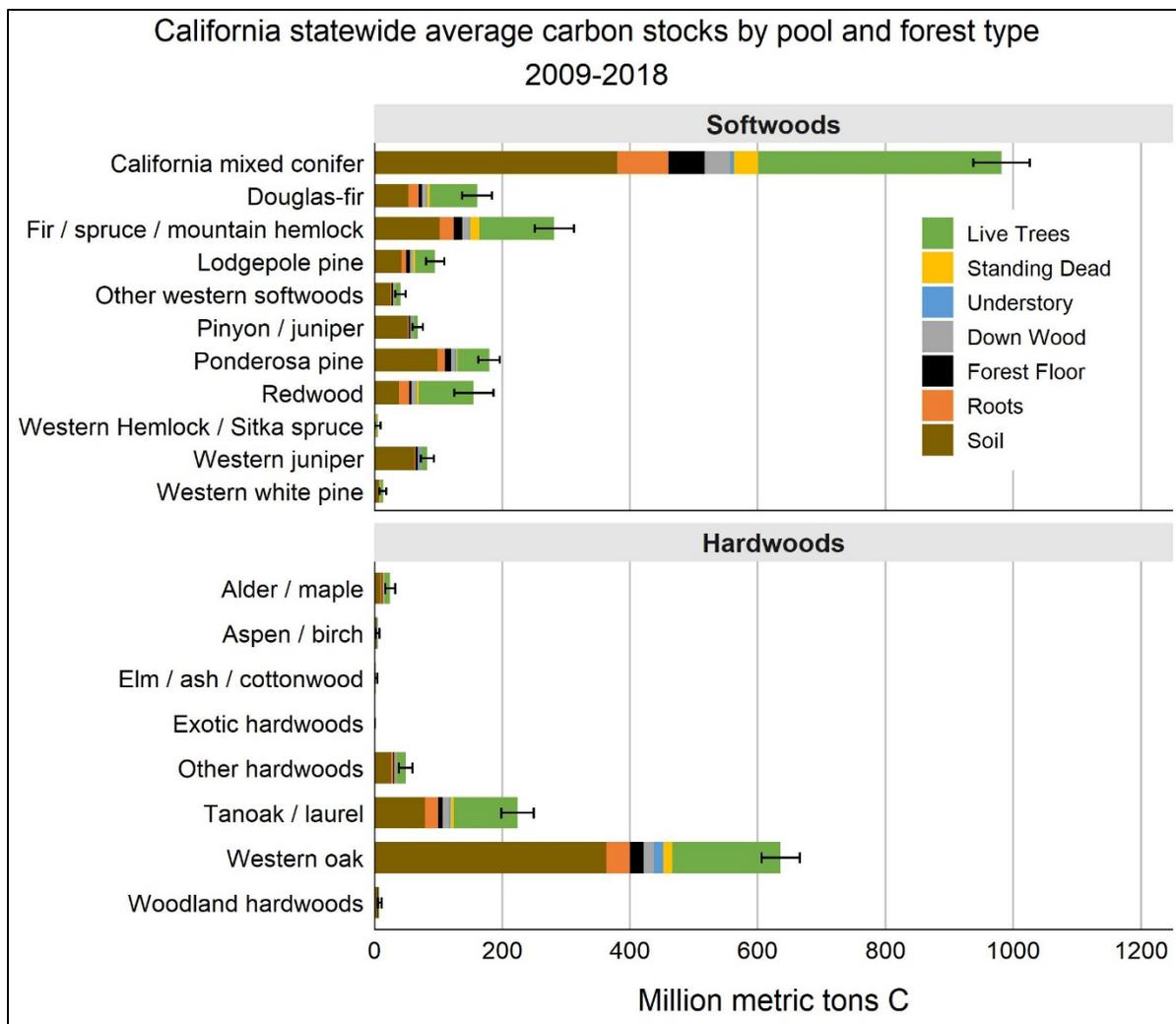


Figure 4.12. California statewide average carbon stock by pool and forest type, 2007-2016 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table 4.21; compare to Appendix 2, D tables. *note, “non-stocked” not depicted in this figure.

Table 4.21: Forest land carbon stocks by forest type and pool, 2009-2018: All California. Compare to Appendix 2, D tables.

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	380,899	10,066	37,871	1,938	80,712	2,141	5,622	167	40,148	1,382	56,556	1,274	379,959	8,414	981,768	22,579
Douglas-fir	74,168	6,031	4,131	523	16,374	1,338	1,321	93	6,721	708	4,807	338	53,153	3,758	160,676	11,945
Fir / spruce / mountain hemlock	117,555	7,364	14,219	1,216	22,745	1,420	1,648	87	10,932	839	12,868	677	101,776	5,297	281,743	15,572
Western Hemlock / Sitka spruce	2,440	1,061	253	177	607	282	31	13	309	233	250	108	1,341	594	5,232	2,328
Lodgepole pine	31,466	2,738	3,503	417	7,308	630	760	69	4,098	520	5,297	399	42,696	3,163	95,128	7,257
Pinyon / juniper	6,192	533	481	71	1,405	118	2,688	160	1,923	229	2,550	177	52,491	3,169	67,730	4,131
Ponderosa pine	49,634	2,950	1,818	257	11,046	664	2,574	144	5,504	434	10,235	485	98,971	4,508	179,781	8,593
Redwood	86,036	10,043	3,433	544	16,814	1,904	803	69	7,455	954	3,027	254	38,069	3,188	155,637	15,619
Western juniper	9,521	848	375	78	1,746	160	3,658	251	1,343	172	3,573	234	62,559	3,853	82,775	5,169
Western white pine	3,531	808	527	140	791	178	150	33	444	127	794	158	7,194	1,389	13,431	2,646
Other western softwoods	7,639	1,107	881	174	1,808	273	852	108	1,543	271	2,308	239	25,320	2,510	40,350	4,177
Total	769,083	14,529	67,493	2,295	161,356	2,936	20,106	365	80,418	1,941	102,265	1,269	863,530	10,043	2,064,251	27,558
Hardwoods:																
Alder / maple	9,072	1,694	938	244	2,042	369	374	56	1,530	297	812	124	9,867	1,506	24,635	3,966
Aspen / birch	711	279	74	39	146	55	134	35	289	117	268	71	3,608	950	5,229	1,384
Elm / ash / cottonwood	741	334	31	19	136	65	57	19	73	29	87	33	1,434	511	2,559	982
Tanoak / laurel	99,810	6,500	4,777	554	20,376	1,326	2,945	160	10,142	821	7,042	386	79,212	4,366	224,303	12,991
Western oak	169,174	5,475	13,967	1,202	36,880	1,187	14,756	324	17,074	754	20,723	502	363,294	8,131	635,869	15,304
Woodland hardwoods	755	191	162	45	167	38	288	52	233	75	415	81	6,165	1,138	8,184	1,497
Exotic hardwoods	3	3	--	--		1	9	6	6	6	9	6	149	100	177	119
Other hardwoods	13,856	2,267	921	211	3,043	499	928	94	2,083	389	1,921	201	26,135	2,663	48,887	5,547
Total	294,122	8,425	20,869	1,351	62,790	1,771	19,492	356	31,429	1,191	31,276	628	489,864	9,138	949,842	19,656
Nonstocked	1,573	326	8,729	1,442	2,200	323	2,040	140	4,088	512	2,917	209	46,557	3,232	68,103	5,090
All forest types	1,064,778	13,954	97,091	2,828	226,346	2,770	41,637	423	115,936	2,088	136,458	1,018	1,399,950	8,855	3,082,195	23,174

Note: Totals may be of because of rounding

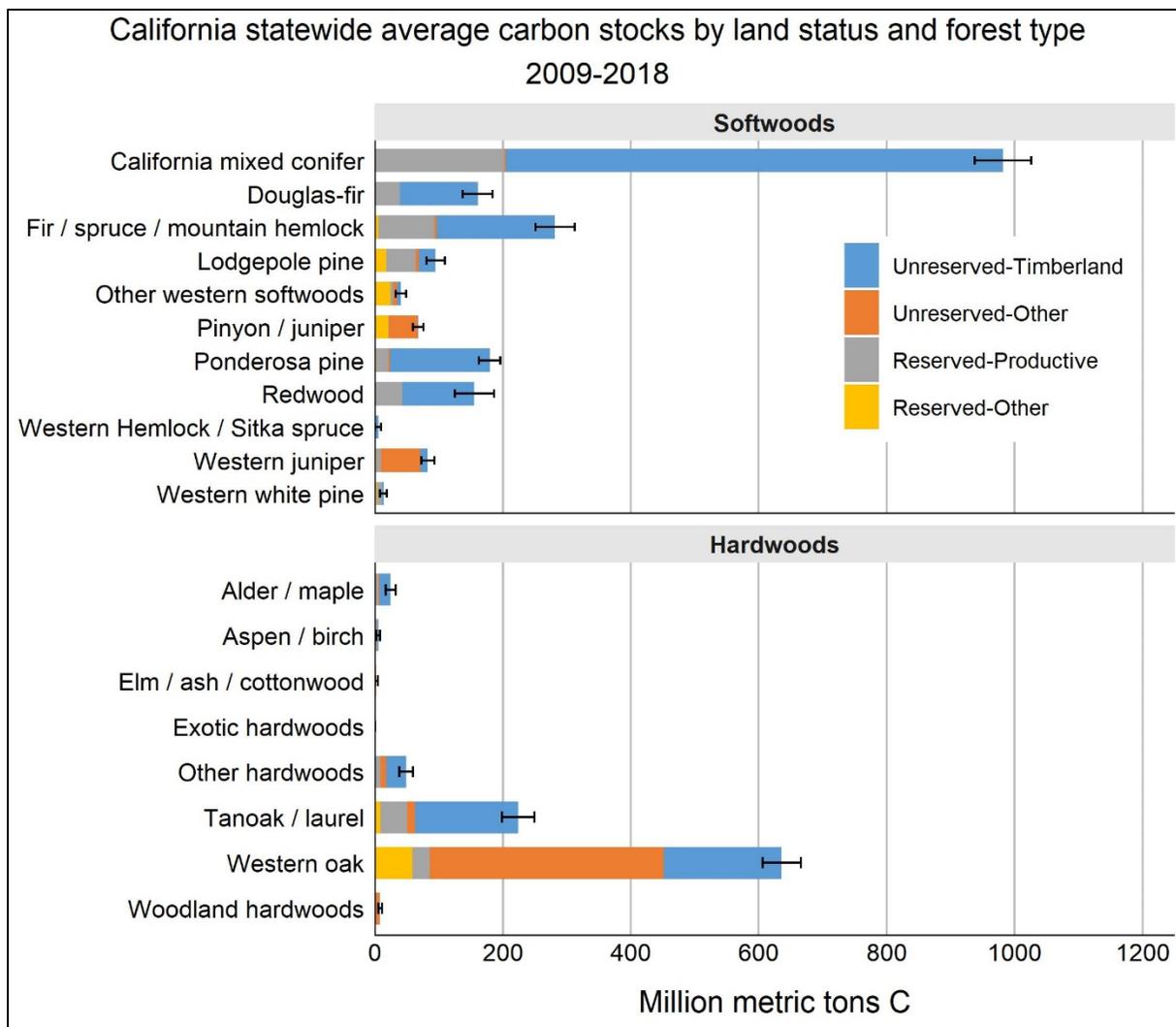


Figure 4.13. California statewide average forest carbon stock by land status and forest type, 2007-2016 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table 4.22; compare to Appendix 2, D tables. *note, “non-stocked” not depicted in this figure.

Table 4.22: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: all California. Compare to Appendix 2, D tables.

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	777,458	19,943	2,195	1,038	200,531	12,204	1,584	1,106	981,768	22,579
Douglas-fir	121,570	10,016	--	--	37,273	6,577	1,833	923	160,676	11,945
Fir / spruce / mountain hemlock	185,640	12,166	3,007	1,386	87,817	9,532	5,279	1,933	281,743	15,572
Western Hemlock / Sitka spruce	4,968	2,314	--	--	263	262	--	--	5,232	2,328
Lodgepole pine	26,430	3,946	4,745	1,677	45,892	5,360	18,061	3,094	95,128	7,257
Pinyon / juniper	590	419	45,388	3,358	250	237	21,501	2,456	67,730	4,131
Ponderosa pine	156,071	7,917	2,787	997	18,651	3,217	2,272	886	179,781	8,593
Redwood	112,605	10,700	--	--	43,033	11,623	--	--	155,637	15,619
Western juniper	11,478	2,002	61,619	4,294	7,167	1,970	2,511	951	82,775	5,169
Western white pine	2,533	1,084	--	--	7,886	2,100	3,011	1,198	13,431	2,646
Other western softwoods	5,698	1,713	6,115	1,490	4,042	1,429	24,495	3,249	40,350	4,177
Total	1,405,042	23,027	125,856	5,943	452,806	18,457	80,547	5,562	2,064,251	27,558
Hardwoods:										
Alder / maple	17,190	3,207	1,634	667	5,134	2,175	677	533	24,635	3,966
Aspen / birch	1,049	639	1,449	650	1,205	710	1,526	762	5,229	1,384
Elm / ash / cottonwood	--	--	1,931	859	23	23	605	474	2,559	982
Tanoak / laurel	161,483	11,036	12,090	2,494	41,739	6,223	8,990	2,470	224,303	12,991
Western oak	184,373	10,337	365,349	10,656	27,278	3,944	58,869	4,890	635,869	15,304
Woodland hardwoods	898	597	5,714	1,253	--	--	1,572	564	8,184	1,497
Exotic hardwoods	92	95	85	73	--	--	--	--	177	119
Other hardwoods	31,453	4,639	8,914	1,688	7,175	2,521	1,345	619	48,887	5,547
Total	396,539	15,338	397,165	11,015	82,555	7,932	73,583	5,608	949,842	19,656
Nonstocked	41,507	3,889	7,405	1,387	15,031	2,801	3,842	1,041	68,103	5,090
All forest types	1,843,088	21,628	530,427	12,151	550,391	18,479	157,972	7,757	3,082,195	23,174

Note: Totals may be of because of rounding

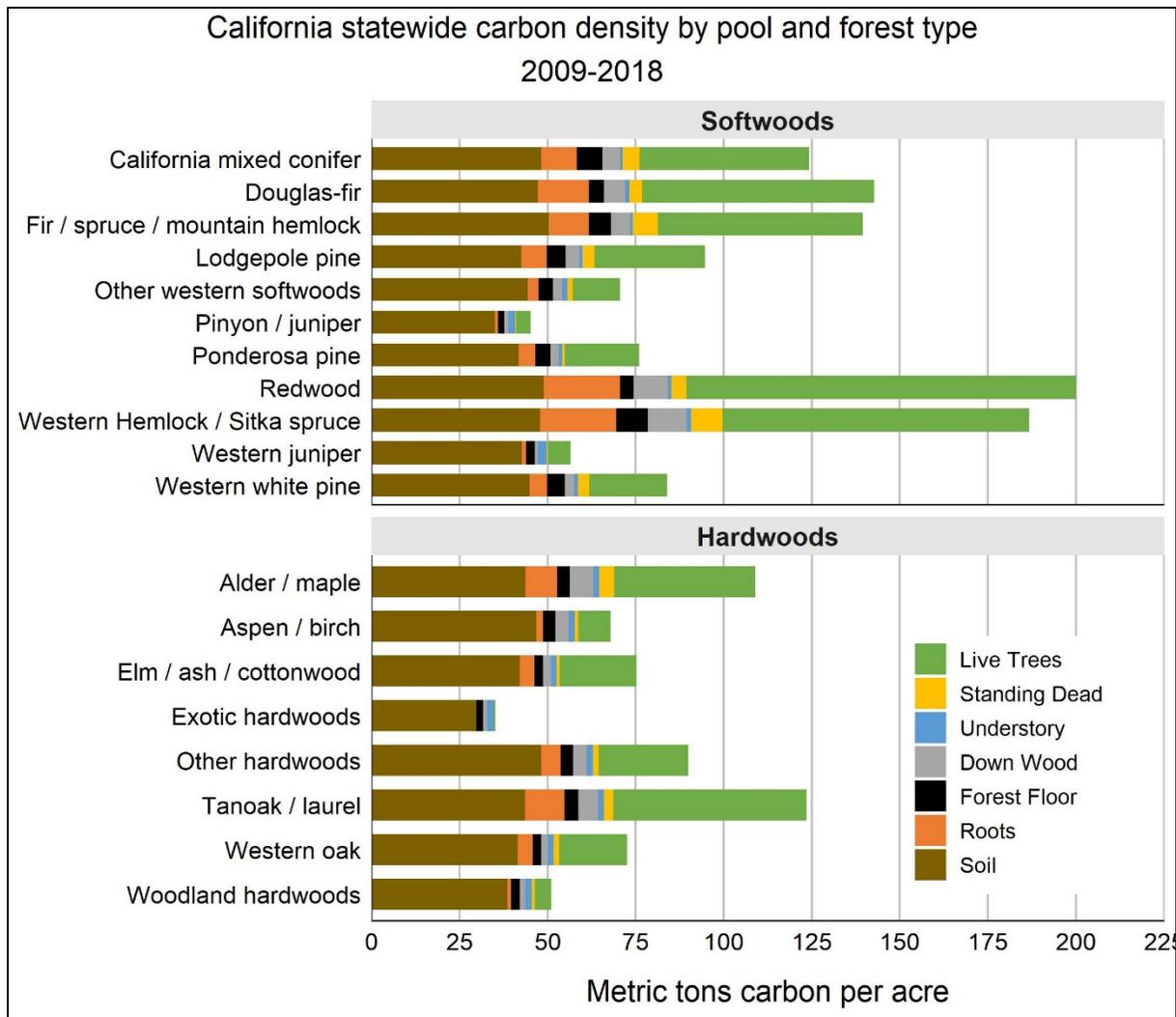


Figure 4.14. California statewide carbon density by pool and forest type, 2007-2016 (metric tons C/acre). *note, “non-stocked” not depicted in this figure.

Table 4.23: Aboveground live carbon (C) stocks on forest land by ownership, 2009-2018. Compare to Table 4.12, Appendix 2, Tables C1 and C19.

	Public						Private				All ownerships	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>											
Live trees	553.47	9.00	87.26	5.94	55.52	6.50	184.08	6.61	184.45	6.86	1,064.78	13.95
Live understory	15.99	0.24	4.12	0.17	1.47	0.09	6.27	0.20	9.62	0.24	37.47	0.38

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.24 Aboveground average annual live carbon flux (CO₂e) on forest land by ownership, 2001-2008 to 2011-2018. Compare to table 4.3 and Appendix 2, Table B1.

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate					
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million Metric Tons CO₂ Equivalent Per Year</i>													
Live trees	1.07	1.39	0.22	0.61	1.72	0.30	4.77	1.17	7.07	0.59	11.84	1.30	14.85	2.03
Foliage	0.14	0.07	0.02	0.03	0.09	0.02	0.28	0.06	0.32	0.03	0.60	0.07	0.85	0.10
Live understory	-0.04	0.05	0.01	0.02	-0.02	0.01	0.00	0.04	-0.06	0.02	-0.06	0.04	-0.11	0.07

Note: Totals may be of because of rounding.

Table 4.25: Belowground live and dead carbon (C) stocks on forest land by ownership, 2009-2018. Compare to Table 4.12, Appendix 2, Tables C28, C36 and C45.

	Public						Private				All ownerships	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C</i>											
Live tree roots	105.27	1.72	16.45	1.07	10.53	1.18	35.32	1.27	36.12	1.34	203.69	2.62
Dead tree roots	15.44	0.53	2.35	0.24	0.56	0.07	2.41	0.18	1.90	0.13	22.65	0.62
Understory roots	1.78	0.03	0.46	0.02	0.16	0.01	0.70	0.02	1.07	0.03	4.16	0.04

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.26: Belowground live and dead average annual carbon flux (CO₂e) on forest land by ownership, 2001-2008 to 2011-2018. Compare to table 4.3 and Appendix 2, Table B1.

	Public						Private				Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons CO₂ Equivalent</i>											
Live tree roots	0.42	0.28	0.08	0.11	0.34	0.07	1.06	0.24	1.35	0.12	3.26	0.41
Dead tree roots	0.99	0.19	-0.01	0.09	-0.01	0.03	-0.01	0.05	0.16	0.05	1.12	0.23
Understory roots	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	-0.01	0.01

Note: Totals may be of because of rounding

Table 4.27: Aboveground dead wood carbon (C) stocks on forest land by ownership, 2009-2018. Compare to Table 4.12, Appendix 2, Tables C10 and C62.

	Public						Private				All ownerships	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>											
Standing dead trees	67.23	2.39	10.75	1.26	2.07	0.28	9.31	0.70	7.73	0.56	97.09	2.83
Down woody material	59.48	1.46	10.71	0.81	4.08	0.43	25.30	1.13	16.36	0.85	115.94	2.09

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.28: Aboveground dead wood average annual carbon flux (CO₂e) on forest land by ownership, 2001-2008 to 2011-2018. Compare to table 4.3 and Appendix 2, Table B1.

	Public						Private				Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons CO₂ Equivalent</i>											
Standing dead trees	6.05	0.91	0.30	0.51	-0.03	0.12	0.39	0.20	0.99	0.22	7.69	1.09
Down woody material	-0.19	0.59	0.37	0.28	0.11	0.15	-1.55	0.44	0.27	0.29	-0.98	0.85

Note: Totals may be of because of rounding

Table 4.29: Soil organic carbon and forest floor (C) stocks on forest land by ownership, 2009-2018. Compare to Table 4.12, Appendix 2, Table C53 and C71.

	Public						Private				All ownerships	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>											
Forest Floor	75.06	0.76	12.05	0.47	3.66	0.22	25.29	0.71	20.39	0.58	136.46	1.02
Soil organic carbon	701.52	5.86	128.96	4.16	45.72	2.53	239.88	6.10	283.88	6.73	1,399.95	8.86

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.30: Soil organic carbon and forest floor average annual flux (CO₂e) on forest land by ownership, 2001-2008 to 2011-2018. Compare to table 4.3 and Appendix 2, Table B1.

	Public						Private				Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons CO₂ Equivalent</i>											
Forest Floor	-0.08	0.12	-0.07	0.06	0.00	0.01	-0.01	0.09	0.16	0.05	0.00	0.17
Soil organic carbon	-0.62	0.22	-0.07	0.08	-0.04	0.05	0.17	0.23	0.09	0.10	-0.47	0.35

Note: Totals may be of because of rounding

Table 4.31: Forest carbon pools by 10-year inventory period, 2001-2010 through 2009-2018. Compare to Appendix 2, C tables.

	Live Trees		Dead Trees		Down wood		Understory		Belowground roots		Forest Floor		Soil		Total carbon	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>															
2001 - 2010	1,028.30	14.25	79.02	2.35	119.13	1.97	43.75	0.43	216.51	2.82	137.15	1.02	1,428.77	8.80	3,052.62	23.60
2002 - 2011	1,037.66	14.32	81.41	2.38	118.87	2.02	43.39	0.43	218.80	2.84	136.78	1.02	1,422.14	8.80	3,059.06	23.73
2003 - 2012	1,037.24	13.64	83.23	2.41	117.89	1.98	43.08	0.44	218.65	2.72	138.09	1.02	1,425.14	8.95	3,063.31	22.77
2004 - 2013	1,046.26	13.74	83.51	2.42	116.51	1.96	42.43	0.44	220.42	2.73	137.52	1.02	1,413.75	8.91	3,060.41	22.86
2005 - 2014	1,055.90	13.70	84.19	2.44	115.82	1.97	42.19	0.43	222.40	2.74	137.44	1.02	1,410.33	8.91	3,068.27	22.89
2006 - 2015	1,061.86	13.77	86.19	2.46	116.07	2.01	42.02	0.43	223.91	2.75	137.38	1.02	1,405.65	8.86	3,073.08	22.95
2007 - 2016	1,065.33	13.92	88.61	2.53	115.30	2.01	41.94	0.43	224.73	2.77	137.21	1.02	1,403.71	8.86	3,076.83	23.08
2008 - 2017	1,064.17	13.97	93.59	2.78	115.41	2.04	41.79	0.43	225.49	2.77	136.72	1.02	1,400.66	8.84	3,077.83	23.14
2009 - 2018	1,064.78	13.95	97.09	2.83	115.94	2.09	41.64	0.42	226.35	2.77	136.46	1.02	1,399.95	8.86	3,082.20	23.17

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

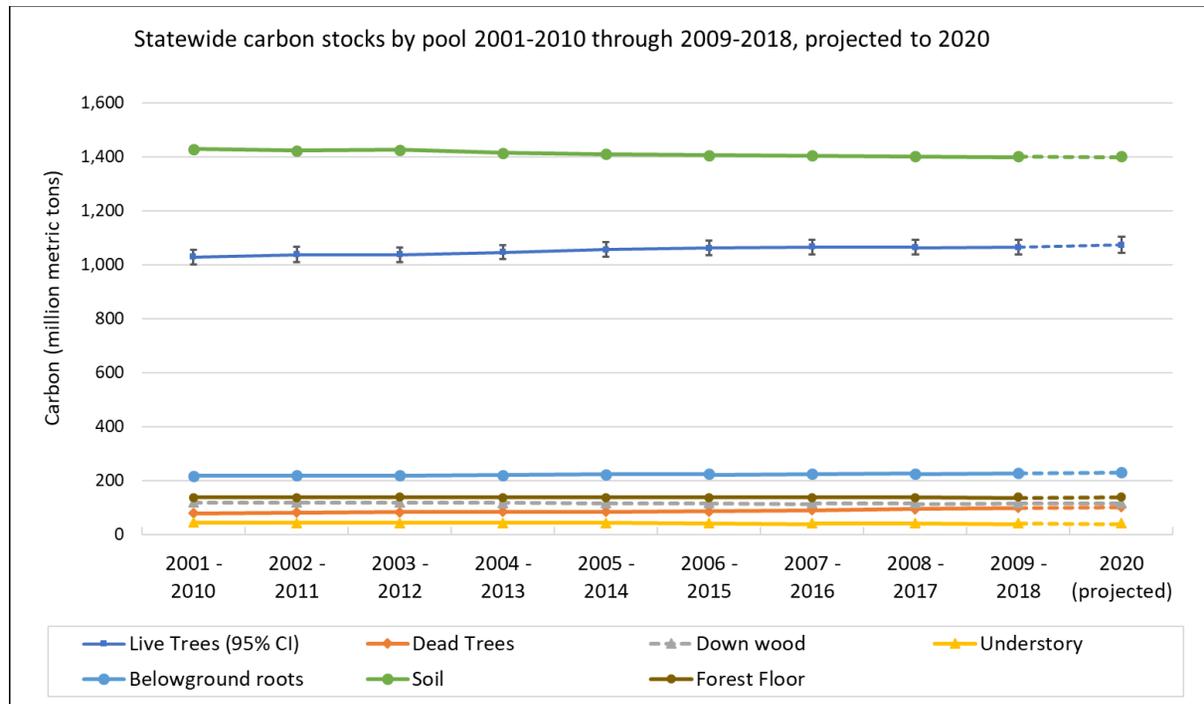


Figure 4.15. California carbon stocks by source pool, 2001-2010 through 2009-2018 with projection to 2020. Error bars represent the 95% confidence interval of live tree carbon stocks to 2020.

Table 4.32: Live tree carbon stocks by ownership and land status, 2001-2010 through 2009-2018. Compare to Appendix 2, C tables.

	Unreserved timberland						Reserved forest land		All forest land	
	Private - corporate		Private - noncorporate		National forests		National forests		All ownerships	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>									
2001 - 2010	145.90	5.81	129.19	6.53	377.34	9.06	139.69	7.18	1,028.30	14.25
2002 - 2011	143.20	5.79	131.34	6.62	383.88	9.20	141.39	7.27	1,037.66	14.32
2003 - 2012	143.01	5.62	134.16	6.72	379.83	8.04	147.61	6.19	1,037.24	13.64
2004 - 2013	146.85	5.74	135.68	6.83	382.44	8.06	147.21	6.19	1,046.26	13.74
2005 - 2014	148.34	5.73	135.40	6.82	384.63	8.03	149.03	6.19	1,055.90	13.70
2006 - 2015	155.03	6.01	133.17	6.74	385.76	8.07	147.93	6.17	1,061.86	13.77
2007 - 2016	160.26	6.15	131.26	6.78	385.39	8.10	148.11	6.16	1,065.33	13.92
2008 - 2017	164.16	6.21	129.68	6.79	384.19	8.13	147.09	6.13	1,064.17	13.97
2009 - 2018	169.89	6.50	129.78	6.70	382.57	8.17	145.52	5.96	1,064.78	13.95

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

Table 4.33: Forest carbon stocks by ownership and land status, 2001-2010 through 2009-2018. Compare to Appendix C tables.

	Unreserved timberland						Reserved forest land		All forest land	
	Private - corporate		Private - noncorporate		National forests		National forests		All ownerships	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Million metric tons C¹</i>									
2001 - 2010	428.33	13.47	328.91	13.68	1,007.14	17.94	397.30	15.60	3,052.62	23.60
2002 - 2011	420.49	13.50	329.10	13.82	1,020.95	18.33	400.57	15.74	3,059.06	23.73
2003 - 2012	421.38	13.20	334.77	13.92	1,016.71	15.87	421.09	11.80	3,063.31	22.77
2004 - 2013	426.39	13.32	332.36	13.96	1,017.35	15.89	421.76	11.71	3,060.41	22.86
2005 - 2014	429.22	13.31	327.40	13.87	1,020.42	15.81	424.99	11.66	3,068.27	22.89
2006 - 2015	441.75	13.53	320.95	13.77	1,021.85	15.85	425.86	11.66	3,073.08	22.95
2007 - 2016	451.17	13.65	312.90	13.71	1,021.18	15.88	429.73	11.62	3,076.83	23.08
2008 - 2017	459.61	13.67	306.40	13.69	1,020.65	15.94	429.26	11.64	3,077.83	23.14
2009 - 2018	469.87	13.91	305.71	13.66	1,019.25	15.98	429.35	11.62	3,082.20	23.17

¹Multiply carbon (C) by 3.667 to calculate equivalent carbon dioxide (CO₂e)

3 Harvested wood product carbon results: Carbon flux, stock, and trends, select table and figure updates

Table 5.2. Conversion factors used in this analysis.

Conversion	Units	Conversion location
6.0200	BF per CF, timber harvest 1952 – 1979	
5.3500	BF per CF, timber harvest 1980 – 1989	
4.7170	BF per CF, timber harvest 1990 – 2000	External
4.6213	BF per CF, timber harvest 2001 – 2006	
3.9594	BF per CF, timber harvest 2007 – 2012	
4.2857*	BF per CF, timber harvest 2013-2018	
33 to 42	lbs per cubic foot, primary products	Internal
2204.6	lbs per metric ton	Internal
0.95 to 1.0	Metric ton wood fiber per metric ton product	Internal
0.5	Metric ton carbon per dry metric ton wood fiber	Internal
0.711 to 0.919	MT C per CCF, primary products ¹	Internal

¹See Appendix 3, Table 3.9 for CCF to MT C conversions for all primary products.

**Note BF per CF value for 2013-2018 updated from previous report value of 3.9594 based on information from the most recent 2016 timber products output report (Marcille, et al. in press).*

Table 6.1. Annual timber product output in California for selected years using the IPCC production approach. This table shows carbon removed from the ecosystem by harvesting.

** Please note that all TPO numbers in this table are updated from table 6.1 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools. Additionally, cumulative TPO column has been added. There are no changes to harvest volumes except for a typo in the 2017 harvest volume that was 275 MBF scribner higher in the previous report.*

Harvest year	Harvest (MBF Scribner)	Timber product output (MT C)	Cumulative TPO (MT C)
1952	5,057,000	6,210,832	6,210,832
1960	5,137,000	6,309,085	62,107,091
1970	4,566,000	5,607,171	126,213,538
1980	3,441,000	4,748,834	183,209,323
1990	4,251,000	6,646,425	238,614,445
1995	2,535,000	3,970,456	262,263,008
2000	2,112,000	3,307,930	281,069,030
2001	1,751,800	2,788,119	283,857,149
2002	1,838,753	2,926,511	286,783,660
2003	1,812,713	2,885,066	289,668,726
2004	1,875,287	2,984,658	292,653,384
2005	1,889,454	3,007,205	295,660,589
2006	1,774,600	2,824,407	298,484,996
2007	1,776,300	3,318,111	301,803,107
2008	1,497,513	2,797,340	304,600,447
2009	915,095	1,709,389	306,309,835
2010	1,302,764	2,433,550	308,743,386
2011	1,464,641	2,735,935	311,479,321
2012	1,437,180	2,684,638	314,163,959
2013	1,767,033	3,049,488	317,213,447
2014	1,494,437	2,579,050	319,792,497
2015	1,703,188	2,939,306	322,731,803
2016	1,687,376	2,912,018	325,643,822
2017	1,695,681	2,926,351	328,570,172
2018	1,724,957	2,976,874	331,547,047

Figure 6.1. Annual timber product output in California, converted to metric tons carbon 1952 to 2018.

** Please note that this entire figure is updated from fig 6.1 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.*

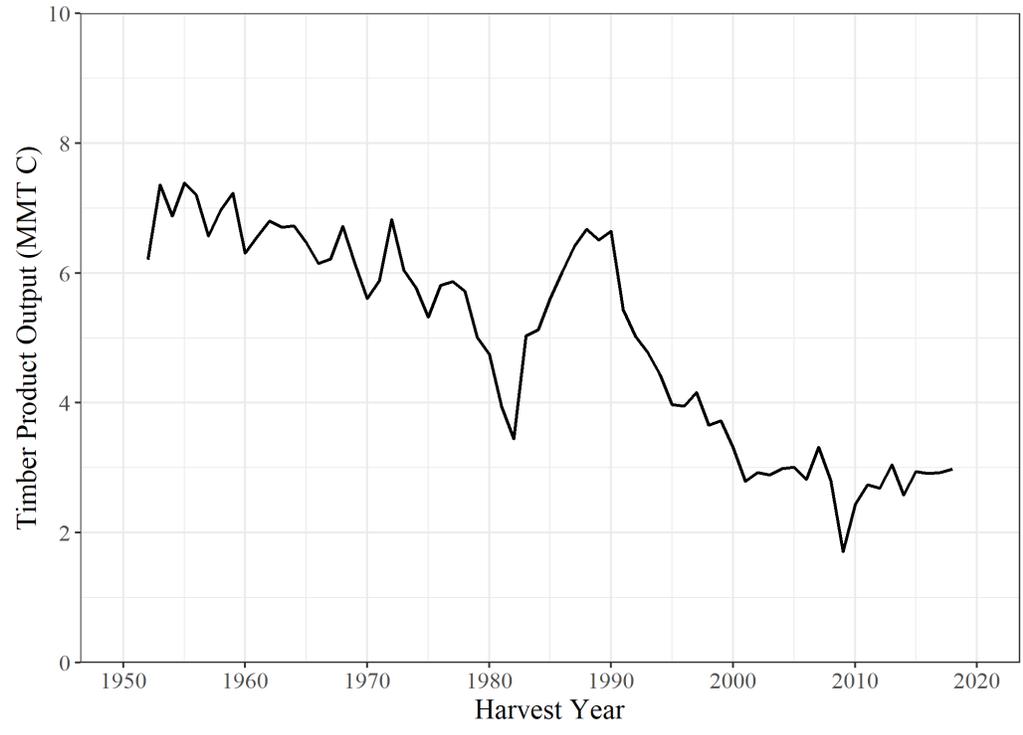


Figure 6.2. Cumulative total carbon stored in HWP manufactured from California timber using the IPCC production approach, 1952-2018. Carbon in HWP includes both products that are still in use and carbon stored at solid waste disposal sites (SWDS).

** Please note that this entire figure is updated from fig 6.2 in the 2017 report report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.*

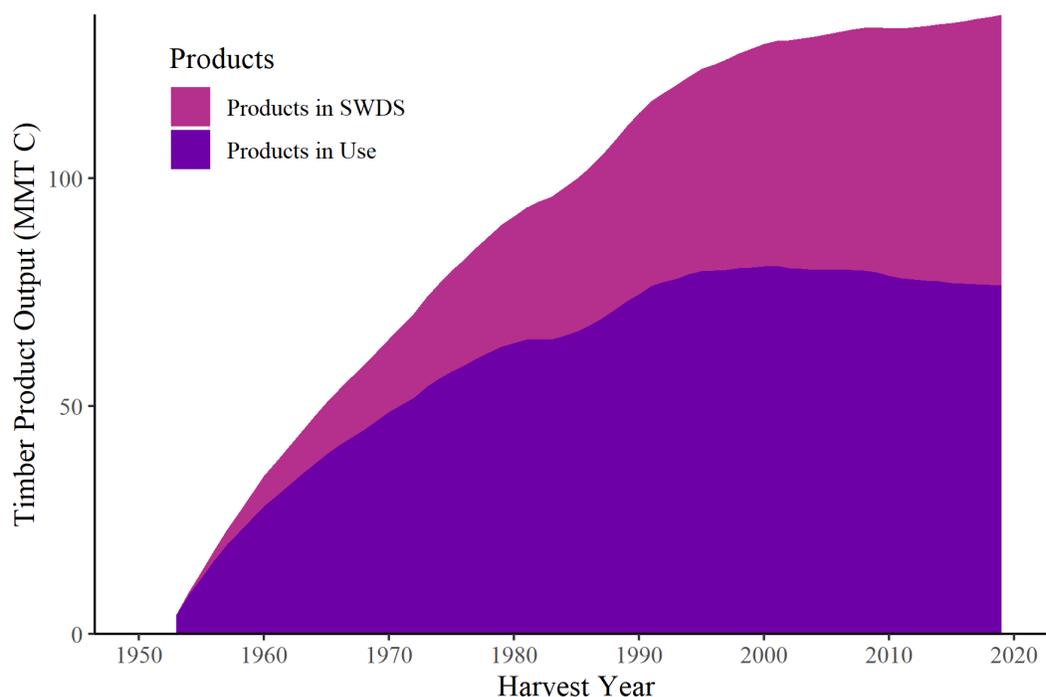


Table 6.2. Cumulative disposition of California HWP C for selected years using the IPCC production approach. This table shows the fate of all carbon removed from the ecosystem by harvesting.

** Please note that all numbers in this table are updated from table 6.2 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.*

Inventory year	Emitted with energy capture (metric ton CO ₂ e) ^a	Emitted without energy capture (metric ton CO ₂ e) ^a	Products in use (metric ton C)	SWDS (metric ton C) ^d	Total in HWP pool ^b (metric ton C)
1960	61,908,899	15,456,377	28,083,244	6,615,140	34,698,385
1970	132,479,288	69,192,814	49,549,702	16,055,183	65,604,885
1980	181,420,269	133,799,370	64,718,902	27,772,594	92,491,496
1990	237,574,946	190,415,212	75,520,876	39,722,556	115,243,431

Inventory year	Emitted with energy capture (metric ton CO _{2e}) ^a	Emitted without energy capture (metric ton CO _{2e}) ^a	Products in use (metric ton C)	SWDS (metric ton C) ^d	Total in HWP pool ^b (metric ton C)
1995	263,918,164	223,094,689	81,164,766	44,306,099	125,470,865
2000	284,541,705	253,869,331	82,130,799	48,790,927	130,921,726
2001	288,045,882	259,808,778	82,241,234	49,412,888	131,654,122
2002	291,831,032	265,641,053	81,819,797	49,999,510	131,819,307
2003	295,804,063	271,249,385	81,545,276	50,587,444	132,132,719
2004	299,720,828	276,741,695	81,314,720	51,136,954	132,451,674
2005	303,772,799	282,050,821	81,201,884	51,681,421	132,883,306
2006	307,855,381	287,175,842	81,152,769	52,226,577	133,379,346
2007	311,689,795	292,114,144	81,040,800	52,770,394	133,811,194
2008	318,040,086	296,867,228	80,791,611	53,309,501	134,101,112
2009	323,393,711	301,441,131	80,349,089	53,841,855	134,190,944
2010	326,665,185	305,825,332	79,462,483	54,349,938	133,812,421
2011	331,322,580	310,071,852	78,946,397	54,871,235	133,817,631
2012	336,558,687	314,192,400	78,598,005	55,403,746	134,001,752
2013	341,696,621	318,193,150	78,252,143	55,941,878	134,194,021
2014	347,532,813	322,097,173	78,090,983	56,496,104	134,587,087
2015	352,468,670	325,894,689	77,735,969	57,048,339	134,784,308
2016	358,093,994	329,612,449	77,560,493	57,615,008	135,175,501
2017	363,667,094	333,252,273	77,385,155	58,189,749	135,574,903
2018	369,267,624	336,821,957	77,227,292	58,772,995	136,000,287
2019 ^c	374,964,846	340,328,971	77,101,416	59,365,498	136,466,914

^a HWP-energy and HWP-without energy pools. HWP C emissions were converted to CO₂ equivalents at the request of the California Board of Forestry and Fire Protection. Multiply carbon (C) by 44/12 to calculate equivalent carbon dioxide (CO_{2e}).

^b Sum of products in use (HWP-use) and SWDS (HWP-SWDS).

^c Although no harvest records are entered for 2019, the cumulative dispositions from prior year harvests are estimated in 2019. Note that HWP storage and emissions as a result of the 2018 harvest are reported by the model in 2019.

^d Note: previous reports did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

Figure 1.3. The flux in carbon stocks in HWP from the previous year using the IPCC production approach, 1952-2018. Negative values for products in use or at SWDS indicate that the carbon in those pools are shrinking, while positive values indicate that those pools are growing. The net stock change trend line is the sum of net flux for SWDS and products in use.

* Please note that this entire figure is updated from fig 6.3 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.

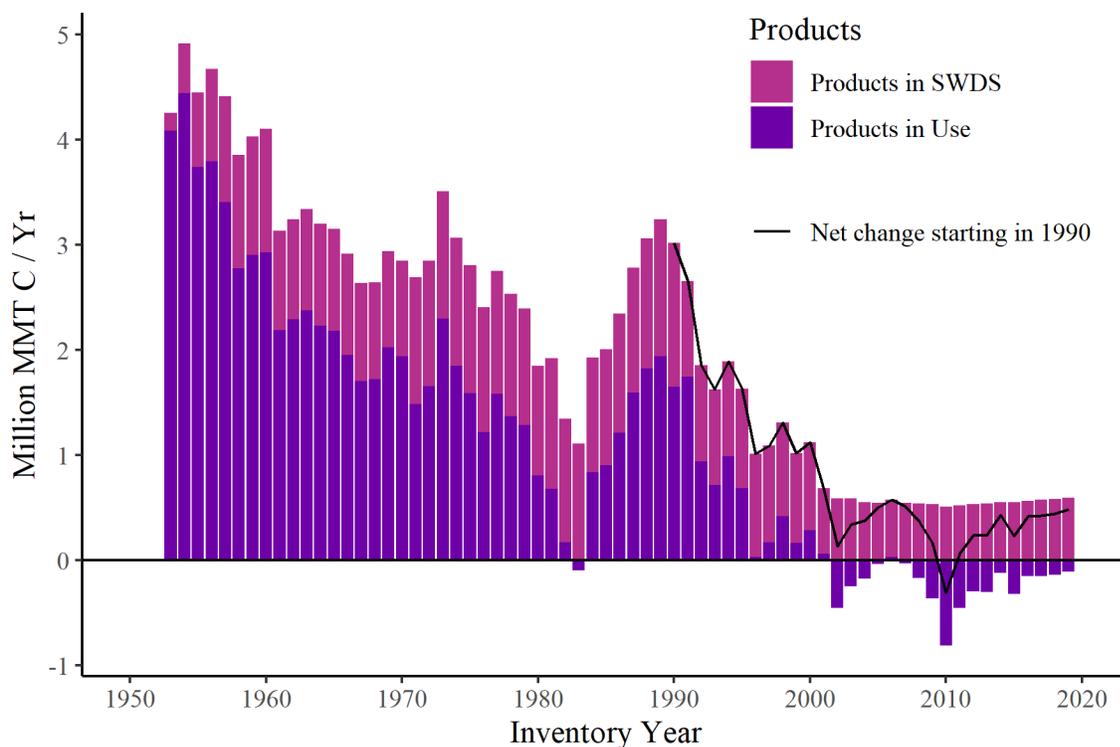


Table 6.3. Selected total stock change (net flux) in cumulative HWP stocks for products in SWDS, products in use, and total from harvests.

* Please note that all numbers in this table are updated from table 6.3 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.

Inventory year	Products in SWDS ^c	Products in use	Total stock change ^a
	MT CO ₂ e per year		
1960	4,290,160	10,746,094	15,036,254
1970	3,329,595	7,195,258	10,524,852
1980	3,820,113	2,937,083	6,757,196

Inventory year	Products in SWDS ^c	Products in use	Total stock change ^a
	MT CO ₂ e per year		
1990	5,007,956	6,112,797	11,120,752
1995	3,458,870	2,726,915	6,185,785
2000	3,071,331	816,276	3,887,607
2001	2,280,525	404,928	2,685,454
2002	2,150,948	-1,545,270	605,678
2003	2,155,755	-1,006,577	1,149,178
2004	2,014,873	-845,372	1,169,501
2005	1,996,379	-413,731	1,582,648
2006	1,998,905	-180,088	1,818,817
2007	1,993,996	-410,554	1,583,442
2008	1,976,724	-913,692	1,063,032
2009	1,951,966	-1,622,581	329,385
2010	1,862,972	-3,250,888	-1,387,917
2011	1,911,420	-1,892,317	19,103
2012	1,952,542	-1,277,434	675,107
2013	1,973,150	-1,268,161	704,989
2014	2,032,161	-590,921	1,441,240
2015	2,024,862	-1,301,717	723,145
2016	2,077,786	-643,413	1,434,372
2017	2,107,383	-642,907	1,464,476
2018	2,138,569	-578,831	1,559,739
2019 ^b	2,172,513	-461,544	1,710,969

^a Net annual change (flux) in CO₂e in products in use and SWDS. HWP C emissions were converted to CO₂ equivalents at the request of the California Board of Forestry and Fire Protection.

^b Although no harvest records are entered for 2018, the annual net flux from the prior year harvest is estimated for 2018. Note that HWP storage and emissions as a result of the 2018 harvest are reported by the model in 2019.

^c Note: previous reports did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

Table 6.4. Selected yearly carbon dispositions. These calculations quantify cumulative carbon storage from HWP products in use and in SWDS, and cumulative emissions with and without energy capture using the IPCC production approach.

** Please note that all numbers in this table are updated from table 6.4 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.*

Disposition category	2019^a	2018	2010	2000	1990
Cumulative storage (MT C per year)					
Products in use:					
End-use products	76,451,864	76,562,297	78,497,630	80,691,997	74,553,052
Recovered products	649,552	664,995	964,853	1,438,802	967,823
Products in SWDS^b:					
Carbon in landfills	55,127,602	54,368,379	48,260,459	39,346,446	24,496,449
Carbon in dumps	4,237,896	4,404,615	6,089,479	9,444,481	15,226,107
Cumulative emissions (MT CO₂e per year)					
Emissions w/ energy capture:					
Emitted from fuelwood	374,964,846	369,267,624	326,665,185	284,541,705	237,574,946
Emitted from burning discarded products	0	0	0	0	0
Emissions w/o energy capture:					
Emitted from landfills	41,701,319	40,724,940	32,450,772	20,809,292	10,028,960
Emitted from dumps	132,390,899	131,667,330	124,573,335	110,949,275	88,112,588
Emitted from recovered products	49,965,172	49,394,565	43,892,985	32,440,875	20,321,488
Emitted from burning	104,993,710	104,206,504	97,750,401	87,701,254	71,952,176
Emitted from compost	11,277,872	10,828,619	7,157,838	1,968,635	0

^a Although no harvest records are entered for 2019, the annual net flux from the prior year harvest is estimated for 2019. Note that HWP storage and emissions as a result of the 2018 harvest are reported by the model in 2019.

^b Note: previous reports did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

Figure 6.4. Cumulative total carbon stored in HWP, by owner group, manufactured from California timber using the IPCC production approach, 1952-2018. Carbon in HWP includes both products that are still in use and carbon stored at solid waste disposal sites (SWDS). “Other public and Tribal” includes BLM, State and other public, and Tribal lands.

* Please note that this entire figure is updated from fig 6.4 in the 2017 due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.

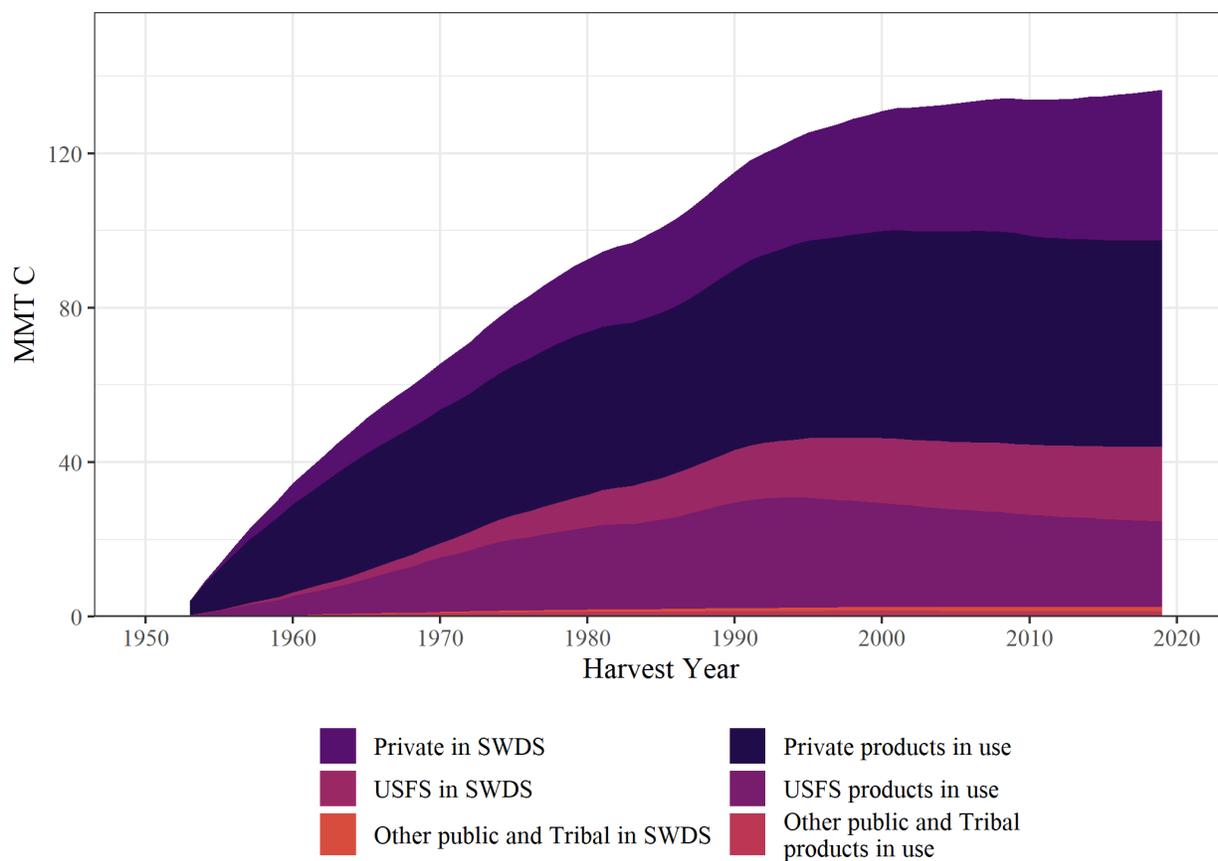


Figure 6.5. Cumulative total carbon stored in HWP, by State and other public, Tribal, and BLM owner groups, manufactured from California timber using the IPCC production approach, 1952-2018. Carbon in HWP includes both products that are still in use and carbon stored at solid waste disposal sites (SWDS).

** Please note that this entire figure is updated from fig 6.5 in the 2017 report due to revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.*

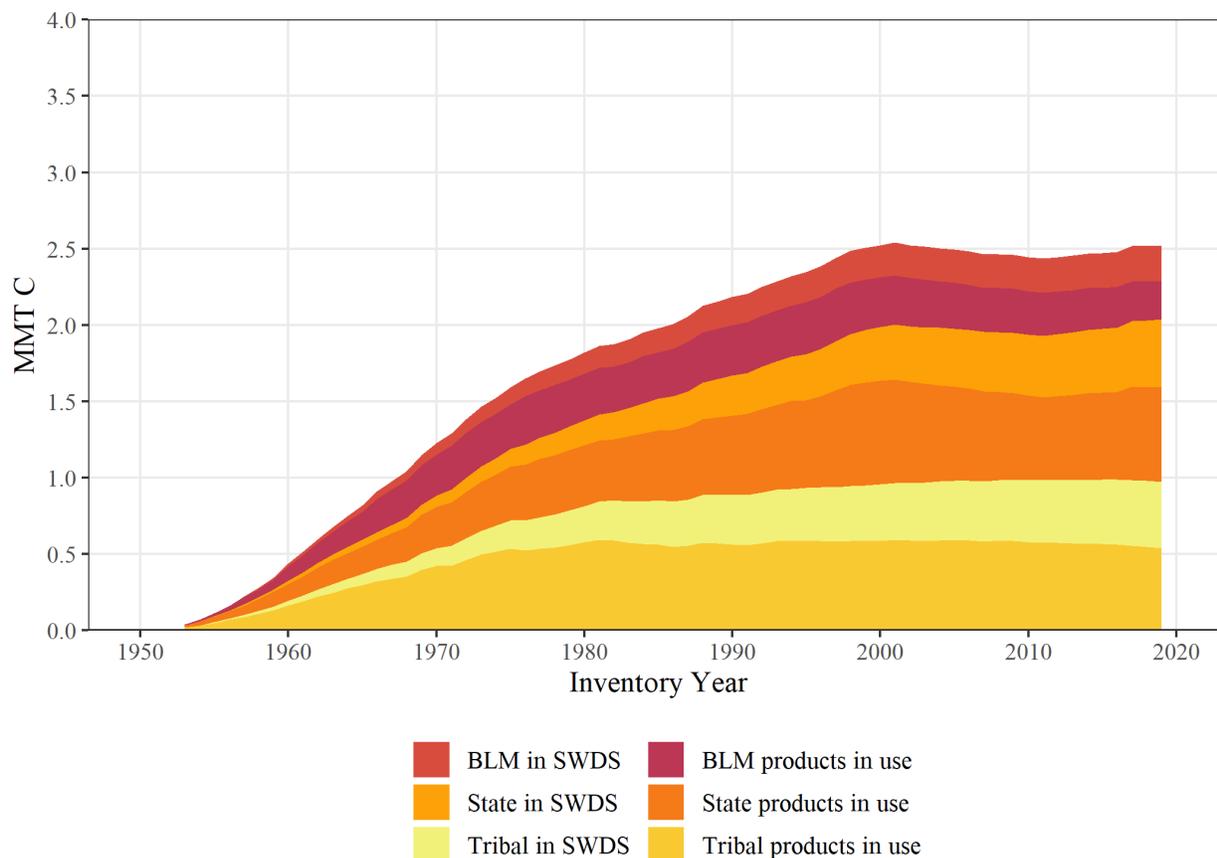


Table 6.5. Average HWP C stocks by owner group for the 2018 California AB 1504 reporting period (2009 – 2018 harvests).

Please note majority of changes in stock from the previous report primarily reflects revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.

Owner group	Products in use	SWDS ^a	Total
		MT C	
Private	53,581,254	37,055,878	90,637,133
USFS	23,046,183	18,682,536	41,728,719
BLM	269,162	227,835	496,997
State and other public	576,137	418,274	994,411
Tribal	563,298	420,926	984,223
All owners	78,036,034	56,805,449	134,841,483

^a Note: previous reports did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

Table 6.6. Average of HWP C flux by owner group and pool for the 2018 California AB 1504 reporting periods.

Please note majority of changes in stock from the previous report primarily reflects revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools.

Owner group	Products in use	SWDS ^a	Total
		MT CO ₂ e	
Private	-337,574	1,506,162	1,168,589
USFS	-878,934	445,877	-433,056
BLM	-12,400	3,715	-8,685
State and other public	-9,984	15,104	5,120
Tribal	-10,731	12,793	2,062
All owners	-1,249,622	1,983,651	734,029

^a Note: previous reports did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

Table 6.7. Confidence intervals for cumulative carbon in HWP for selected years for harvests beginning in 1960 using the IPCC production. Means and confidence intervals were calculated using Monte Carlo simulation (5,000 iterations).

**Please note this table is not updated in this data update as model code revisions are still pending to fix narrower confidences intervals than expected based on the parameters set for Monte Carlo Uncertainty Analysis. Revisions are anticipated to be complete before release of the 2019 data update.*

Table 6.8: HWP carbon pools by 10-year inventory period, 2002-2011 through 2010-2019¹.

	2002-2011	2003-2012	2004-2013	2005-2014	2006-2015	2007-2016	2008-2017	2009-2018	2010-2019
	<i>Metric tons C</i>								
Private:									
Products in use	54,317,779	54,282,178	54,226,807	54,163,199	54,066,147	53,954,890	53,825,623	53,696,555	53,581,254
SWDS	33,769,706	34,176,219	34,580,575	34,986,478	35,393,786	35,803,862	36,216,862	36,633,903	37,055,878
<i>Total</i>	<i>88,087,485</i>	<i>88,458,398</i>	<i>88,807,382</i>	<i>89,149,676</i>	<i>89,459,932</i>	<i>89,758,752</i>	<i>90,042,486</i>	<i>90,330,457</i>	<i>90,637,133</i>
USFS:									
Products in use	24,963,857	24,693,624	24,433,864	24,186,975	23,947,996	23,708,783	23,476,022	23,252,496	23,046,183
SWDS	17,709,712	17,835,125	17,957,885	18,079,582	18,200,626	18,320,942	18,441,059	18,561,370	18,682,536
<i>Total</i>	<i>42,673,569</i>	<i>42,528,749</i>	<i>42,391,749</i>	<i>42,266,557</i>	<i>42,148,621</i>	<i>42,029,725</i>	<i>41,917,081</i>	<i>41,813,866</i>	<i>41,728,719</i>
BLM:									
Products in use	296,216	292,450	288,840	285,497	282,266	279,230	276,337	272,865	269,162
SWDS	219,730	220,766	221,779	222,792	223,804	224,826	225,857	226,859	227,835
<i>Total</i>	<i>515,946</i>	<i>513,216</i>	<i>510,619</i>	<i>508,289</i>	<i>506,070</i>	<i>504,056</i>	<i>502,195</i>	<i>499,724</i>	<i>496,997</i>
State and other public:									
Products in use	597,920	586,727	577,896	571,851	567,411	564,652	566,791	570,629	576,137
SWDS	385,321	389,309	393,153	396,988	400,838	404,761	408,997	413,489	418,274
<i>Total</i>	<i>983,240</i>	<i>976,036</i>	<i>971,048</i>	<i>968,839</i>	<i>968,249</i>	<i>969,413</i>	<i>975,788</i>	<i>984,118</i>	<i>994,411</i>
Tribal:									
Products in use	586,711	585,325	583,584	581,095	578,206	575,242	572,460	568,257	563,298
SWDS	393,014	396,486	399,958	403,425	406,903	410,409	413,959	417,464	420,926
<i>Total</i>	<i>979,725</i>	<i>981,811</i>	<i>983,542</i>	<i>984,520</i>	<i>985,109</i>	<i>985,651</i>	<i>986,419</i>	<i>985,721</i>	<i>984,223</i>
All owners:									
Products in use	80,762,483	80,440,303	80,110,990	79,788,616	79,442,025	79,082,797	78,717,233	78,360,801	78,036,034
SWDS	52,477,483	53,017,907	53,553,350	54,089,265	54,625,957	55,164,800	55,706,735	56,253,085	56,805,449
<i>Total</i>	<i>133,239,966</i>	<i>133,458,210</i>	<i>133,664,340</i>	<i>133,877,882</i>	<i>134,067,982</i>	<i>134,247,597</i>	<i>134,423,968</i>	<i>134,613,886</i>	<i>134,841,483</i>

¹ Note that 2002-2011 through 2010-2019 correspond with FIA periods of 2001-2010 through 2009-2018; all time periods recalculated to reflect revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools. Previous reports also did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified to allow for better quality assurance of calculations.

4 Forest ecosystem and harvested wood product carbon flux and stock summary, select table and figure updates

Table 7.1: Statewide average annual net CO₂e flux from forest ecosystem and harvested wood product pools in forest land remaining forest land for the 2018 CA AB 1504 reporting period.

Table 7.1: Statewide average annual net CO₂e flux from forest ecosystem and harvested wood product pools in forest land remaining forest land, 2018 reporting period

	Net flux	
	Total	SE
	<i>million metric tons CO₂ equivalent</i>	
Aboveground live¹	15.6	2.1
Aboveground dead²	6.7	1.4
Belowground live³	3.2	0.4
Belowground dead⁴	1.1	0.2
NET FLUX	26.7	2.2
Soil Organic C	-0.5	0.3
TOTAL FOREST NET FLUX	26.2	2.4
Harvested Wood		
Products in use	-1.2	--
Products at SWDS	2.0	--
HWP NET FLUX	0.7	--
TOTAL NET FLUX	26.9	2.4 ⁵

¹includes live trees, foliage, and understory veg

²includes standing and down dead wood, forest floor

³includes live tree and understory veg roots

⁴includes dead tree roots

⁵Excludes HWP C sampling error. There is no HWP C sampling error, just modeling error.

Totals may be off due to rounding

Table 7.2: Statewide average annual net CO₂e flux from forest ecosystem and harvested wood product pools, including non-CO₂ emissions from forest fires in forest land remaining forest land (FF) and from changes due to forest land conversions (i.e., by forest land-use and land-use change) for the 2018 CA AB 1504 reporting period.

Table 7.2: Statewide average annual net CO₂e flux from forest ecosystem and harvested wood product pools, including non-CO₂ emissions from forest fires in forest land remaining forest land (FF) and from changes due to forest land conversions (i.e., by forest land-use and land-use change) for the 2018 CA AB 1504 reporting period.

<u>Land-use category</u>	Net flux	
	Total	SE ¹
<i>million metric tons CO₂ equivalent</i>		
Forest land remaining forest land (FF)		
Forest ecosystem		
Changes in forest ecosystem carbon	26.2	2.4
Non-CO ₂ emissions from forest fires	-0.6	0.0
Harvested Wood		
Changes in HWP carbon	0.7	
NET FLUX	26.3	2.4
Forest land conversions (LF)		
Changes in forest carbon, forest to non-forest	-2.9	0.4
Changes in forest carbon, non-forest to forest	1.4	0.2
TOTAL NET FLUX (LF)	-1.5	0.5
TOTAL NET FLUX (FF & LF)	24.9	2.4

¹Excludes HWP C sampling error. There is no HWP C sampling error, just modeling error

Totals may be off due to rounding

Table 7.3. Statewide average carbon stock for the 2018 CA AB 1504 reporting period.

<i>Carbon pool</i>	<i>Stock (MMT C)</i>
Forest Ecosystem¹	3,082.2
Harvested wood product²	134.8
Total carbon stock	3,217.0

¹For a complete breakdown of carbon stocks in the forest ecosystem pools, refer to table 4.12a

²For a complete breakdown of HWP C pools, refer to table 6.5

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Appendix 1: Forest carbon stock by forest type and region

A1.0 All Ecoregions

California (ecoregions) average annual net forestland CO₂e flux by pool and owner
2001-2008 to 2011-2018

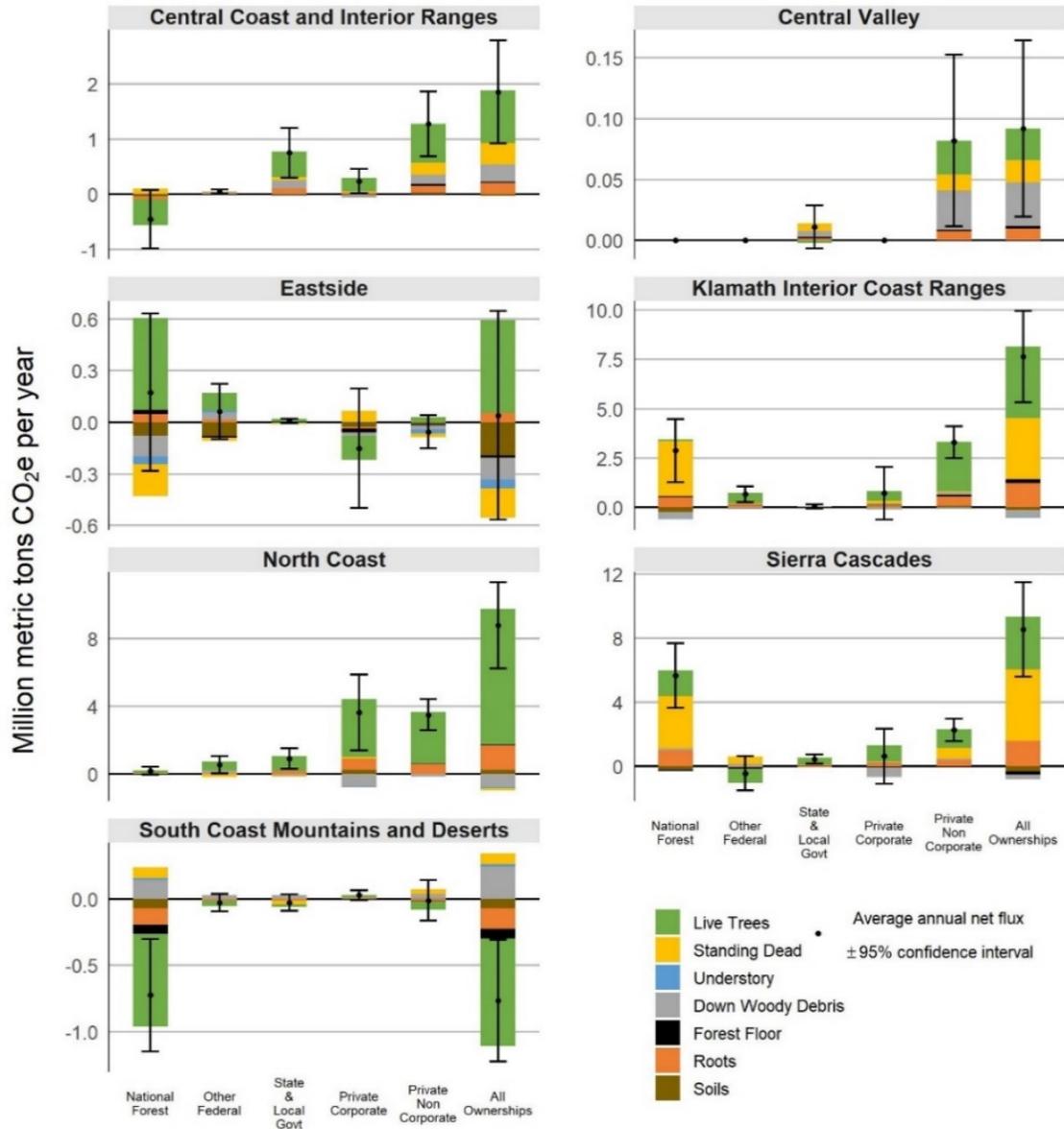


Figure A1.0: California Ecoregions average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Tables B2-8. ***Note – Y axis scale varies for each ecoregion; this is a new figure that was not included in previous reports.**

A1.1 Central Coast and Interior Ranges

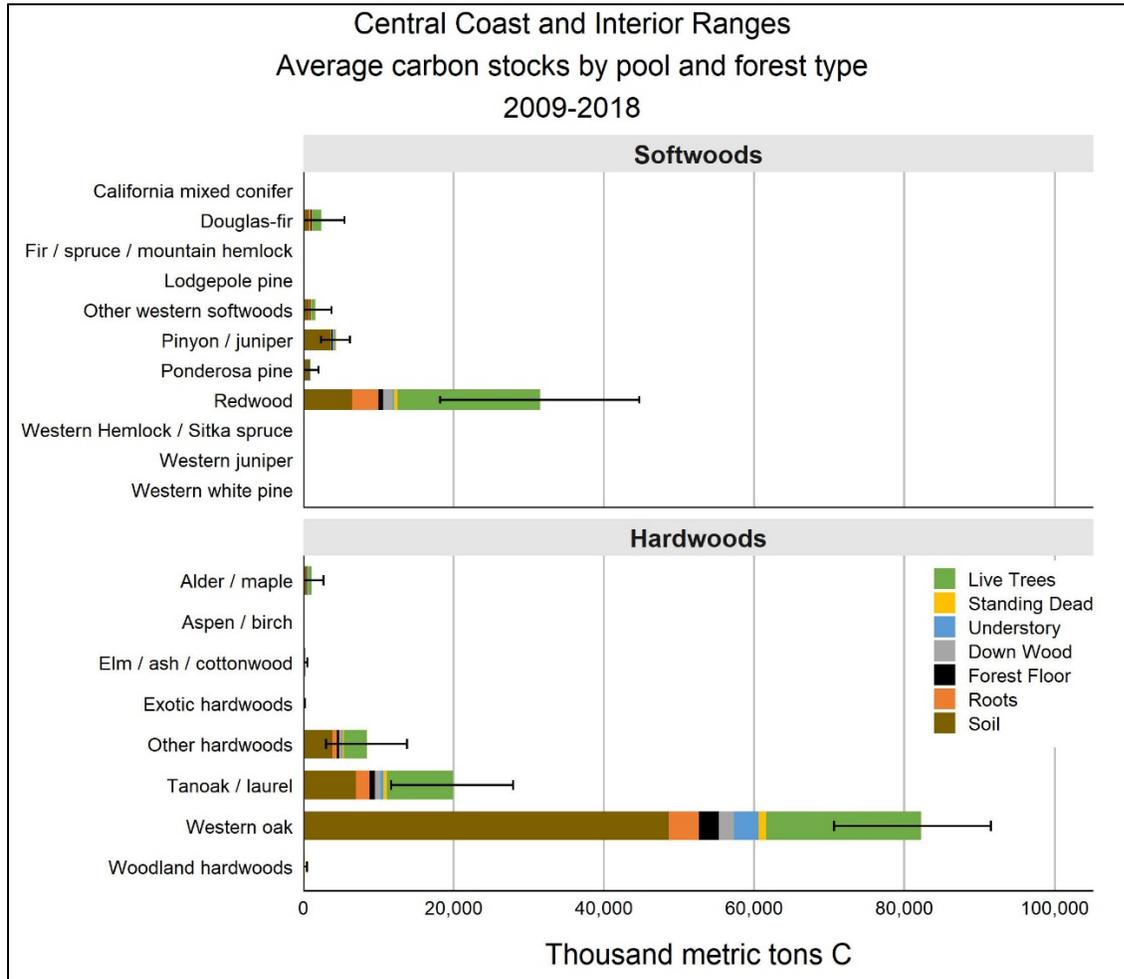


Figure A1.1.1. Central Coast and Interior Ranges: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.1.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.1.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: Central Coast and Interior Ranges

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	1,267	813	18	15	271	179	21	12	69	50	78	49	725	454	2,446	1,546
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	193	57	10	4	40	11	279	58	30	19	127	32	3,702	852	4,299	992
Ponderosa pine	95	59	5	4	21	13	51	33	14	11	45	26	739	433	954	552
Redwood	18,992	4,229	481	147	3,518	778	197	41	1,253	376	620	126	6,481	1,313	31,478	6,776
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	570	449	50	38	148	116	18	13	40	29	64	40	754	463	1,642	1,083
Total	21,117	4,326	564	152	3,998	806	567	81	1,406	381	933	146	12,401	1,746	40,819	7,117
Hardwoods:																
Alder / maple	410	368	2	2	86	78	30	18	48	36	43	30	453	314	1,057	815
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	59	40	--	--	10	7	40	21	11	8	10	6	187	108	284	154
Tanoak / laurel	8,815	2,170	453	189	1,803	432	370	63	731	205	734	140	7,036	1,319	19,830	4,142
Western oak	20,674	1,689	980	212	4,009	317	3,267	196	1,973	242	2,672	176	48,666	3,117	81,042	5,320
Woodland hardwoods	8	8	21	21	5	4	25	18	8	8	8	5	134	96	190	135
Exotic hardwoods	--	--	--	--	--	--	17	15	--	--	5	4	75	65	85	73
Other hardwoods	3,081	1,316	146	71	645	275	182	46	309	135	242	69	3,862	1,079	8,408	2,765
Total	33,047	2,982	1,601	294	6,558	590	3,931	216	3,081	347	3,712	233	60,414	3,531	110,894	7,173
Nonstocked	69	47	10	9	16	10	58	26	13	7	32	19	596	364	764	431
All forest types	54,233	5,153	2,175	330	10,572	977	4,556	233	4,499	520	4,678	272	73,411	3,917	152,477	9,921

Note: Totals may be of because of rounding

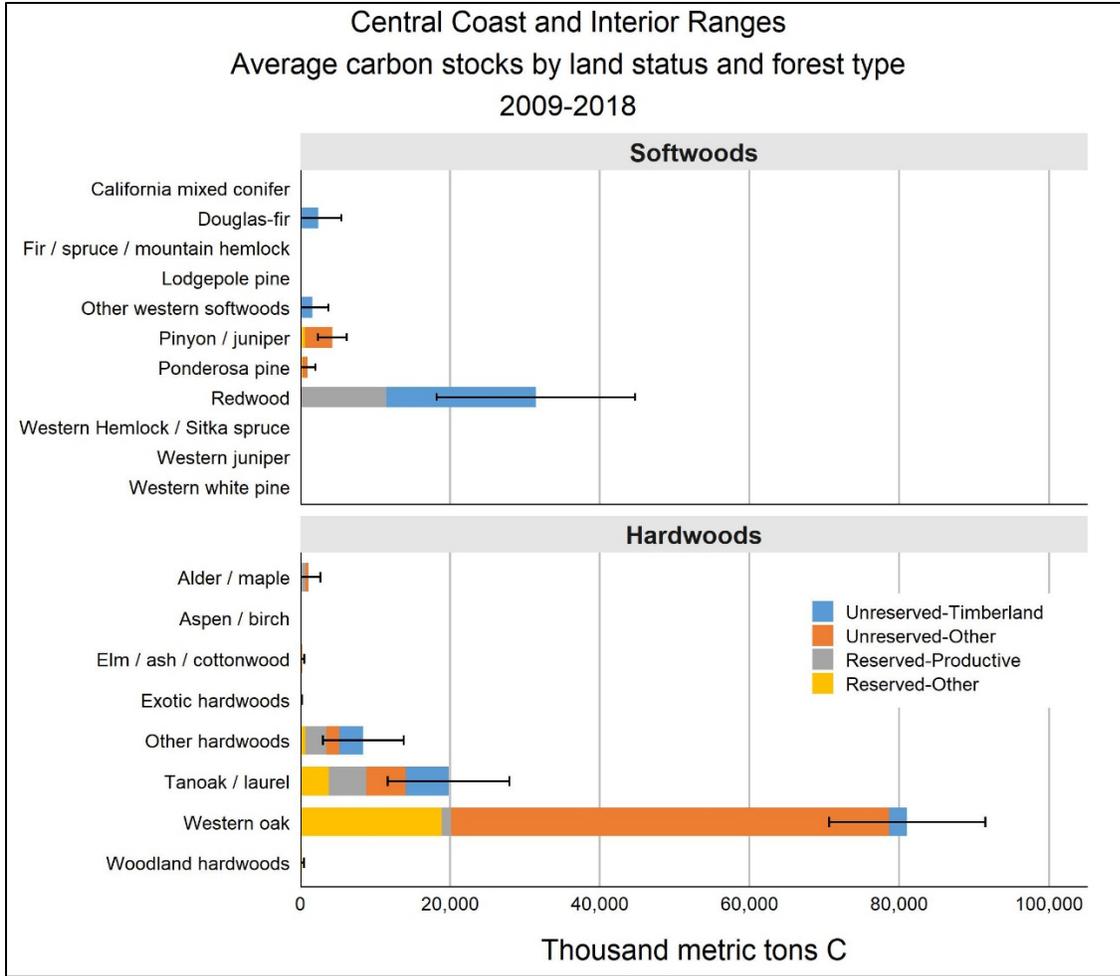


Figure A1.1.2. Central Coast and Interior Ranges: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.1.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.1.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: Central Coast and Interior Ranges

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	--	--	--	--	--	--	--	--	--	--
Douglas-fir	2,446	1,546	--	--	--	--	--	--	2,446	1,546
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	3,669	920	--	--	631	372	4,299	992
Ponderosa pine	--	--	679	485	--	--	276	263	954	552
Redwood	19,974	4,955	--	--	11,504	4,439	--	--	31,478	6,776
Western juniper	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--
Other western softwoods	1,642	1,083	--	--	--	--	--	--	1,642	1,083
Total	24,062	5,291	4,347	1,039	11,504	4,439	907	456	40,819	7,117
Hardwoods:										
Alder / maple	--	--	374	295	683	760	--	--	1,057	815
Aspen / birch	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	256	149	--	--	27	37	284	154
Tanoak / laurel	5,720	2,286	5,288	1,599	5,011	2,683	3,811	1,491	19,830	4,142
Western oak	2,428	1,178	58,503	4,521	1,247	765	18,864	2,588	81,042	5,320
Woodland hardwoods	--	--	--	--	--	--	190	135	190	135
Exotic hardwoods	--	--	85	73	--	--	--	--	85	73
Other hardwoods	3,190	1,863	1,722	778	2,812	1,922	684	407	8,408	2,765
Total	11,337	3,172	66,229	4,862	9,752	3,382	23,576	3,056	110,894	7,173
Nonstocked	186	187	96	82	402	373	80	70	764	431
All forest types	35,586	6,148	70,672	4,966	21,657	5,448	24,562	3,089	152,477	9,921

Note: Totals may be off because of rounding

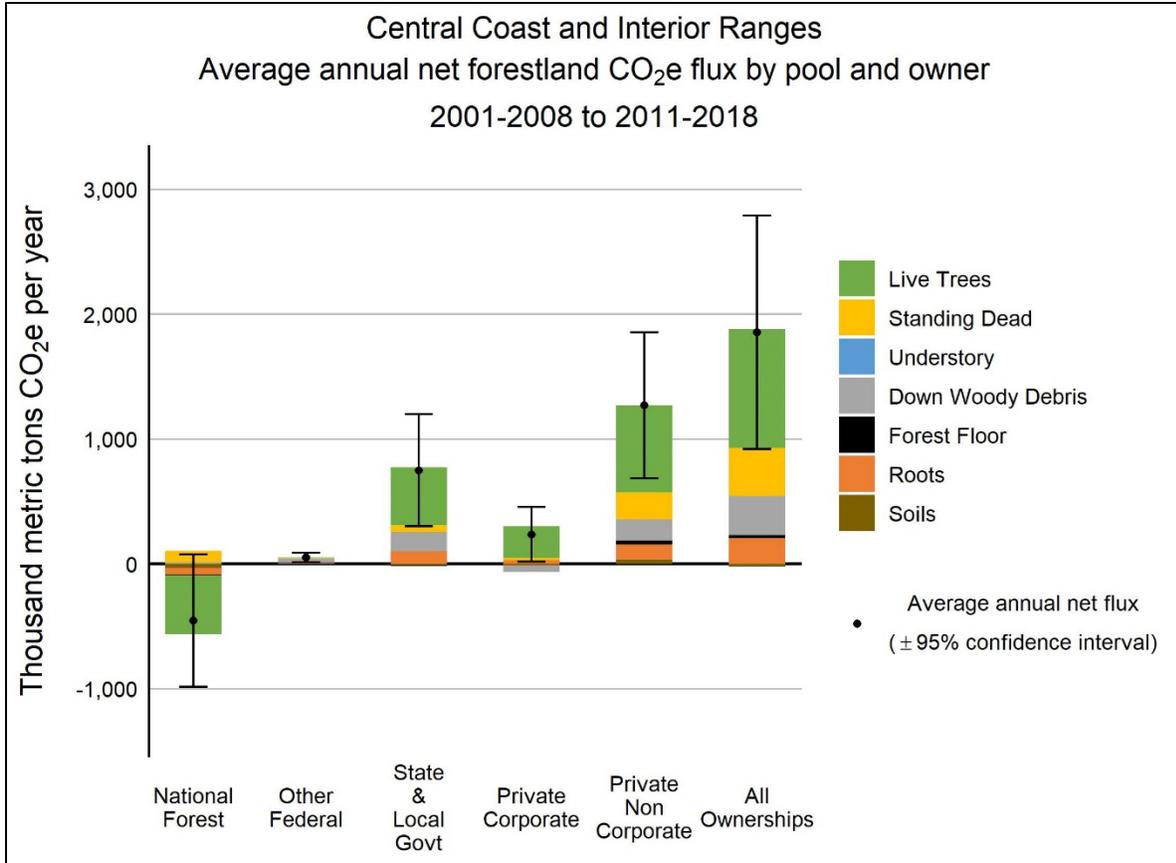


Figure A1.1.3. Central Coast and Interior Ranges average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B2.

**Note: this is a new figure that was not included in previous reports.*

A1.2 Central Valley

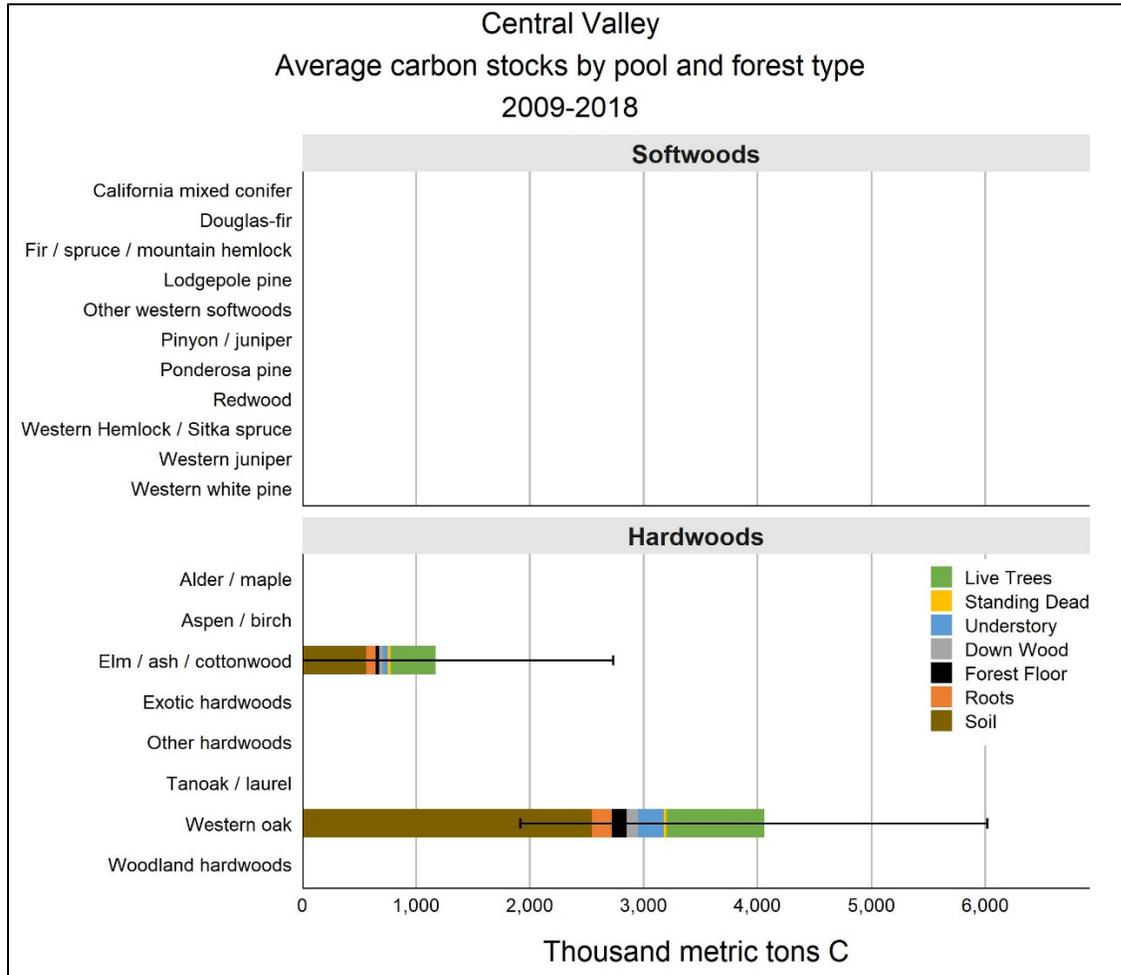


Figure A1.2.1. Central Valley: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.2.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.2.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: Central Valley

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:																
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	397	298	26	19	81	60	42	22	33	24	31	21	563	375	1,151	806
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	859	282	27	14	175	56	225	50	102	49	130	34	2,543	652	3,966	1,046
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,256	410	53	24	256	82	266	54	134	55	161	40	3,106	752	5,117	1,320
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	1,256	410	53	24	256	82	266	54	134	55	161	40	3,106	752	5,117	1,320

Note: Totals may be of because of rounding

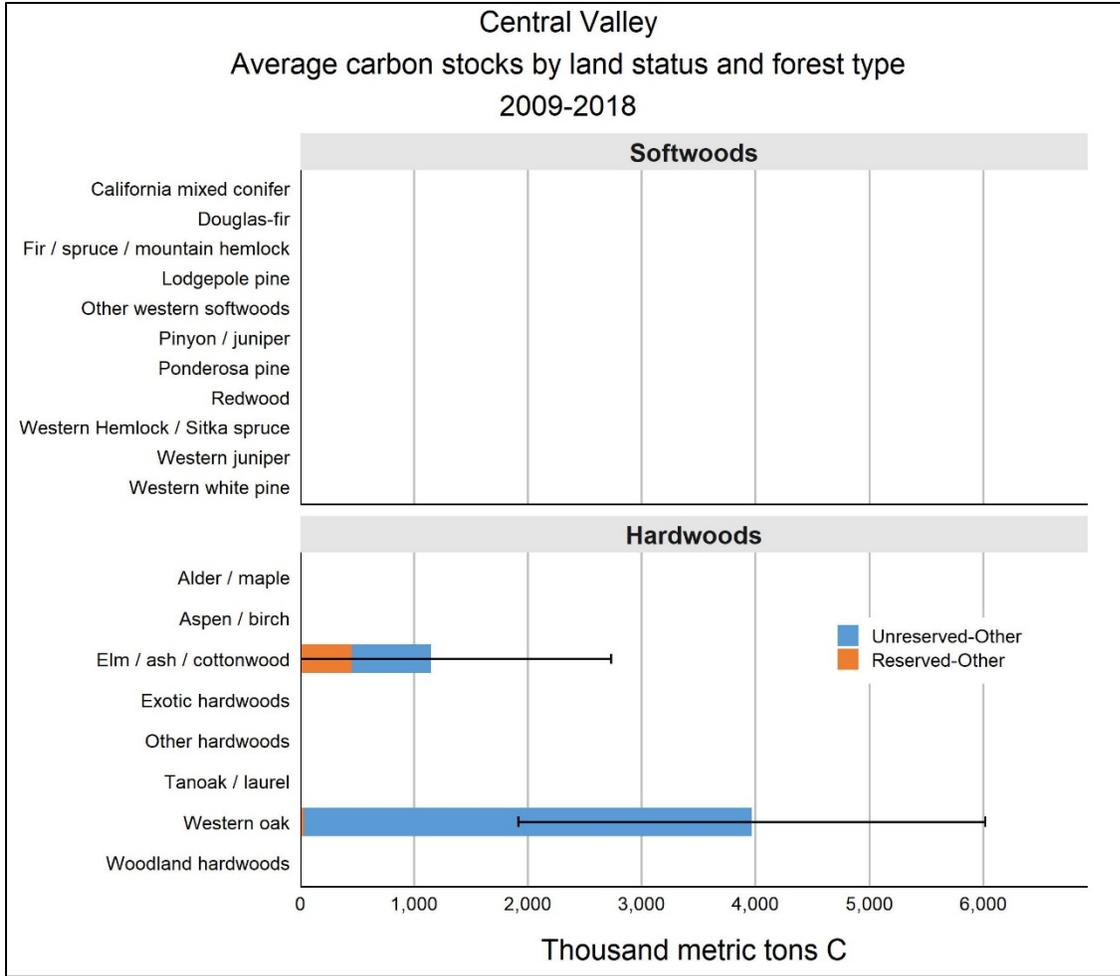


Figure A1.2.2. Central Valley: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.2.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.2.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: Central Valley

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
<i>Thousand metric tons C</i>										
Softwoods:										
California mixed conifer			--	--			--	--	--	--
Douglas-fir			--	--			--	--	--	--
Fir / spruce / mountain hemlock			--	--			--	--	--	--
Western Hemlock / Sitka spruce			--	--			--	--	--	--
Lodgepole pine			--	--			--	--	--	--
Pinyon / juniper			--	--			--	--	--	--
Ponderosa pine			--	--			--	--	--	--
Redwood			--	--			--	--	--	--
Western juniper			--	--			--	--	--	--
Western white pine			--	--			--	--	--	--
Other western softwoods			--	--			--	--	--	--
Total			--	--			--	--	--	--
Hardwoods:										
Alder / maple			--	--			--	--	--	--
Aspen / birch			--	--			--	--	--	--
Elm / ash / cottonwood			700	675			451	441	1,151	806
Tanoak / laurel			--	--			--	--	--	--
Western oak			3,932	1,045			34	35	3,966	1,046
Woodland hardwoods			--	--			--	--	--	--
Exotic hardwoods			--	--			--	--	--	--
Other hardwoods			--	--			--	--	--	--
Total			4,632	1,244			485	442	5,117	1,320
Nonstocked										
			--	--			--	--	--	--
All forest types			4,632	1,244			485	442	5,117	1,320

Note: Totals may be of because of rounding

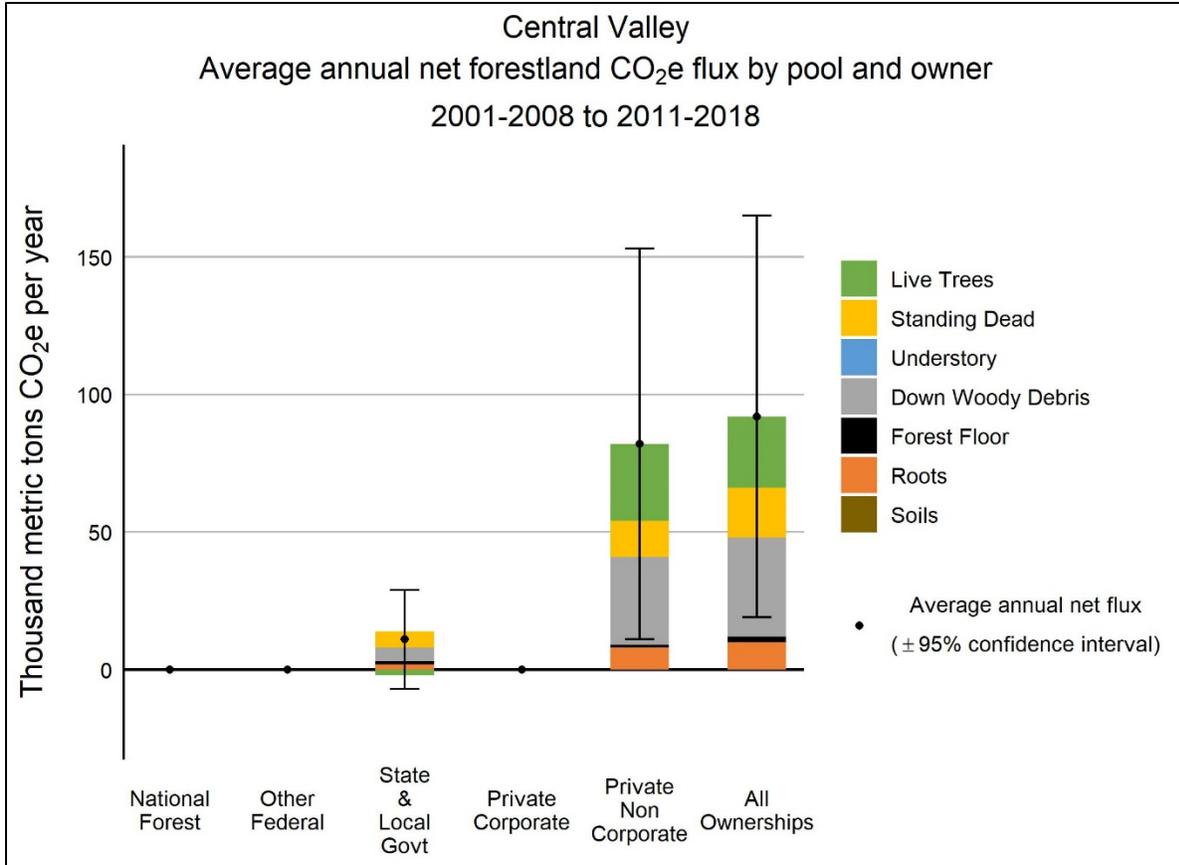


Figure A1.2.3. Central Valley average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B3.

**Note: this is a new figure that was not included in previous reports.*

A1.3 Eastside

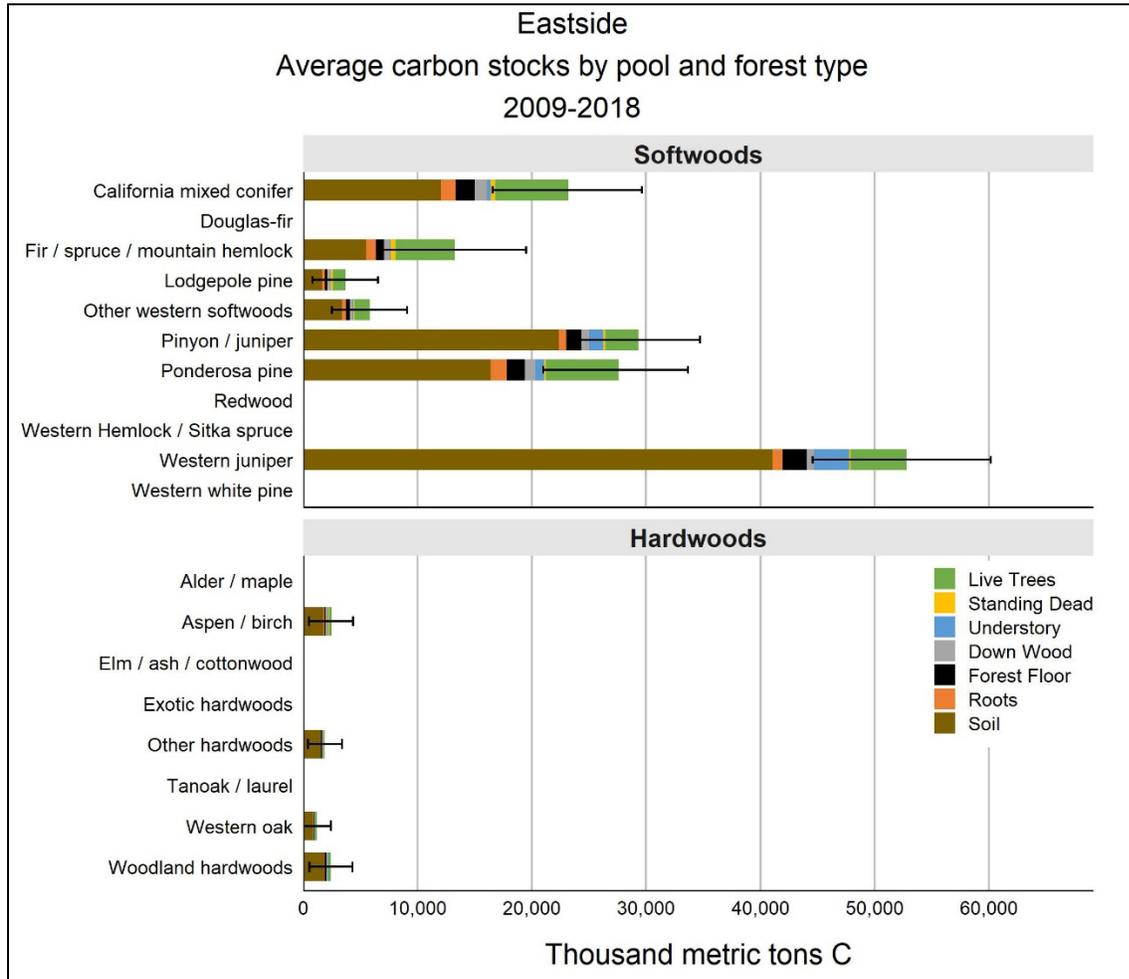


Figure A1.3.1. Eastside: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.3.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.3.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: Eastside

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	6,400	977	409	100	1,282	196	325	48	1,083	201	1,650	241	12,057	1,723	23,111	3,326
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	5,155	1,393	435	136	913	247	113	26	465	133	680	160	5,471	1,257	13,204	3,207
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,120	462	154	121	272	120	56	26	258	114	196	78	1,642	638	3,669	1,463
Pinyon / juniper	2,922	351	151	30	651	77	1,250	116	705	111	1,289	136	22,368	2,132	29,218	2,795
Ponderosa pine	6,371	862	145	45	1,397	190	769	106	939	176	1,569	189	16,414	1,914	27,327	3,224
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	4,919	463	129	31	880	87	3,047	244	676	97	2,094	163	41,067	3,128	52,349	3,977
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	1,325	448	113	46	323	112	91	34	204	70	366	106	3,397	945	5,802	1,683
Total	28,213	2,082	1,536	221	5,717	417	5,653	303	4,330	357	7,845	424	102,415	4,799	154,680	7,673
Hardwoods:																
Alder / maple	--	--	--	--	--	--	12	13	--	--	--	--	2	2	2	2
Aspen / birch	211	121	55	38	53	28	95	34	141	80	112	46	1,780	725	2,417	986
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	157	95	8	7	39	23	63	31	44	27	46	24	843	460	1,172	632
Woodland hardwoods	198	95	41	19	45	21	82	34	68	38	136	56	1,854	736	2,411	963
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	83	54	17	14	17	12	80	30	81	39	100	40	1,538	615	1,897	767
Total	650	189	122	45	155	44	333	66	335	100	394	86	6,017	1,285	7,899	1,697
Nonstocked	89	40	327	141	86	31	459	72	272	66	496	88	7,796	1,367	9,396	1,652
All forest types	28,952	2,094	1,985	267	5,958	422	6,445	323	4,937	377	8,735	441	116,227	5,134	171,975	8,020

Note: Totals may be of because of rounding

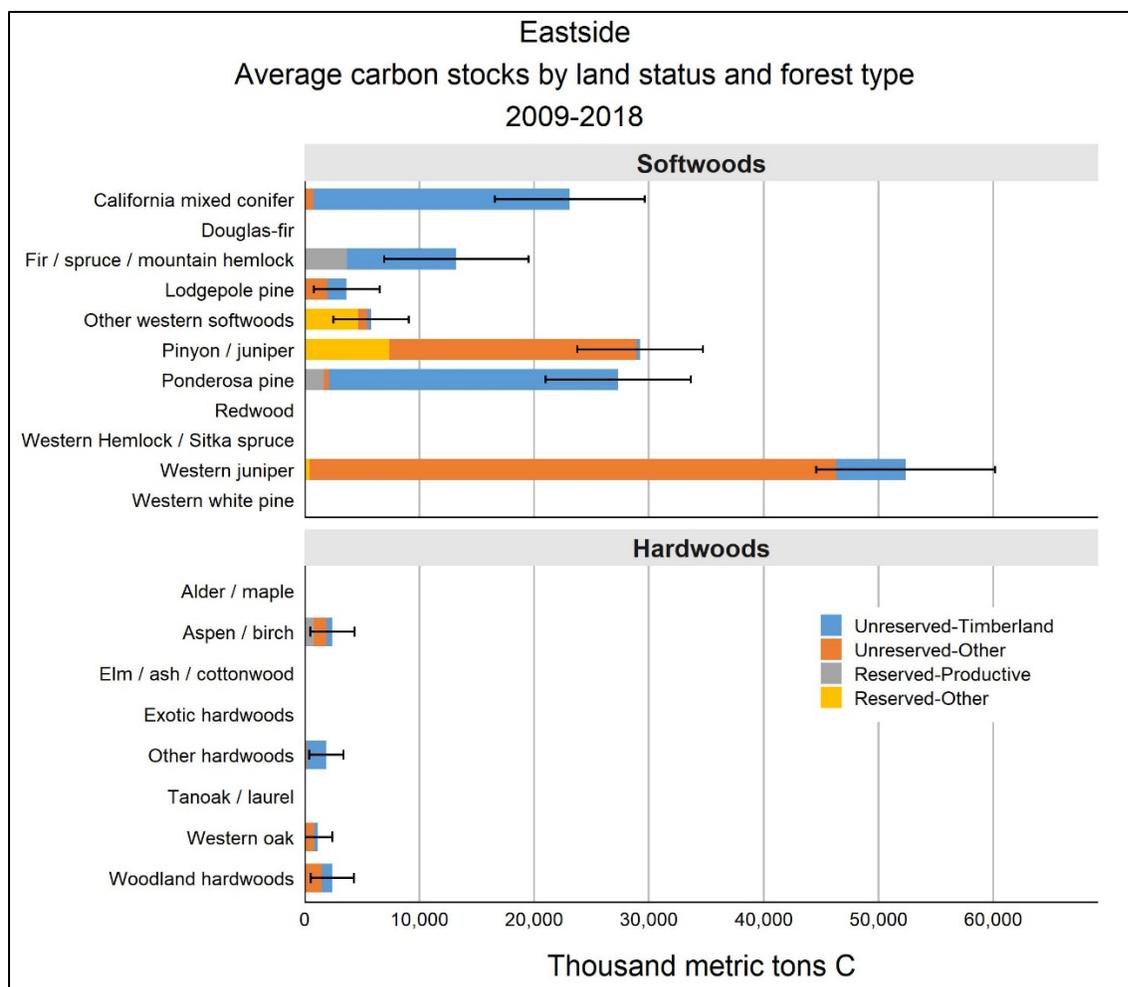


Figure A1.3.2. Eastside: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.3.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.3.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: Eastside

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	22,343	3,272	768	616	--	--	--	--	23,111	3,326
Douglas-fir	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	9,497	2,588	--	--	3,707	1,895	--	--	13,204	3,207
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,697	866	1,972	1,179	--	--	--	--	3,669	1,463
Pinyon / juniper	294	293	21,559	2,405	--	--	7,366	1,465	29,218	2,795
Ponderosa pine	25,231	3,096	417	279	1,679	863	--	--	27,327	3,224
Redwood	--	--	--	--	--	--	--	--	--	--
Western juniper	6,040	1,384	45,859	3,734	--	--	449	385	52,349	3,977
Western white pine	--	--	--	--	--	--	--	--	--	--
Other western softwoods	291	299	835	587	--	--	4,676	1,549	5,802	1,683
Total	65,393	5,438	71,409	4,603	5,386	2,083	12,491	2,168	154,680	7,673
Hardwoods:										
Alder / maple	--	--	--	--	--	--	2	2	2	2
Aspen / birch	524	478	1,092	615	796	604	5	6	2,417	986
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--
Western oak	337	273	835	528	--	--	--	--	1,172	632
Woodland hardwoods	898	597	1,513	756	--	--	--	--	2,411	963
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--
Other hardwoods	1,693	739	203	204	--	--	--	--	1,897	767
Total	3,453	1,097	3,644	1,126	796	604	7	6	7,899	1,697
Nonstocked	6,547	1,386	2,650	878	--	--	199	203	9,396	1,652
All forest types	75,393	5,757	77,703	4,789	6,182	2,195	12,698	2,188	171,975	8,020

Note: Totals may be of because of rounding

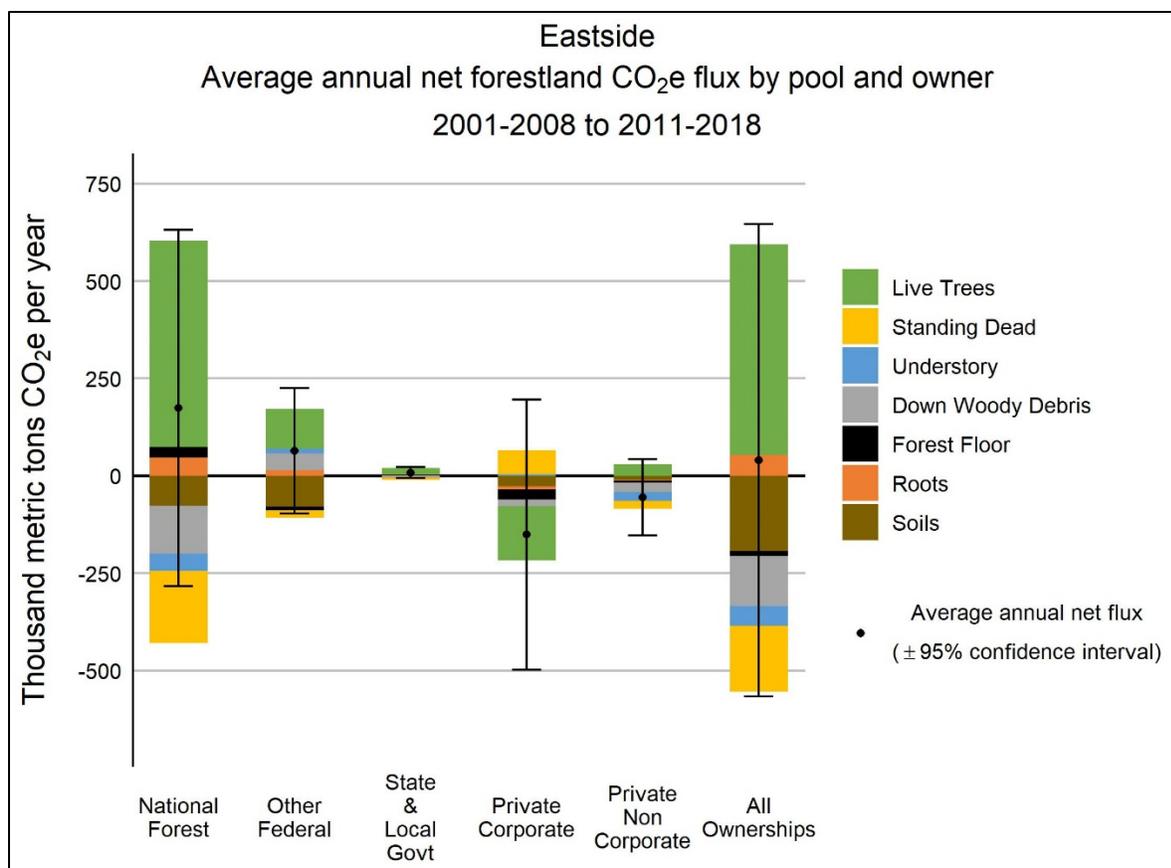


Figure A1.3.3. Eastside average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B4.

**Note: this is a new figure that was not included in previous reports.*

A1.4 Klamath/Interior Coast Ranges

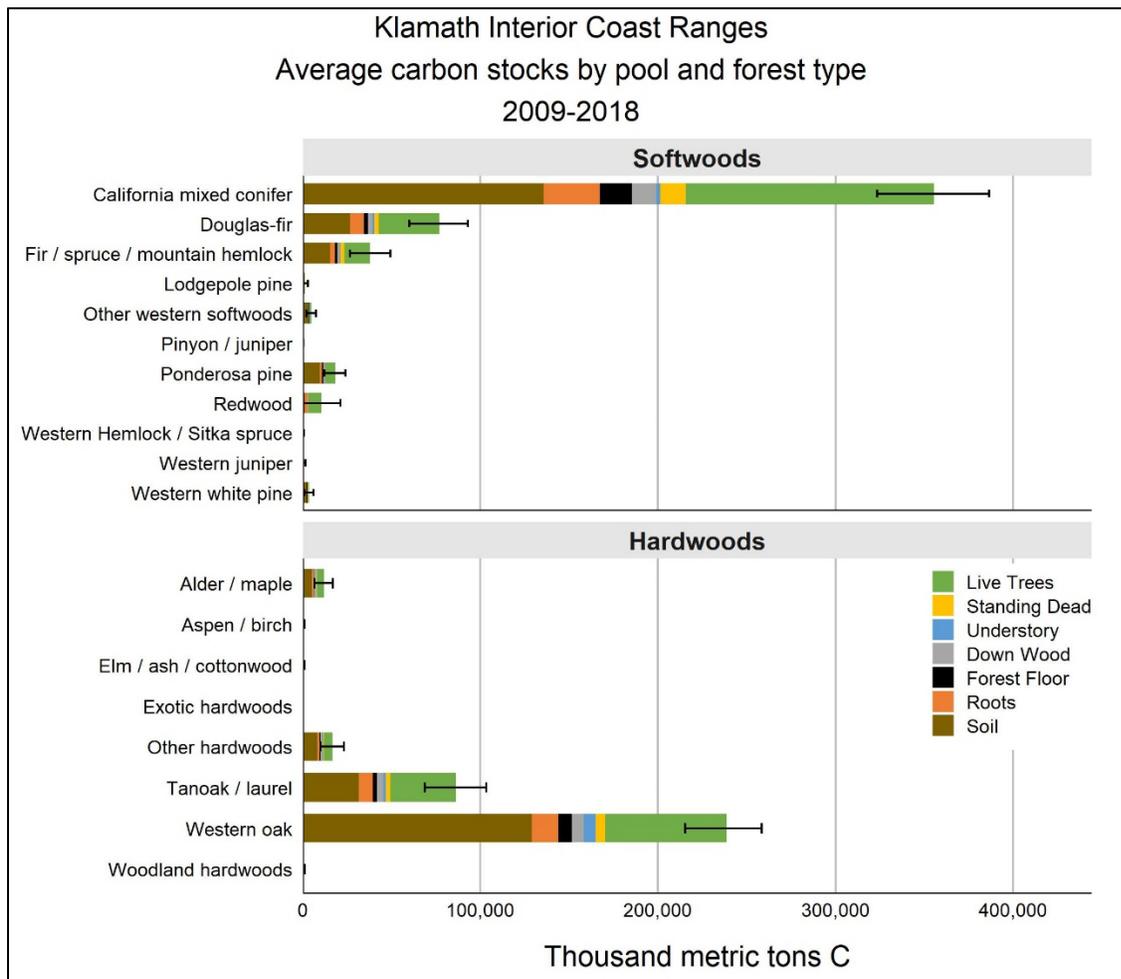


Figure A1.4.1. Klamath/Interior Coast Ranges: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.4.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.4.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: Klamath Interior Coast Ranges

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	139,855	7,065	14,223	1,181	31,555	1,605	2,368	135	13,816	822	17,846	788	135,825	5,910	354,923	16,037
Douglas-fir	34,082	4,040	2,555	452	7,684	918	954	102	2,694	435	2,236	236	26,661	2,817	76,510	8,418
Fir / spruce / mountain hemlock	14,428	2,622	2,341	548	2,896	511	344	52	1,242	266	1,455	210	15,193	2,188	37,809	5,817
Western Hemlock / Sitka spruce	121	120	--	--	24	24	14	14	2	2	22	21	92	92	263	262
Lodgepole pine	249	155	11	8	45	27	24	14	16	10	61	35	894	515	1,299	750
Pinyon / juniper	6	6	--	--	1	1	23	23			7	7	133	133	154	154
Ponderosa pine	5,457	1,087	327	107	1,244	250	464	71	413	92	981	159	9,524	1,488	18,150	3,013
Redwood	7,064	3,888	149	83	1,272	698	46	22	469	291	109	51	1,278	602	10,374	5,551
Western juniper	22	17	5	5	5	3	72	37	1	1	36	22	593	360	700	425
Western white pine	655	285	111	54	134	60	90	35	87	42	182	65	2,226	779	3,464	1,229
Other western softwoods	683	242	105	60	149	48	160	52	241	88	228	64	3,216	910	4,742	1,336
Total	202,624	8,979	19,827	1,335	45,009	1,945	4,559	209	18,981	990	23,162	835	195,635	6,831	508,387	18,935
Hardwoods:																
Alder / maple	3,932	1,088	379	159	890	234	284	58	872	244	410	90	5,098	1,128	11,768	2,709
Aspen / birch	13	13	--	--	2	2	12	12	3	3	15	15	268	269	309	310
Elm / ash / cottonwood	116	82	3	2	17	13	35	20	16	12	11	7	208	138	380	257
Tanoak / laurel	37,054	4,330	2,454	452	7,820	914	1,312	122	3,692	511	2,341	225	31,664	3,015	86,066	8,784
Western oak	68,343	3,943	5,224	960	15,129	877	6,675	279	6,804	530	7,553	348	128,898	5,599	236,846	10,952
Woodland hardwoods	62	40	4	4	8	6	67	28	5	3	26	17	402	261	523	313
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	4,934	1,294	547	188	1,158	304	383	66	951	322	650	125	8,126	1,551	16,639	3,356
Total	114,453	5,977	8,611	1,086	25,025	1,297	8,767	316	12,344	837	11,006	432	174,664	6,520	352,531	14,356
Nonstocked	515	232	3,469	942	868	228	574	84	1,035	235	702	111	10,125	1,592	17,118	2,906
All forest types	317,593	10,307	31,906	1,911	70,902	2,227	13,900	389	32,360	1,275	34,871	897	380,423	8,976	878,037	22,423

Note: Totals may be of because of rounding

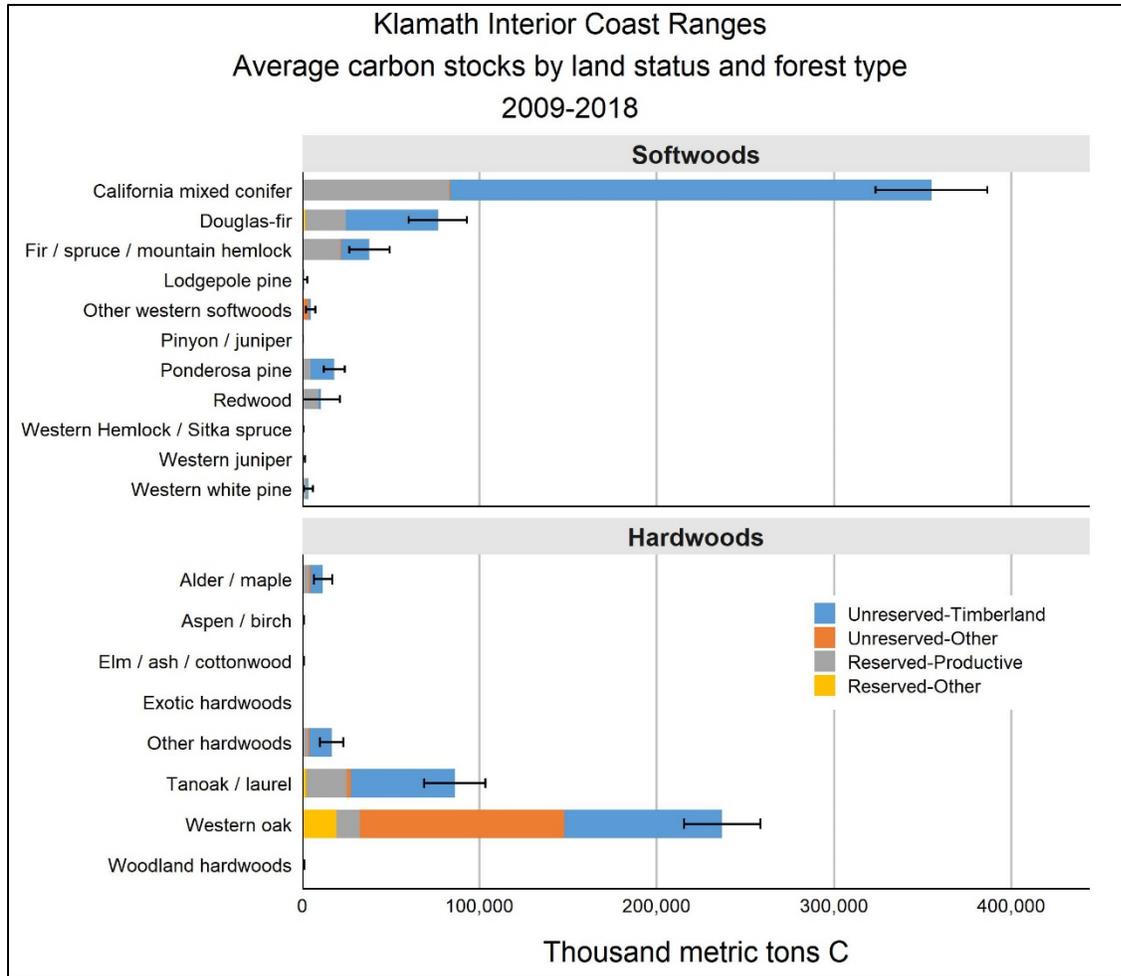


Figure A1.4.2. Klamath/Interior Coast Ranges: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.4.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.4.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: Klamath Interior Coast Ranges

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	271,613	14,151	526	463	82,345	7,713	438	430	354,923	16,037
Douglas-fir	51,945	6,711	--	--	22,732	5,043	1,833	923	76,510	8,418
Fir / spruce / mountain hemlock	15,665	3,633	798	645	20,985	4,492	361	377	37,809	5,817
Western Hemlock / Sitka spruce	--	--	--	--	263	262	--	--	263	262
Lodgepole pine	504	483	--	--	390	393	405	417	1,299	750
Pinyon / juniper	--	--	154	154	--	--	--	--	154	154
Ponderosa pine	13,521	2,500	--	--	4,067	1,626	563	440	18,150	3,013
Redwood	1,386	1,221	--	--	8,988	5,415	--	--	10,374	5,551
Western juniper	--	--	700	425	--	--	--	--	700	425
Western white pine	976	727	--	--	2,136	923	353	366	3,464	1,229
Other western softwoods	1,214	709	2,823	1,040	356	314	349	356	4,742	1,336
Total	356,824	15,859	5,001	1,384	142,261	10,703	4,301	1,377	508,387	18,935
Hardwoods:										
Alder / maple	7,220	1,984	728	462	3,146	1,705	675	533	11,768	2,709
Aspen / birch	--	--	--	--	--	--	309	310	309	310
Elm / ash / cottonwood	--	--	356	256	23	23	--	--	380	257
Tanoak / laurel	58,546	7,389	2,282	1,105	22,952	4,556	2,286	1,116	86,066	8,784
Western oak	89,111	7,601	115,155	6,908	13,467	2,860	19,113	3,136	236,846	10,952
Woodland hardwoods	--	--	144	90	--	--	379	299	523	313
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--
Other hardwoods	12,591	3,071	740	538	2,764	1,163	544	454	16,639	3,356
Total	167,469	11,016	119,404	7,021	42,352	5,682	23,306	3,424	352,531	14,356
Nonstocked	8,895	2,055	645	398	7,231	1,993	347	318	17,118	2,906
All forest types	533,188	18,664	125,049	7,160	191,845	11,427	27,954	3,713	878,037	22,423

Note: Totals may be off because of rounding

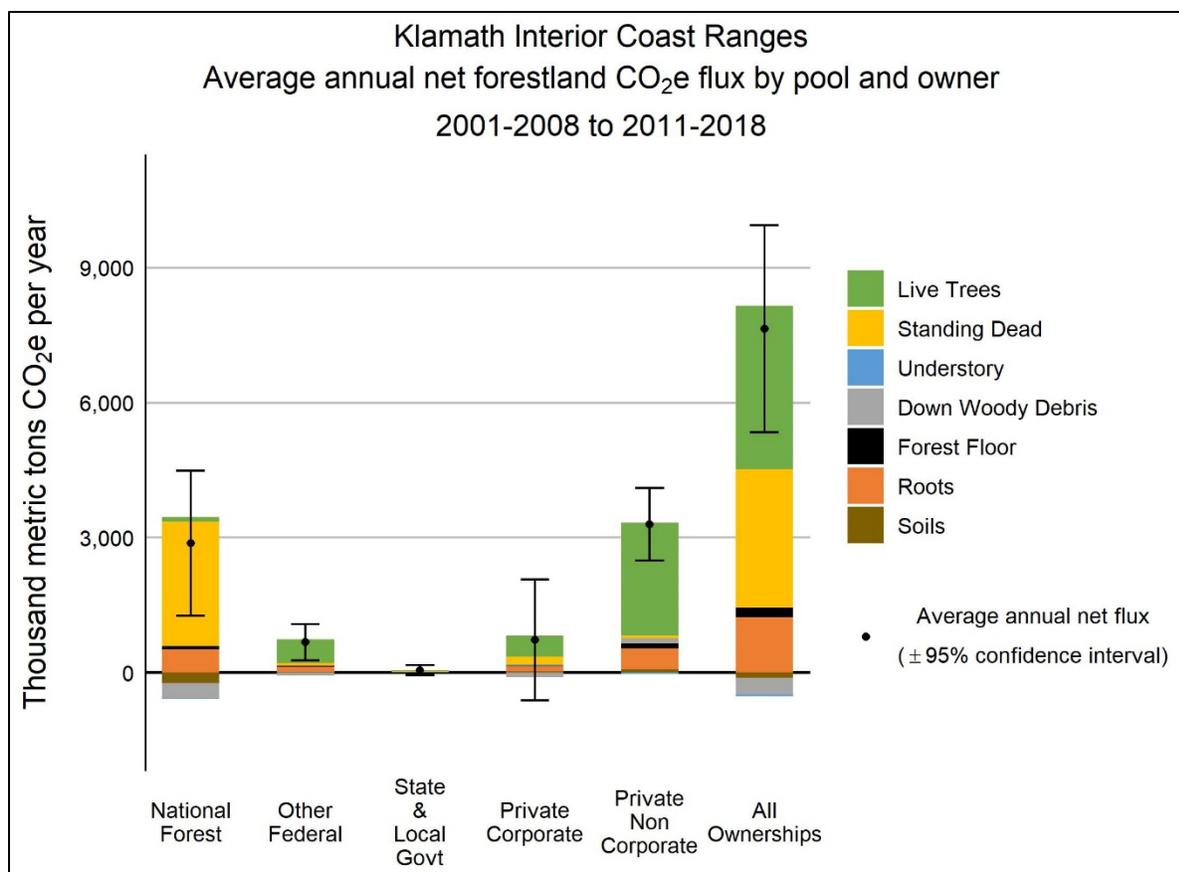


Figure A1.4.3. Klamath Interior Coast Ranges average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B5.

**Note: this is a new figure that was not included in previous reports.*

A1.5 North Coast

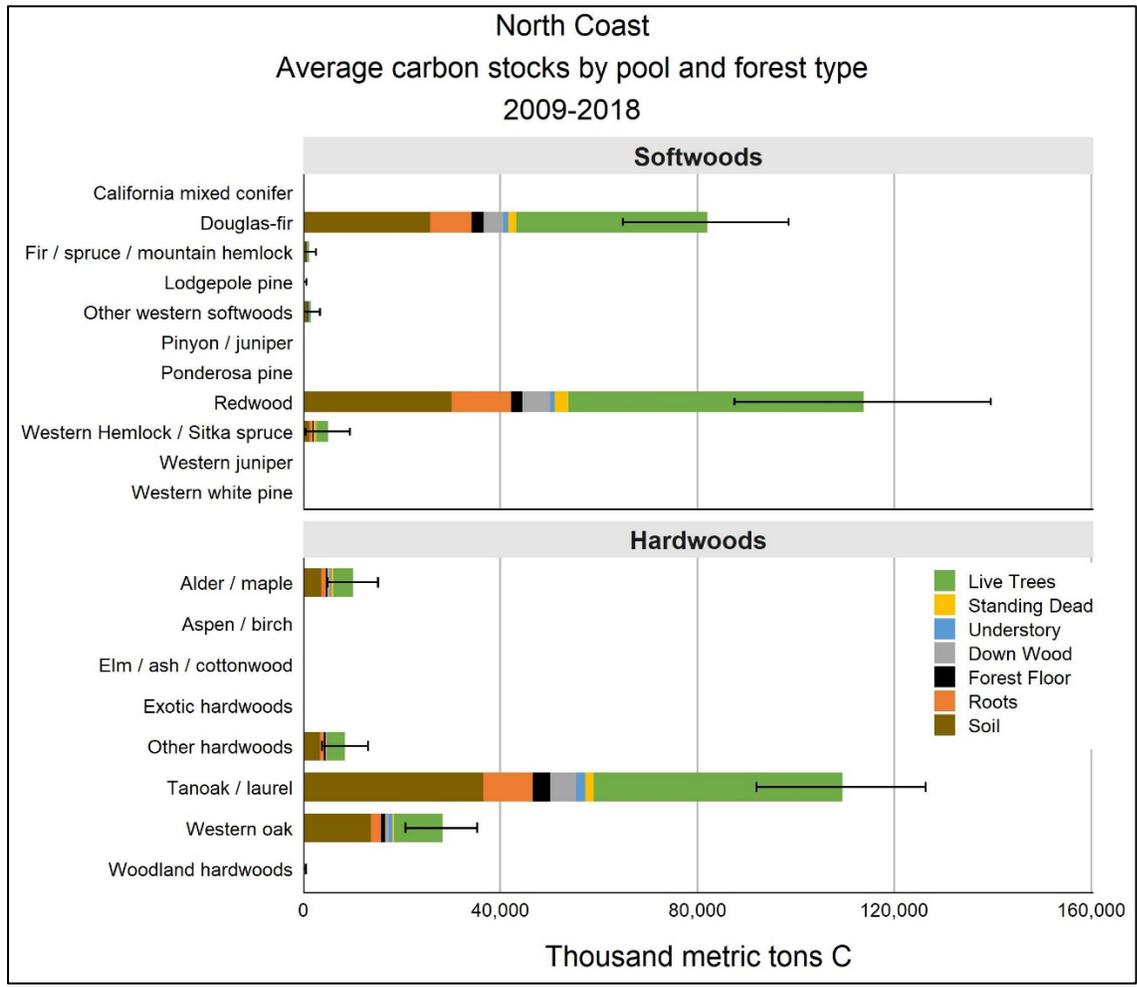


Figure A1.5.1. North Coast: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.5.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.5.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: North Coast

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	38,819	4,512	1,558	268	8,419	980	1,016	100	3,958	564	2,493	244	25,767	2,518	81,721	8,570
Fir / spruce / mountain hemlock	431	292	37	37	89	61	13	8	16	11	53	37	463	311	1,097	742
Western Hemlock / Sitka spruce	2,319	1,054	253	177	583	281	50	20	306	233	229	106	1,249	587	4,968	2,314
Lodgepole pine	28	28	8	8	7	8	14	12	2	2	18	17	168	161	236	228
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	59,951	8,451	2,803	520	12,019	1,631	870	86	5,692	837	2,287	220	30,157	2,895	113,542	13,274
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	446	338	19	20	108	84	45	26	118	108	64	36	804	447	1,590	936
Total	101,994	9,389	4,679	607	21,226	1,869	2,009	136	10,092	1,022	5,144	336	58,608	3,783	203,153	15,485
Hardwoods:																
Alder / maple	3,942	1,147	469	175	907	257	222	48	543	158	296	74	3,738	909	10,043	2,605
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	50,503	4,393	1,778	259	10,065	873	1,800	140	5,244	593	3,615	282	36,501	2,859	109,201	8,771
Western oak	9,900	1,470	322	86	2,010	305	816	96	638	139	841	112	13,801	1,788	28,051	3,721
Woodland hardwoods	94	85			20	18	13	11	6	6	4	3	67	61	194	176
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	3,605	1,086	61	28	754	227	158	41	188	67	307	88	3,413	952	8,448	2,393
Total	68,044	4,813	2,630	323	13,757	969	3,008	181	6,619	629	5,063	317	57,520	3,542	155,936	9,957
Nonstocked	36	25	4	3	9	5	37	21	34	25	39	23	508	303	654	382
All forest types	170,074	10,198	7,312	676	34,992	2,029	5,054	227	16,745	1,167	10,247	433	116,637	4,879	359,744	17,497

Note: Totals may be of because of rounding

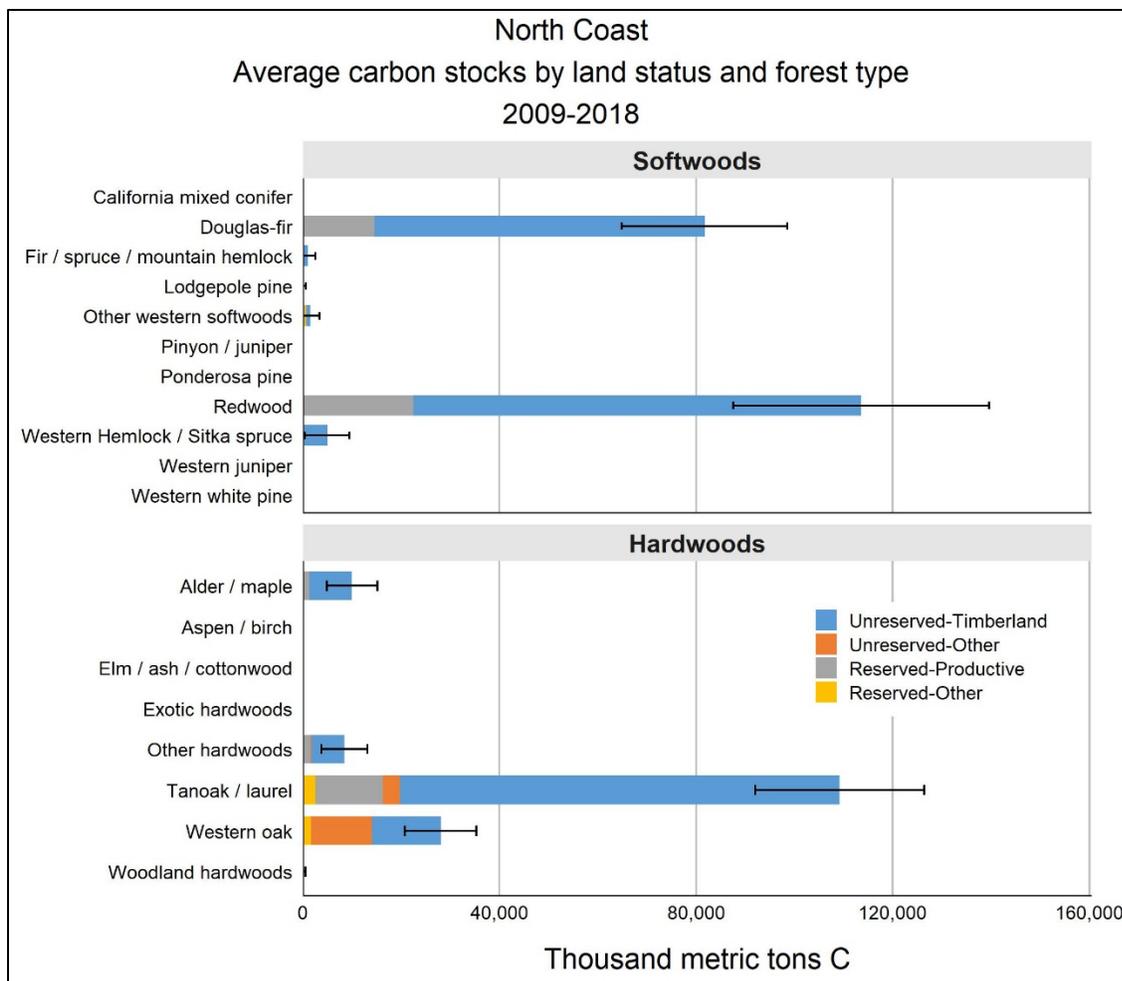


Figure A1.5.2. North Coast: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.5.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.5.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: North Coast

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	--	--	--	--	--	--	--	--	--	--
Douglas-fir	67,179	7,462	--	--	14,541	4,322	--	--	81,721	8,570
Fir / spruce / mountain hemlock	1,097	742	--	--	--	--	--	--	1,097	742
Western Hemlock / Sitka spruce	4,968	2,314	--	--	--	--	--	--	4,968	2,314
Lodgepole pine	--	--	--	--	222	227	13	21	236	228
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--
Redwood	91,001	9,589	--	--	22,541	9,495	--	--	113,542	13,274
Western juniper	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--
Other western softwoods	770	695	--	--	315	454	504	433	1,590	936
Total	165,015	12,064	--	--	37,620	10,251	517	433	203,153	15,485
Hardwoods:										
Alder / maple	8,682	2,354	56	52	1,306	1,116	--	--	10,043	2,605
Aspen / birch	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	89,403	7,890	3,462	1,477	13,776	3,370	2,560	1,590	109,201	8,771
Western oak	14,040	2,922	12,360	2,130	--	--	1,651	867	28,051	3,721
Woodland hardwoods	--	--	--	--	--	--	194	176	194	176
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--
Other hardwoods	6,674	2,069	175	166	1,599	1,191	--	--	8,448	2,393
Total	118,799	8,826	16,052	2,595	16,681	3,705	4,405	1,819	155,936	9,957
Nonstocked	654	382	--	--	--	--	--	--	654	382
All forest types	284,468	14,205	16,052	2,595	54,302	10,628	4,922	1,870	359,744	17,497

Note: Totals may be of because of rounding

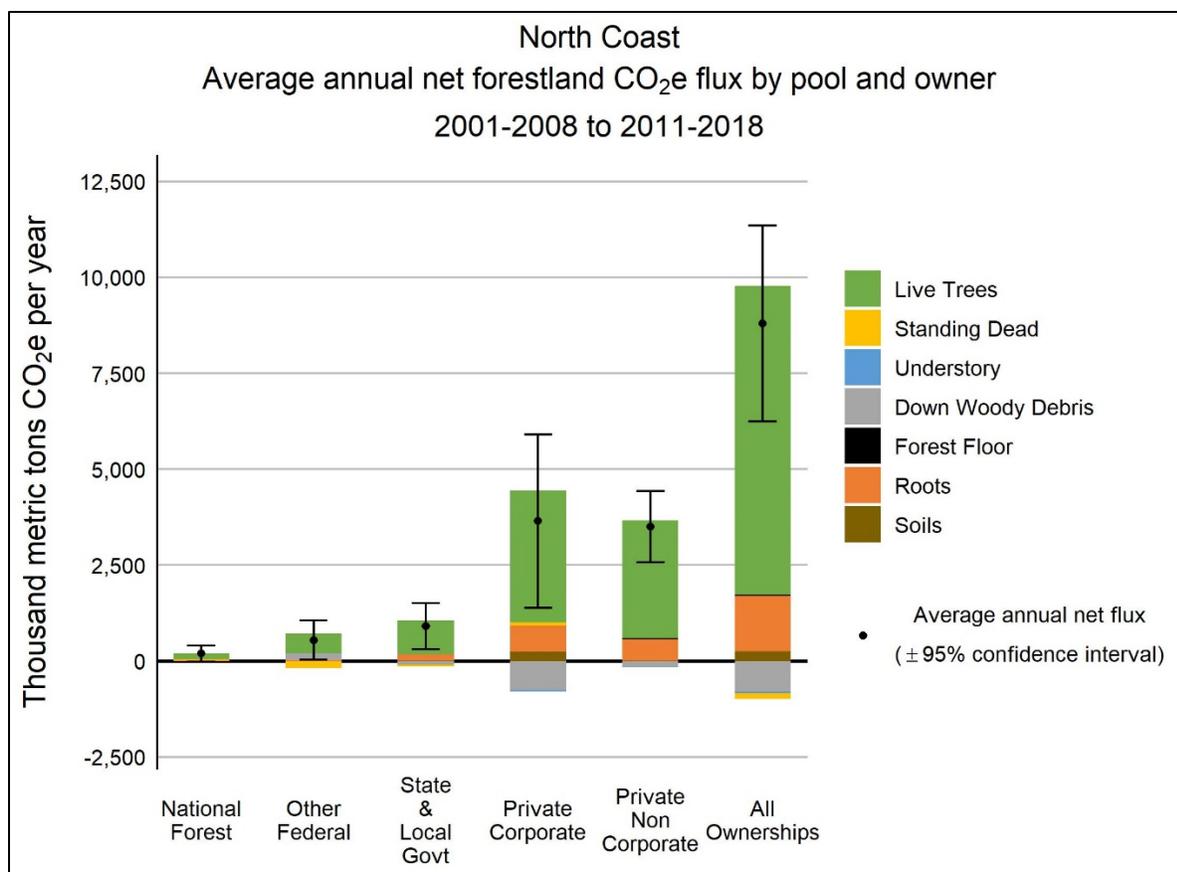


Figure A1.5.3. North Coast annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B6.

**Note: this is a new figure that was not included in previous reports.*

A1.6 Sierra/Cascades

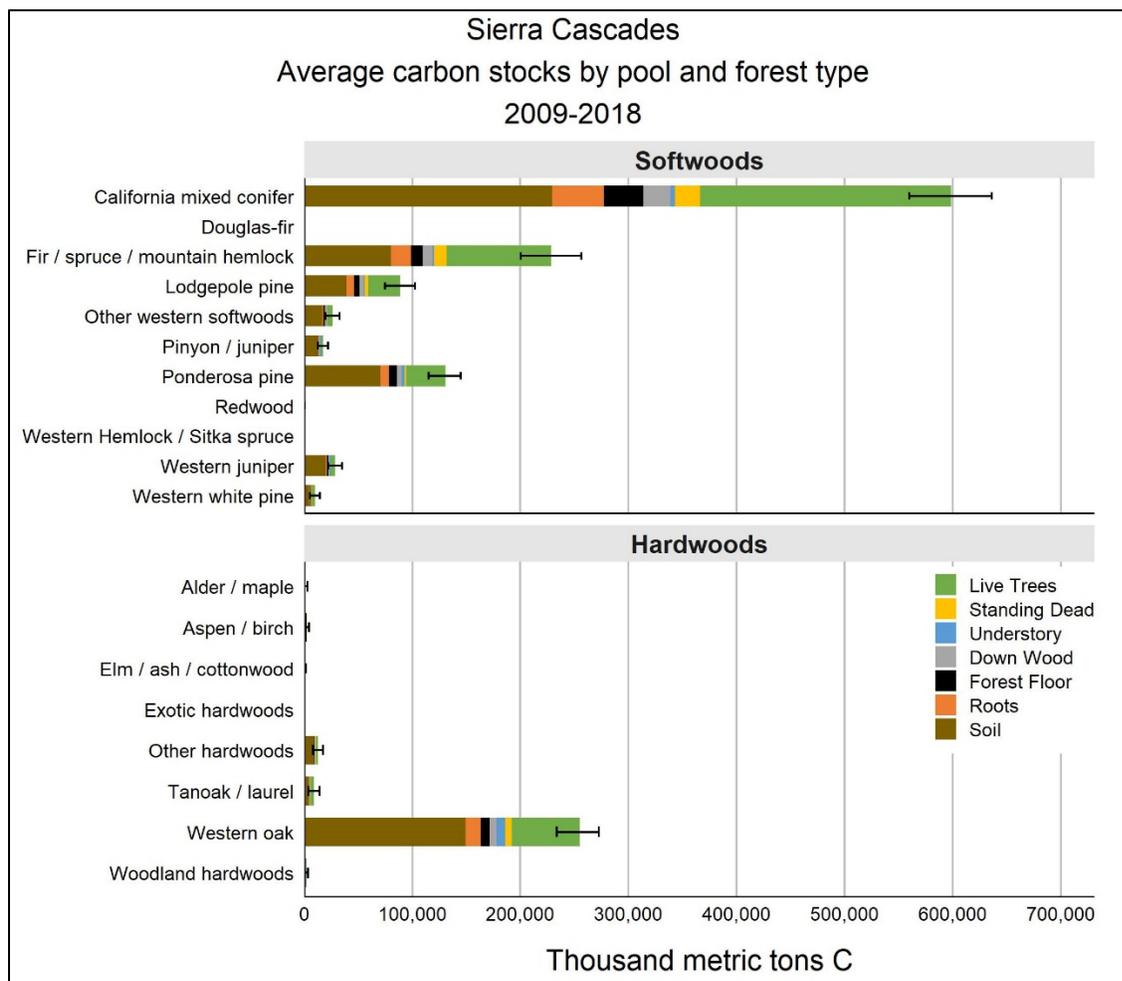


Figure A1.6.1. Sierra/Cascades: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.6.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.6.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: Sierra Cascades

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	232,586	8,652	23,065	1,613	47,522	1,766	4,549	191	24,946	1,184	36,681	1,156	229,412	7,116	597,757	19,471
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	97,018	6,828	11,365	1,087	18,757	1,319	1,598	99	9,164	790	10,588	630	80,066	4,732	228,253	14,306
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	29,817	2,695	3,247	397	6,906	618	889	87	3,743	506	4,940	388	39,287	3,036	88,632	7,050
Pinyon / juniper	2,057	356	198	55	471	81	754	94	709	168	674	101	12,613	1,639	17,364	2,299
Ponderosa pine	36,729	2,634	1,323	229	8,160	592	2,775	171	3,990	382	7,458	427	70,364	3,884	129,833	7,521
Redwood	28	26	--	--	6	5	10	9	41	38	11	10	152	140	243	223
Western juniper	4,272	692	206	64	800	130	1,202	147	629	140	1,388	167	20,131	2,249	28,446	3,275
Western white pine	2,876	757	416	129	657	168	142	36	357	120	612	145	4,968	1,152	9,967	2,345
Other western softwoods	4,536	807	594	151	1,071	198	748	105	935	220	1,563	198	16,728	2,031	26,023	3,282
Total	409,919	10,564	40,413	1,930	84,350	2,141	12,666	344	44,514	1,506	63,915	1,295	473,721	9,116	1,126,517	23,529
Hardwoods:																
Alder / maple	607	474	87	60	125	95	23	15	61	51	42	29	351	239	1,288	942
Aspen / birch	487	251	19	12	90	47	116	37	145	85	140	52	1,559	552	2,502	920
Elm / ash / cottonwood	136	112	1	1	22	18	45	22	12	9	27	20	401	284	615	442
Tanoak / laurel	3,387	1,254	91	44	677	242	164	42	468	217	330	90	3,779	1,007	8,873	2,626
Western oak	62,775	3,377	6,057	649	14,009	732	8,046	281	6,324	436	8,404	335	149,180	5,515	252,998	9,949
Woodland hardwoods	62	46	39	24	23	11	93	33	31	23	106	39	1,526	581	1,855	713
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	2,066	765	147	56	449	176	476	76	547	154	576	101	8,402	1,455	12,507	2,353
Total	69,521	3,697	6,441	655	15,395	792	8,964	298	7,588	518	9,626	364	165,198	5,797	280,639	10,562
Nonstocked	842	219	4,637	1,072	1,148	224	1,491	130	2,460	439	1,492	149	23,500	2,286	35,133	3,673
All forest types	480,282	10,629	51,490	2,232	100,892	2,150	23,121	456	54,562	1,600	75,033	1,272	662,420	9,963	1,442,289	23,805

Note: Totals may be of because of rounding

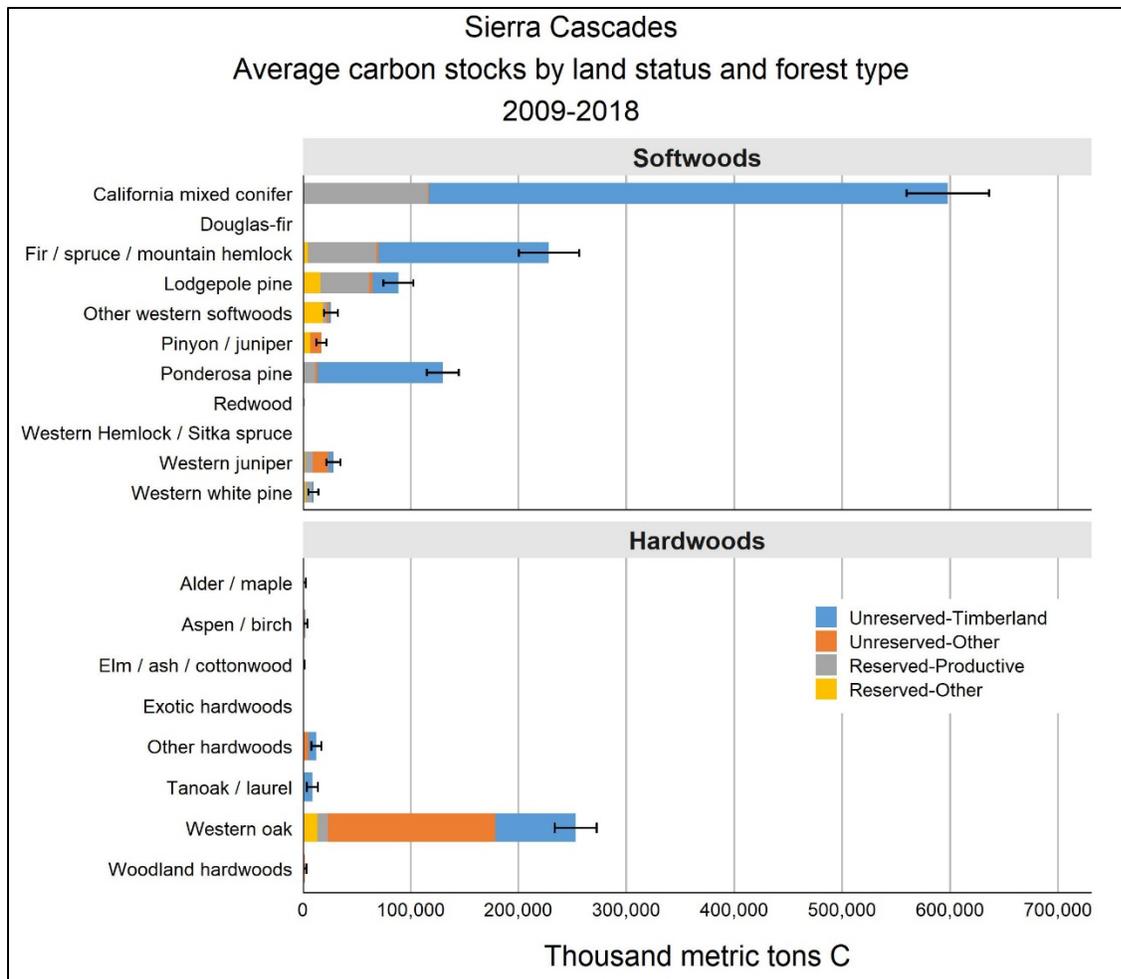


Figure A1.6.2. Sierra/Cascades: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.6.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.6.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: Sierra Cascades

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	480,719	17,283	901	695	114,991	10,046	1,146	1,019	597,757	19,471
Douglas-fir	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	158,001	11,430	2,209	1,227	63,126	8,399	4,918	1,896	228,253	14,306
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	24,229	3,825	2,773	1,202	45,280	5,341	16,350	2,977	88,632	7,050
Pinyon / juniper	297	299	9,870	1,717	250	237	6,948	1,490	17,364	2,299
Ponderosa pine	116,461	7,066	1,691	825	10,651	2,448	1,030	597	129,833	7,521
Redwood	243	223	--	--	--	--	--	--	243	223
Western juniper	4,535	1,294	14,682	2,118	7,167	1,970	2,062	869	28,446	3,275
Western white pine	1,558	804	--	--	5,751	1,888	2,658	1,140	9,967	2,345
Other western softwoods	1,780	830	2,458	897	2,908	1,248	18,877	2,822	26,023	3,282
Total	787,822	20,022	34,584	3,471	250,123	13,398	53,988	4,872	1,126,517	23,529
Hardwoods:										
Alder / maple	1,288	942	--	--	--	--	--	--	1,288	942
Aspen / birch	524	423	357	211	410	374	1,211	696	2,502	920
Elm / ash / cottonwood	--	--	615	442	--	--	--	--	615	442
Tanoak / laurel	7,815	2,570	1,058	543	--	--	--	--	8,873	2,626
Western oak	74,305	6,442	155,437	7,224	9,524	2,368	13,732	2,449	252,998	9,949
Woodland hardwoods	--	--	1,665	692	--	--	190	172	1,855	713
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--
Other hardwoods	7,304	1,975	5,086	1,275	--	--	117	109	12,507	2,353
Total	91,237	7,244	164,219	7,359	9,933	2,398	15,250	2,550	280,639	10,562
Nonstocked	23,298	2,905	2,546	800	6,954	1,915	2,335	879	35,133	3,673
All forest types	902,356	20,362	201,349	8,091	267,011	13,486	71,573	5,517	1,442,289	23,805

Note: Totals may be of because of rounding

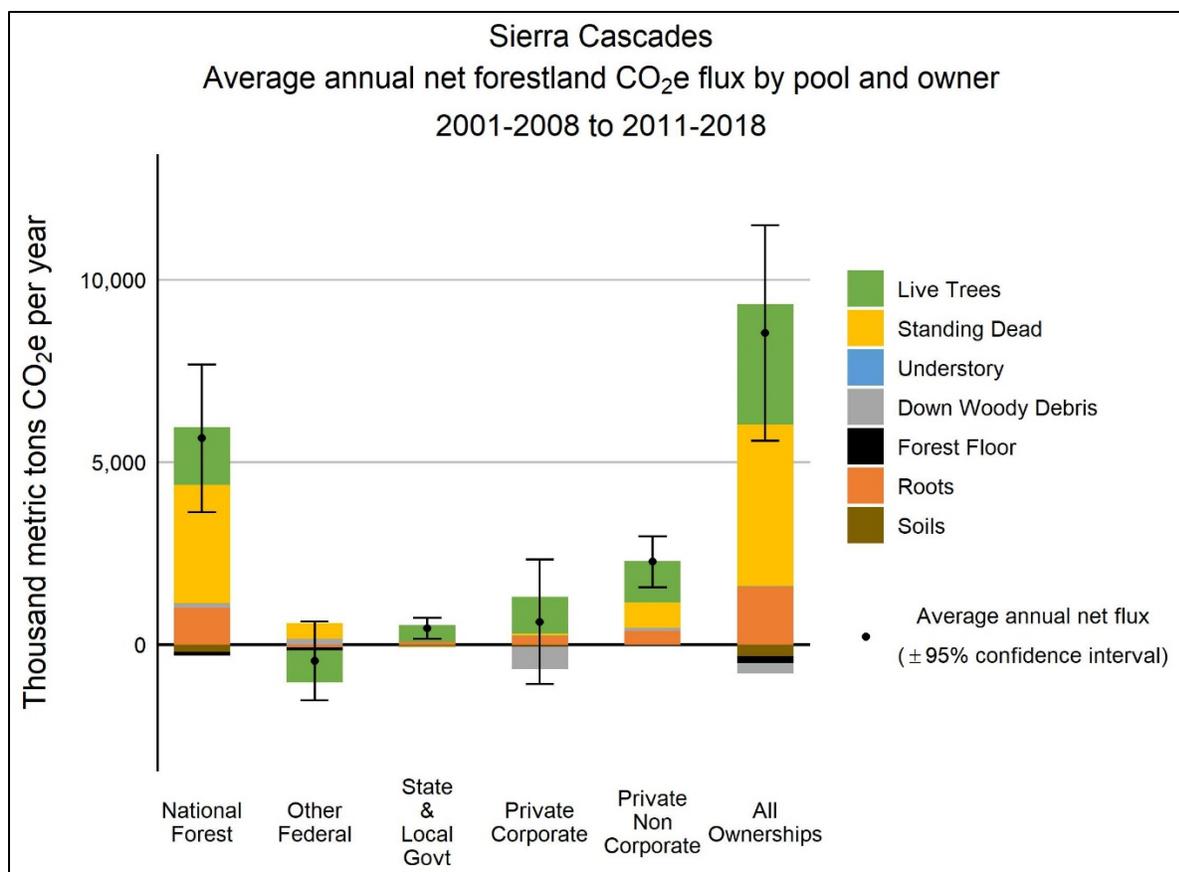


Figure A1.6.3. Sierra Cascades average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B7.

**Note: this is a new figure that was not included in previous reports.*

A1.7 South Coast Mountains and Deserts

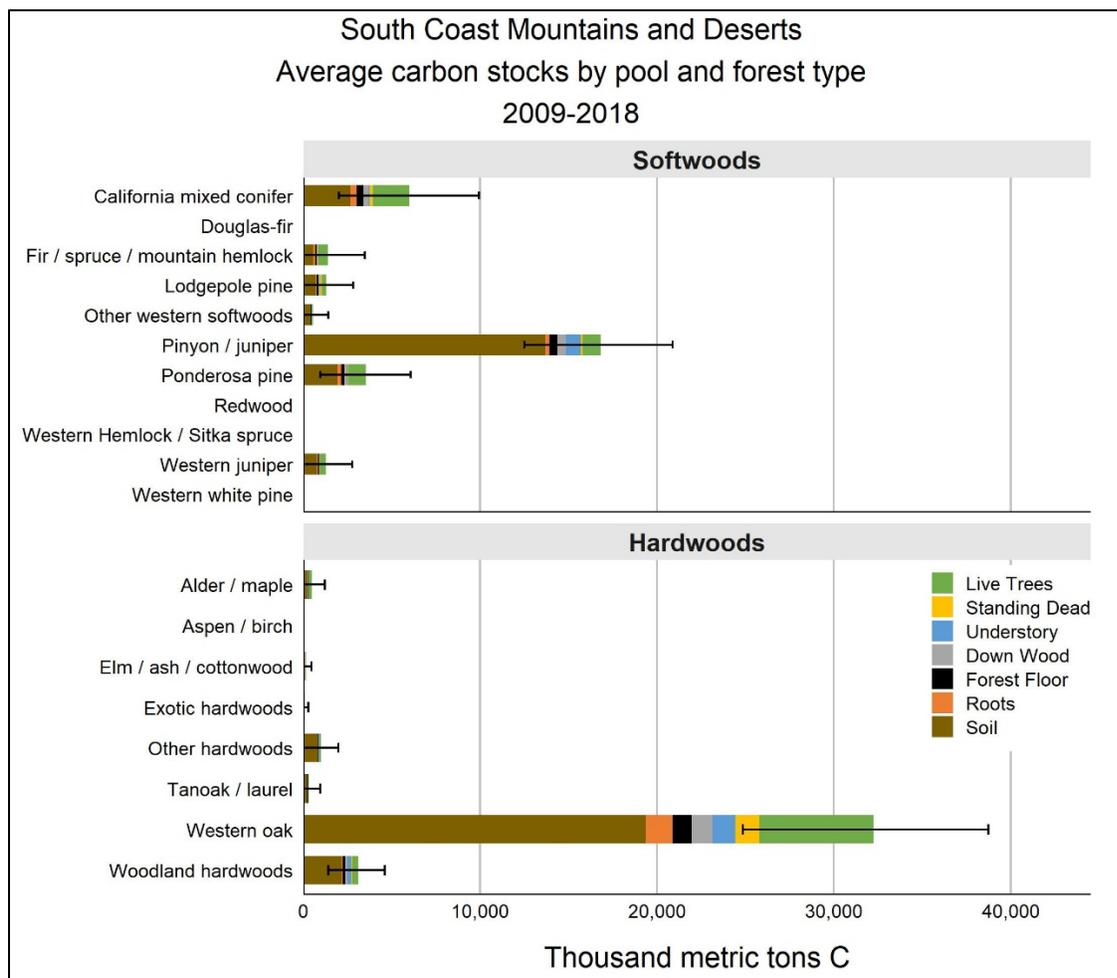


Figure A1.7.1. South Coast Mountains/Deserts: Average carbon stock by pool and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.7.1. **note: "non-stocked" not depicted in this figure.*

Table A 1.7.1: Forest land carbon stocks (thousand metric tons C) by forest type and pool, 2009-2018: South Coast Mountains and Deserts

	Live Trees		Dead Trees		Roots		Understory		Down wood		Forest Floor		Soil		All pools	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>Thousand metric tons C</i>																
Softwoods:																
California mixed conifer	2,057	807	174	73	353	135	46	17	303	124	379	127	2,666	865	5,977	2,020
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	523	392	41	37	90	68	8	6	44	41	91	71	584	456	1,381	1,065
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	252	154	84	54	78	48	12	7	80	53	82	51	705	430	1,293	789
Pinyon / juniper	1,014	236	122	37	240	50	831	98	478	117	453	63	13,676	1,713	16,694	2,134
Ponderosa pine	982	369	18	9	224	84	49	19	147	76	181	69	1,929	733	3,517	1,301
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	308	184	36	32	62	38	17	10	36	27	55	33	767	456	1,280	765
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	80	73	--	--	9	8	16	13	7	9	23	18	422	332	552	438
Total	5,215	1,024	475	110	1,056	189	978	103	1,095	200	1,265	183	20,750	2,211	30,694	3,568
Hardwoods:																
Alder / maple	181	162	2	2	33	30	24	16	6	4	20	16	226	164	476	378
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	34	47	1	2	6	9	20	15	1	2	8	11	74	98	130	174
Tanoak / laurel	50	49	1	1	11	11	12	11	5	5	21	21	232	228	333	327
Western oak	6,466	1,027	1,349	281	1,508	220	1,302	127	1,188	218	1,077	123	19,362	2,055	31,794	3,534
Woodland hardwoods	330	128	57	26	66	23	228	54	115	59	137	39	2,182	581	3,012	814
Exotic hardwoods	3	3	--	--		1	11	11	6	6	4	4	74	76	92	95
Other hardwoods	88	55	2	1	20	12	49	24	7	4	46	25	794	420	988	515
Total	7,152	1,050	1,411	282	1,645	224	1,646	143	1,328	226	1,313	134	22,945	2,194	36,826	3,695
Nonstocked	21	13	283	173	74	41	238	52	274	105	156	38	4,032	921	5,037	1,177
All forest types	12,388	1,467	2,170	349	2,775	296	2,863	184	2,698	318	2,734	229	47,726	3,225	72,557	5,240

Note: Totals may be of because of rounding

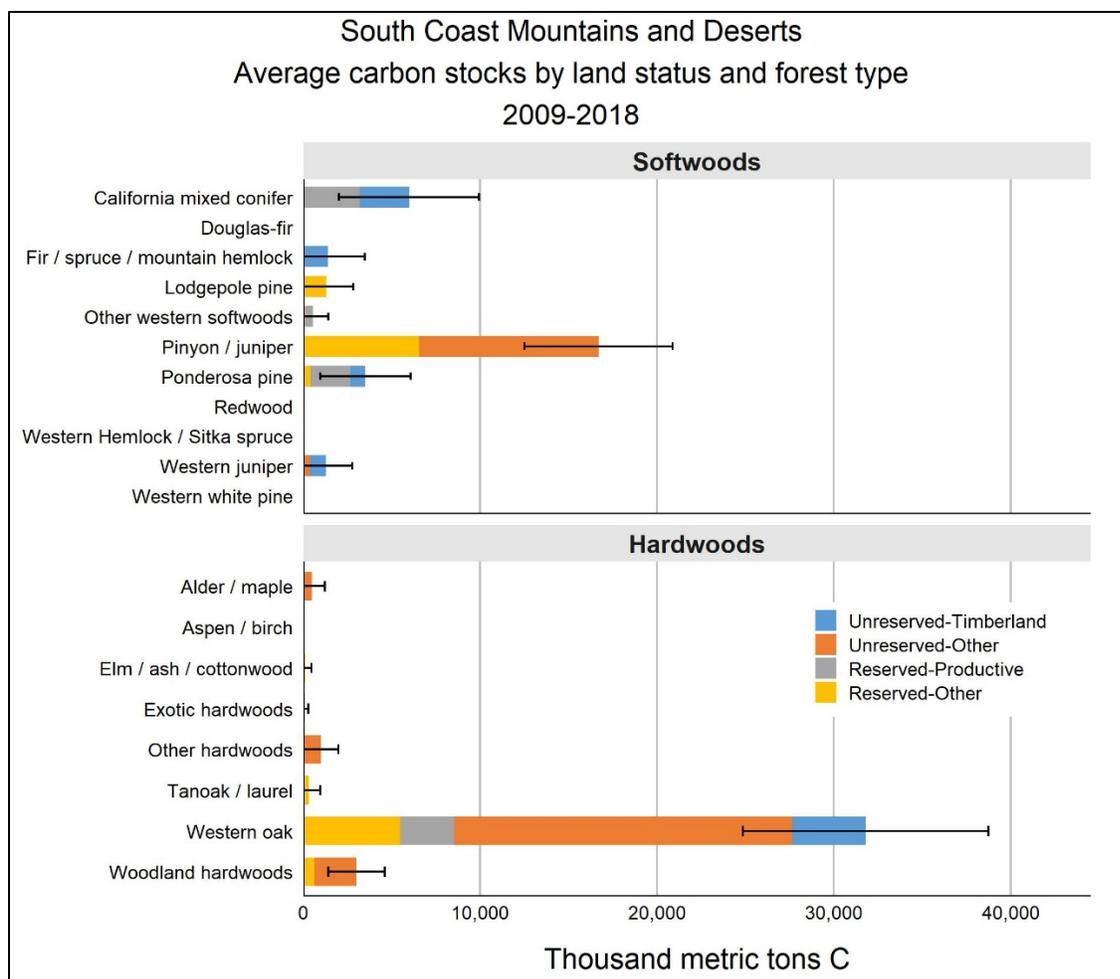


Figure A1.7.2. South Coast Mountains/Deserts: Average forest carbon stock by land status and forest type, 2009-2018 (thousand metric tons C). Error bars represent the 95% confidence interval of total stock for each forest type. Figure derived from Table A1.7.2. **note: "non-stocked" not depicted in this figure.*

Table A 1.7.2: Forest land carbon stocks (thousand metric tons C) by forest type and land status, 2009-2018: South Coast Mountains and Deserts

	Unreserved Forests:				Reserved Forests:				All forest land	
	Timberland		Other Forest		Productive		Other Forest		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE		
	<i>Thousand metric tons C</i>									
Softwoods:										
California mixed conifer	2,783	1,299	--	--	3,194	1,547	--	--	5,977	2,020
Douglas-fir	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	1,381	1,065	--	--	--	--	--	--	1,381	1,065
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	1,293	789	1,293	789
Pinyon / juniper	--	--	10,138	1,646	--	--	6,557	1,363	16,694	2,134
Ponderosa pine	859	627	--	--	2,255	1,065	404	407	3,517	1,301
Redwood	--	--	--	--	--	--	--	--	--	--
Western juniper	903	663	378	381	--	--	--	--	1,280	765
Western white pine	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	462	423	89	111	552	438
Total	5,926	1,910	10,515	1,690	5,911	1,903	8,343	1,624	30,694	3,568
Hardwoods:										
Alder / maple	--	--	476	378	--	--	--	--	476	378
Aspen / birch	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	3	2	--	--	127	174	130	174
Tanoak / laurel	--	--	--	--	--	--	333	327	333	327
Western oak	4,153	1,405	19,127	2,581	3,041	1,201	5,474	1,469	31,794	3,534
Woodland hardwoods	--	--	2,392	716	--	--	620	386	3,012	814
Exotic hardwoods	92	95	--	--	--	--	--	--	92	95
Other hardwoods	--	--	988	515	--	--	--	--	988	515
Total	4,245	1,408	22,986	2,745	3,041	1,201	6,555	1,564	36,826	3,695
Nonstocked	1,926	812	1,469	607	443	349	881	407	5,037	1,177
All forest types	12,097	2,502	34,969	3,278	9,395	2,284	15,779	2,280	72,557	5,240

Note: Totals may be off because of rounding

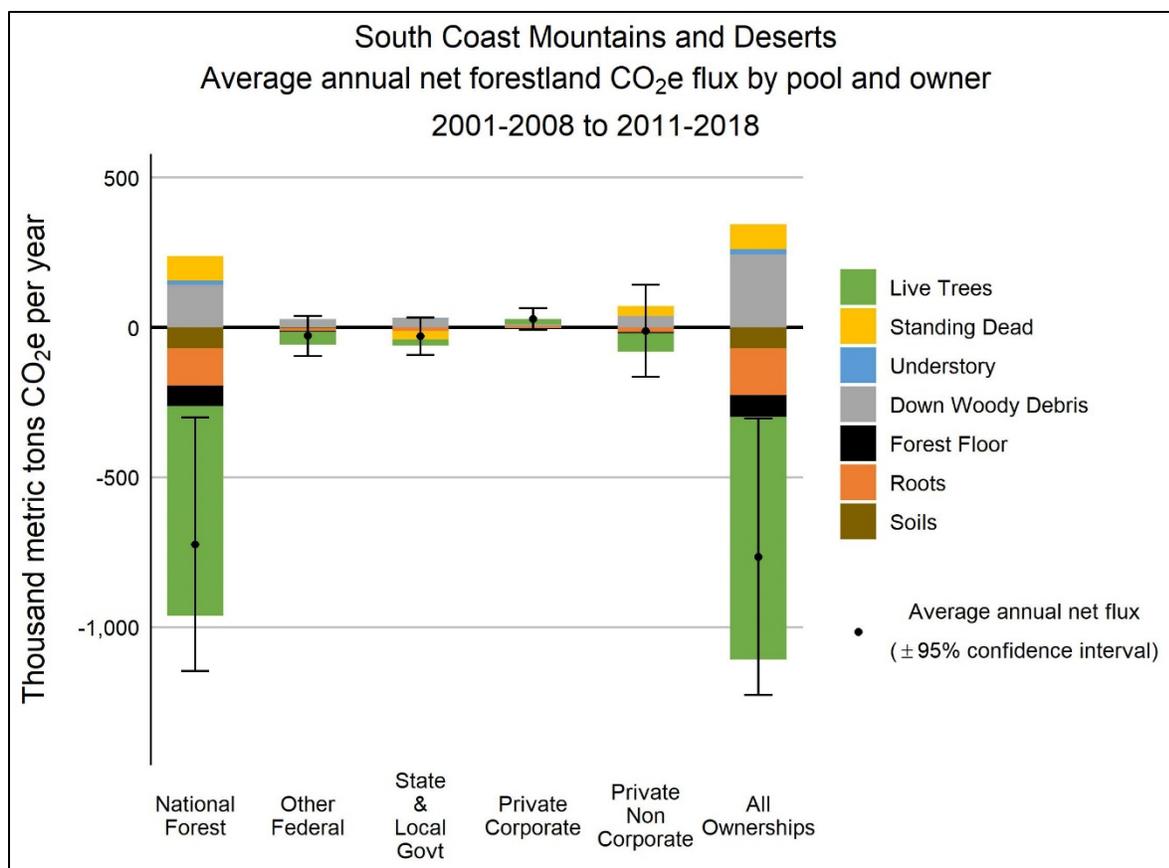


Figure A1.7.3. South Coast Mountains and Deserts average annual net forestland carbon flux by pool and ownership, 2001-2008 to 2011-2018 (MMT CO₂e/yr). Estimates exclude emissions from land-use changes. Roots includes belowground live and dead tree roots. Understory includes aboveground and belowground understory vegetation. Error bars represent the 95% confidence interval of estimated net flux. Figure derived from Appendix 2, Table B8.

**Note: this is a new figure that was not included in previous reports.*

Appendix 2: 2009 - 2018 California FIA forest carbon inventory tables

Flux are based on plots initially measured between 2001-2008 and re-measured between 2011-2018.

Stocks are based on 10-year averages with the current reporting period being 2009-2018.

A. Area

Sampled Area

Table A1- A8: Area of Sampled Land by Land Status and Owner Group, 2009-2018: [Region]

Table A1: Area of Sampled Land by Land Status and Ownership Group, 2009-2018: All California

Table A2: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Central Coast and Interior Ranges

Table A3: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Central Valley

Table A4: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Eastside

Table A5: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Klamath Interior Coast Ranges

Table A6: Area of Sampled Land by Land Status and Owner Group, 2009-2018: North Coast

Table A7: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Sierra Cascades

Table A8: Area of Sampled Land by Land Status and Owner Group, 2009-2018: South Coast Mountains and Deserts

Forest Area for Forest Land Remaining Forest (FF)

Table A9- A16: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: [Region]

Table A9: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: All California

Table A10: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table A11: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table A12: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: Eastside

Table A13: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table A14: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: North Coast

Table A15: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table A16: Area of Forest Land by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest Area for Forest Land Remaining Forest (FF): By Forest Type, Owner Group and Forest Land Status

Table A17: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: All California

Table A18: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table A19: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Central Valley

Table A20: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Eastside

Table A21: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table A22: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: North Coast

Table A23: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table A24: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

B. Net Carbon Flux for Forest Land Remaining Forest (FF)

Net Carbon Flux for All Pools by Owner Group

Tables B1- B8: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: [Region]

Table B1: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: All California

Table B2: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: Central Coast and Interior Ranges

Table B3: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: Central Valley

Table B4: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: Eastside

Table B5: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: Klamath Interior Coast Ranges

Table B6: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: North Coast

Table B7: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2007 to 2011-2017: Sierra Cascades

Table B8: Annual Net Change in Carbon Stocks on Forest Land for all Pools by Owner Group, 2001-2007 to 2011-2017: South Coast Mountains and Deserts

Disturbance Effects on Net Forest Carbon Flux

Table B9.1: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: All California

Table B9.2: Average annual carbon (CO₂e) flux in live trees from growth, harvest, mortality, 2001-2007 to 2011-2017: COUNTY

Table B9.3: Average annual carbon (CO₂e) flux in live trees from growth, harvest, mortality, 2001-2007 to 2011-2017: NATIONAL FOREST

Table B9.4: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: Coastal Forest Practice District

Table B9.5: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: Northern Forest Practice District

Table B9.6: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: Southern Forest Practice District

Table B10: Annual Net Change Per Acre in Carbon Stock for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: All California

Table B11: Annual Net Change in Carbon Stocks for Aboveground Pools on Timberland by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: All California

Table B12: Annual Net Change Per Acre in Carbon Stock for Aboveground Pools on Timberland by Disturbance, Forest Land Status and Owner Group, 2001-2007 to 2011-2017: All California

C. Forest Carbon Stocks for Forest Land Remaining Forest (FF): by Owner Group and Forest Land Status

Aboveground Live Tree Pool

Tables C1 – C8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: All California (Same as Table C9.8)

Table C2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Tables C9.1 – C9.8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): [Years]

Table C9.1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2001-2010

Table C9.2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2002-2011

Table C9.3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2003-2012

Table C9.4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2004-2013

Table C9.5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2005-2014

Table C9.6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California, (10-year averages): 2006-2015

Table C9.7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C9.8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inches) by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (Same as Table C1)

Aboveground Dead Tree Pool

Tables C10 – C17: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C10: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: All California (Same as Table C18.8)

Table C11: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C12: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C13: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C14: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C15: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C16: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C17: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Tables C18.1 – C18.8 – Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): [Years]

Table C18.1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2001-2010

Table C18.2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2002-2011

Table C18.3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2003-2012

Table C18.4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2004-2013

Table C18.5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2005-2014

Table C18.6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2006-2015

Table C18.7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C18.8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees Foliage (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (Same as Table C10)

Aboveground Live Understory Vegetation Pool

Tables C19 – C26: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C19: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: All California (information from Table C19 combined with information from Table C28 in Table C27.8)

Table C20: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C21: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C22: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C23: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C24: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C25: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C26: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Aboveground and Belowground Live Understory Vegetation, 10-Year Averages

Tables C27.1 – C27.8: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10-year averages): [Years]

Table C27.1: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2001-2010

Table C27.2: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2002-2011

Table C27.3: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2003-2012

Table C27.4: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2004-2013

Table C27.5: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2005-2014

Table C27.6: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2006-2015

Table C27.7: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C27.8: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (Same as Table C19 and Table C28 combined)

Belowground Live Understory Vegetation Pool

Tables C28 – C35: Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C28: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: All California (information from Table C28 combined with information from Table C19 in Table C27.8)

Table C29: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C30: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C31: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C32: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C33: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C34: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C35: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Belowground Live Tree Pool

Tables C36 - 43: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C36: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: All California (information from Table C36 combined with information from Table C45 in Table C44.8)

Table C37: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Range

Table C38: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C39: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C40: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C41: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C42: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C43: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Belowground Live and Dead Tree Pool, 10-year averages

Tables C44.1 – C44.8: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): [Years]

Table C44.1: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2001-2010

Table C44.2: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2002-2011

Table C44.3: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2003-2012

Table C44.4: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2004-2013

Table C44.5: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2005-2014

Table C44.6: Belowground Carbon, Dry Weight of Live (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2006-2015

Table C44.7: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C44.8: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) and Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (Same as Table C36 and Table C45 combined)

Belowground Dead Tree Pool

Tables C45 – 52: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: [Regions]

Table C45: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: All California (information from Table C45 combined with information from Table C36 in Table C44.8)

Table C46: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C47: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C48: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C49: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C50: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C51: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C52: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Soil Organic Carbon Pool

Tables C53 – C60: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C53: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: All California (information duplicated in Table C61.8)

Table C54: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C55: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C56: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C57: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C58: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C59: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C60: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Tables C61.1 – C61.8: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): [Years]

Table C61.1: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2001-2010

Table C61.2: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2002-2011

Table C61.3: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2003-2012

Table C61.4: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2004-2013

Table C61.5: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2005-2014

Table C61.6: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2006-2015

Table C61.7: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C61.8: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (Same as Table C53)

Aboveground Down Dead Wood Pool

Tables C62 – C69: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C62: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: All California (information duplicated in Table C70.8)

Table C63: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: Central Coast and Interior Ranges

Table C64: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: Central Valley

Table C65: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: Eastside

Table C66: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: Klamath Interior Coast Ranges

Table C67: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: North Coast

Table C68: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: Sierra Cascades

Table C69: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2005-2016: South Coast Mountains and Deserts

Tables C70.1 – C70.8: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): [Years]

Table C70.1: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2001-2010

Table C70.2: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2002-2011

Table C70.3: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2003-2012

Table C70.4: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2004-2013

Table C70.5: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2005-2014

Table C70.6: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2006-2015

Table C70.7: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2007-2016

Table C70.8: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018 (information duplicated in Table C62)

Forest Floor Pool

Tables C71 – C78: Forest Floor by Owner Group and Forest Land Status, 2009-2018: [Region]

Table C71: Forest Floor by Owner Group and Forest Land Status, 2009-2018: All California (same as Table C79.8)

Table C72: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table C73: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Central Valley

Table C74: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Eastside

Table C75: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table C76: Forest Floor by Owner Group and Forest Land Status, 2009-2018: North Coast

Table C77: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Table C78: Forest Floor by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Tables C79.1 – C79.8: Forest Floor Pool, by Owner Group and Forest Land Status, All California (10-year averages): [Years]

Table C79.1: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2001 – 2010

Table C79.2: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2002 – 2011

Table C79.3: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2003 – 2012

Table C79.4: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2004 – 2013

Table C79.5: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2005 – 2014

Table C79.6: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2006 – 2015

Table C79.7: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2007 – 2016

Table C79.8: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2008 – 2017 (Information duplicated in Table C71)

D. Forest Carbon Stocks for Forest Land Remaining Forest (FF): by Forest Type and Forest Land Status

Aboveground Live Tree Pool

Tables D1 - D8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: All California

Table D2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: Central Coast and Interior Ranges

Table D3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: Central Valley

Table D4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: Eastside

Table D5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: North Coast

Table D7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: Sierra Cascades

Table D8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (≥ 1 inch) by Forest Type and Land Status, 2009-2018: South Coast Mountains and Deserts

Aboveground Dead Tree Pool

Tables D9 – D16: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D9: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Table D10: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D11: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D12: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inches) by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D13: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D14: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D15: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D16: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status - South Coast Mountains and Deserts

Aboveground Live Understory Vegetation Pool

Tables D17 – D24: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D17: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: All California

Table D18: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D19: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D20: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D21: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D22: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D23: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D24: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Belowground Live Understory Vegetation Pool

Tables D25 - D32 – Belowground Carbon, Dry Weight of Live Understory Vegetation by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D25: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: All California

Table D26: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D27: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D28: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D29: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D30: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D31: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D32: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Belowground Live Tree Pool

Tables D33 – D40 – Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D33: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Table D34: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D35: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D36: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D37: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D38: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D39: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D40: Belowground Carbon, Dry Weight of Live Trees (≥ 1 inch) by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Belowground Dead Tree Pool

Tables D41 - 48 – Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: [Region]

Table D41: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Table D42: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D43: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D44: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D45: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D46: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D47: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D48: Belowground Carbon, Dry Weight of Dead Trees (≥ 5 inch) by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Soil Organic Carbon Pool

Tables D49 – D56 – Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: [Region]

Table D49: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: All California

Table D50: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D51: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Central Valley

Table D52: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Eastside

Table D53: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D54: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: North Coast

Table D55: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Sierra Cascades

Table D56: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Aboveground Down Dead Wood Pool:

Tables D57 – D64 – Aboveground Carbon Mass of Down Dead Wood by Forest Type Group and Forest Land Status, 2009-2018: [Region]

Table D57: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: All California

Table D58: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D59: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Table D60: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Eastside

Table D61: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D62: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: North Coast

Table D63: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Table D64: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest Floor Pool

Tables D65 – D72 – Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: [Region]

Table D65: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: All California

Table D66: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Table D67: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Central Valley

Table D68: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Eastside

Table D69: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Table D70: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: North Coast

Table D71: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Sierra Cascades

Table D72: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

E. Forest Land Conversions (LF)

Changes in Area from Forest Land-Use Conversions

Table E1: Annual Change in Forest Land Area To and From Other IPCC Land-Use Classes in California, 2001-2008 to 2011-2018

Net Forest Carbon Flux from Forest Land-Use Conversions

Table E2: Annual Change in Carbon Pools Due to Change in Land-Use Between Forest and Non-forest in California, 2001-2008 to 2011-2018

F. Net Flux from Other GHG emissions

Table F1 - Annual Net Emissions of Non-CO₂e Greenhouse Gases from Fire, 2001-2008 to 2011-2018

Table A1: Area of Sampled Land by Land Status and Owner Group, 2009-2018: All California

	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
Land status	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	8,787	121	273	40	156	29	7,203	119	16,419	169
Other unreserved forest land	2,385	99	1,039	72	196	33	5,069	139	8,688	185
Total, unreserved	11,172	121	1,312	81	351	43	12,272	153	25,107	203
Reserved forest land:										
Reserved productive forest land	2,794	91	1,063	62	328	36	--	--	4,184	116
Other reserved forest land	1,266	77	683	61	423	45	--	--	2,372	107
Total, reserved forest land	4,066	96	1,746	81	751	54	--	--	6,563	136
Total, forest land	15,238	123	3,058	98	1,102	62	12,272	153	31,670	201
Nonforest and other area:										
Nonforest land	5,327	113	23,855	133	2,965	91	36,110	187	68,257	212
Noncensus water	39	9	29	11	17	7	152	28	236	32
Census water	--	--	--	--	4,896	69	--	--	4,896	69
Total, nonforest and other area	5,366	113	23,883	133	7,877	109	36,262	186	73,389	202
Total, all sampled area	20,605	68	26,941	130	8,979	120	48,534	158	105,059	49

Table A2: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Central Coast and Interior Ranges

Land status	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	2	1	--	--	15	9	202	34	218	36
Other unreserved forest land	83	21	113	25	40	14	865	66	1,101	75
Total, unreserved	84	21	113	25	55	16	1,067	74	1,318	82
Reserved forest land:										
Reserved productive forest land	29	13	--	--	86	22	--	--	115	26
Other reserved forest land	123	27	17	10	222	32	--	--	362	43
Total, reserved forest land	152	30	17	10	309	37	--	--	477	48
Total, forest land	236	36	129	27	363	40	1,067	74	1,796	95
Nonforest and other area:										
Nonforest land	482	53	729	67	341	43	5,845	177	7,396	199
Noncensus water	2	2	6	5	3	2	15	8	25	9
Census water	--	--	--	--	1,010	72	--	--	1,010	72
Total, nonforest and other area	484	53	734	67	1,353	84	5,860	177	8,432	212
Total, all sampled area	720	64	864	72	1,717	94	6,926	194	10,227	234

Table A3: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Central Valley

Land status	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	--	--	--	--	--	--	--	--	--	--
Other unreserved forest land	--	--	--	--	4	3	78	20	83	20
Total, unreserved	--	--	--	--	4	3	78	20	83	20
Reserved forest land:										
Reserved productive forest land	--	--	--	--	--	--	--	--	--	--
Other reserved forest land	--	--	1	1	5	5	--	--	6	5
Total, reserved forest land	--	--	1	1	5	5	--	--	6	5
Total, forest land	--	--	1	1	9	6	78	20	89	21
Nonforest and other area:										
Nonforest land	--	--	291	43	168	32	11,718	215	12,177	220
Noncensus water	--	--	--	--	2	2	30	14	32	14
Census water	--	--	--	--	142	30	--	--	142	30
Total, nonforest and other area	--	--	291	43	312	44	11,748	215	12,351	222
Total, all sampled area	--	--	291	43	321	45	11,827	215	12,440	223

Table A4: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Eastside

Land status	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	686	60	25	12	--	--	327	44	1,037	76
Other unreserved forest land	773	62	475	51	6	6	213	36	1,468	88
Total, unreserved	1,459	85	500	53	6	6	540	57	2,505	115
Reserved forest land:										
Reserved productive forest land	54	18	--	--	6	6	--	--	60	19
Other reserved forest land	110	27	119	27	9	8	--	--	238	39
Total, reserved forest land	165	32	119	27	15	10	--	--	298	43
Total, forest land	1,623	91	619	58	21	12	540	57	2,803	122
Nonforest and other area:										
Nonforest land	1,116	73	3,785	142	316	43	1,256	84	6,473	185
Noncensus water	2	2	6	6	6	6	12	9	26	13
Census water	--	--	--	--	263	40	--	--	263	40
Total, nonforest and other area	1,118	73	3,792	142	585	59	1,268	85	6,763	189
Total, all sampled area	2,742	113	4,411	151	605	60	1,808	102	9,566	221

Table A5: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Klamath Interior Coast Ranges

	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
Land status	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	2,548	105	117	27	16	9	1,691	94	4,373	144
Other unreserved forest land	397	47	140	28	26	12	1,237	80	1,800	97
Total, unreserved	2,945	112	257	39	42	15	2,929	121	6,173	170
Reserved forest land:										
Reserved productive forest land	1,350	74	68	20	6	5	--	--	1,424	76
Other reserved forest land	263	39	70	20	25	12	--	--	358	46
Total, reserved forest land	1,614	81	137	29	32	14	--	--	1,782	87
Total, forest land	4,559	133	394	47	74	20	2,929	121	7,955	187
Nonforest and other area:										
Nonforest land	355	43	339	44	65	18	2,157	107	2,916	124
Noncensus water	10	5	2	2	2	2	45	14	59	15
Census water	--	--	--	--	159	31	--	--	159	31
Total, nonforest and other area	365	43	341	44	226	36	2,202	108	3,134	129
Total, all sampled area	4,924	140	735	65	300	42	5,130	163	11,089	227

Table A6: Area of Sampled Land by Land Status and Owner Group, 2009-2018: North Coast

Land status	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	23	12	48	17	73	20	2,026	98	2,170	101
Other unreserved forest land	7	6			8	5	184	30	199	31
Total, unreserved	30	13	48	17	81	21	2,210	101	2,369	105
Reserved forest land:										
Reserved productive forest land	12	9	108	26	153	27	--	--	273	39
Other reserved forest land	--	--	7	6	48	17	--	--	54	18
Total, reserved forest land	12	9	115	26	200	32	--	--	327	42
Total, forest land	41	16	163	31	282	34	2,210	101	2,696	111
Nonforest and other area:										
Nonforest land	--	--	96	25	98	24	1,119	79	1,314	86
Noncensus water	--	--	--	--	1	2	25	11	26	11
Census water	--	--	--	--	1,035	73	--	--	1,035	73
Total, nonforest and other area	--	--	96	25	1,135	77	1,144	80	2,375	113
Total, all sampled area	41	16	259	39	1,417	84	3,354	132	5,071	161

Table A7: Area of Sampled Land by Land Status and Owner Group, 2009-2018: Sierra Cascades

Land status	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	5,398	134	81	22	52	18	2,938	114	8,468	176
Other unreserved forest land	788	64	262	39	92	24	2,232	102	3,373	128
Total, unreserved	6,186	141	343	44	144	30	5,169	146	11,842	206
Reserved forest land:										
Reserved productive forest land	1,238	78	887	59	67	20	--	--	2,192	100
Other reserved forest land	618	56	354	45	65	19	--	--	1,037	75
Total, reserved forest land	1,856	87	1,241	71	132	28	--	--	3,229	116
Total, forest land	8,042	159	1,584	79	276	40	5,169	146	15,071	225
Nonforest and other area:										
Nonforest land	1,636	85	1,124	77	176	30	3,405	134	6,342	178
Noncensus water	22	7	9	4	3	2	13	6	48	10
Census water	--	--	--	--	286	41	--	--	286	41
Total, nonforest and other area	1,659	86	1,133	77	465	51	3,418	134	6,675	183
Total, all sampled area	9,701	172	2,717	105	742	65	8,587	192	21,747	277

Table A8: Area of Sampled Land by Land Status and Owner Group, 2009-2018: South Coast Mountains and Deserts

	Ownership group									
	National forest		Other federal		State and local govt.		Private		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
Land status	<i>thousand acres</i>									
Unreserved forest land:										
Timberland	130	28	2	2	--	--	19	10	152	29
Other unreserved forest land	339	42	49	16	19	10	259	38	666	59
Total, unreserved	469	50	51	16	19	10	279	39	818	66
Reserved forest land:										
Reserved productive forest land	110	27	--	--	10	8	--	--	120	28
Other reserved forest land	151	30	117	26	48	17	--	--	317	43
Total, reserved forest land	268	40	117	26	58	18	--	--	443	51
Total, forest land	737	64	168	31	77	21	279	39	1,260	84
Nonforest and other area:										
Nonforest land	1,738	87	17,490	169	1,801	78	10,611	220	31,640	288
Noncensus water	2	2	6	6	--	--	12	9	20	11
Census water	--	--	--	--	2,000	90	--	--	2,000	90
Total, nonforest and other area	1,740	87	17,496	169	3,801	118	10,623	220	33,660	299
Total, all sampled area	2,477	105	17,664	170	3,878	119	10,902	224	34,920	308

Table A9: Area of forest land by Owner Group and Forest Land Status, 2009-2018: All California

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	8,787	121	2,385	99	11,172	121	2,794	91	1,266	77	4,066	96	15,238	123
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,787	121	2,385	99	11,172	121	2,794	91	1,266	77	4,066	96	15,238	123
Other federal government:														
Bureau of Land Management	251	38	901	68	1,152	77	75	22	202	35	277	41	1,429	84
Department of Defense and Energy	19	11	80	21	100	24	--	--	6	6	6	6	105	24
National Park Service	--	--	--	--	--	--	984	61	471	52	1,455	76	1,455	76
U.S. Fish and Wildlife Service	--	--	--	--	--	--	4	4	1	1	4	4	4	4
Other federal	3	4	57	18	60	18	--	--	5	3	5	3	65	18
Total	273	40	1,039	72	1,312	81	1,063	62	683	61	1,746	81	3,058	98
State and local government:														
Local	58	18	142	28	201	34	44	16	151	28	196	31	396	45
State	97	22	53	17	150	28	279	33	266	37	544	48	694	48
Other public	--	--	1	1	1	1	5	5	6	6	11	8	11	8
Total	156	29	196	33	351	43	328	36	423	45	751	54	1,102	62
Private:														
Corporate	4,534	122	891	69	5,425	136	--	--	--	--	--	--	5,425	136
Noncorporate private:														
Total, noncorporate private	2,669	111	4,178	130	6,847	160	--	--	--	--	--	--	6,847	160
All private	7,203	119	5,069	139	12,272	153	--	--	--	--	--	--	12,272	153
All owners	16,419	169	8,688	185	25,107	203	4,184	116	2,372	107	6,563	136	31,670	201

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A10: Area of forest land by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	2	1	83	21	84	21	29	13	123	27	152	30	236	36
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2	1	83	21	84	21	29	13	123	27	152	30	236	36
Other federal government:														
Bureau of Land Management	--	--	53	18	53	18	--	--	11	8	11	8	63	19
Department of Defense and Energy	--	--	49	16	49	16	--	--	--	--	--	--	49	16
National Park Service	--	--	--	--	--	--	--	--	6	6	6	6	6	6
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	11	8	11	8	--	--	--	--	--	--	11	8
Total	--	--	113	25	113	25	--	--	17	10	17	10	129	27
State and local government:														
Local	--	--	30	12	30	12	44	16	98	22	142	26	172	28
State	15	9	10	7	25	11	37	15	119	25	156	29	181	31
Other public	--	--	--	--	--	--	5	5	6	6	11	8	11	8
Total	15	9	40	14	55	16	86	22	222	32	309	37	363	40
Private:														
Corporate	39	15	139	27	178	31	--	--	--	--	--	--	178	31
Noncorporate private:														
Total, noncorporate private	163	31	726	61	889	68	--	--	--	--	--	--	889	68
All private	202	34	865	66	1,067	74	--	--	--	--	--	--	1,067	74
All owners	218	36	1,101	75	1,318	82	115	26	362	43	477	48	1,796	95

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A11: Area of forest land by Owner Group and Forest Land Status, 2009-2018: Central Valley

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	1	1	1	1	1	1
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	1	1	1	1	1	1
State and local government:														
Local	--	--	4	3	4	3	--	--	--	--	--	--	4	3
State	--	--	--	--	--	--	--	--	5	5	5	5	5	5
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	4	3	4	3	--	--	5	5	5	5	9	6
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	78	20	78	20	--	--	--	--	--	--	78	20
All private	--	--	78	20	78	20	--	--	--	--	--	--	78	20
All owners	--	--	83	20	83	20	--	--	6	5	6	5	89	21

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A12: Area of forest land by Owner Group and Forest Land Status, 2009-2018: Eastside

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	686	60	773	62	1,459	85	54	18	110	27	165	32	1,623	91
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	686	60	773	62	1,459	85	54	18	110	27	165	32	1,623	91
Other federal government:														
Bureau of Land Management	25	12	447	50	473	51	--	--	53	18	53	18	525	54
Department of Defense and Energy	--	--	28	13	28	13	--	--	--	--	--	--	28	13
National Park Service	--	--	--	--	--	--	--	--	66	20	66	20	66	20
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	25	12	475	51	500	53	--	--	119	27	119	27	619	58
State and local government:														
Local	--	--	6	6	6	6	--	--	--	--	--	--	6	6
State	--	--	--	--	--	--	6	6	9	8	15	10	15	10
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	6	6	6	6	6	6	9	8	15	10	21	12
Private:														
Corporate	246	38	73	21	319	44	--	--	--	--	--	--	319	44
Noncorporate private:														
Total, noncorporate private	81	22	141	29	221	37	--	--	--	--	--	--	221	37
All private	327	44	213	36	540	57	--	--	--	--	--	--	540	57
All owners	1,037	76	1,468	88	2,505	115	60	19	238	39	298	43	2,803	122

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A13: Area of forest land by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	2,548	105	397	47	2,945	112	1,350	74	263	39	1,614	81	4,559	133
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,548	105	397	47	2,945	112	1,350	74	263	39	1,614	81	4,559	133
Other federal government:														
Bureau of Land Management	114	26	132	28	246	38	7	6	23	12	29	14	276	41
Department of Defense and Energy	--	--	--	--	--	--	--	--	6	6	6	6	6	6
National Park Service	--	--	--	--	--	--	61	19	40	15	101	25	101	25
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	3	4	7	5	10	7	--	--	1	1	1	1	11	7
Total	117	27	140	28	257	39	68	20	70	20	137	29	394	47
State and local government:														
Local	7	6	11	8	19	10	--	--	6	6	6	6	25	12
State	9	6	14	9	23	11	6	5	19	11	25	13	48	17
Other public	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Total	16	9	26	12	42	15	6	5	25	12	32	14	74	20
Private:														
Corporate	941	72	272	39	1,213	82	--	--	--	--	--	--	1,213	82
Noncorporate private:														
Total, noncorporate private	750	66	965	71	1,715	96	--	--	--	--	--	--	1,715	96
All private	1,691	94	1,237	80	2,929	121	--	--	--	--	--	--	2,929	121
All owners	4,373	144	1,800	97	6,173	170	1,424	76	358	46	1,782	87	7,955	187

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A14: Area of forest land by Owner Group and Forest Land Status, 2009-2018: North Coast

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	23	12	7	6	30	13	12	9	--	--	12	9	41	16
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	23	12	7	6	30	13	12	9	--	--	12	9	41	16
Other federal government:														
Bureau of Land Management	31	14	--	--	31	14	61	20	--	--	61	20	92	24
Department of Defense and Energy	17	10			17	10	--	--	--	--	--	--	17	10
National Park Service	--	--	--	--	--	--	44	17	7	6	51	18	51	18
U.S. Fish and Wildlife Service	--	--	--	--	--	--	4	4	--	--	4	4	4	4
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	48	17			48	17	108	26	7	6	115	26	163	31
State and local government:														
Local	20	10	7	5	27	12	--	--	38	15	38	15	65	19
State	53	17	2	2	55	18	153	27	9	8	162	28	217	29
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	73	20	8	5	81	21	153	27	48	17	200	32	282	34
Private:														
Corporate	1,218	80	30	12	1,248	81	--	--	--	--	--	--	1,248	81
Noncorporate private:														
Total, noncorporate private	809	67	153	28	962	72	--	--	--	--	--	--	962	72
All private	2,026	98	184	30	2,210	101	--	--	--	--	--	--	2,210	101
All owners	2,170	101	199	31	2,369	105	273	39	54	18	327	42	2,696	111

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A15: Area of forest land by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	5,398	134	788	64	6,186	141	1,238	78	618	56	1,856	87	8,042	159
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	5,398	134	788	64	6,186	141	1,238	78	618	56	1,856	87	8,042	159
Other federal government:														
Bureau of Land Management	81	22	244	37	324	43	8	7	93	24	101	25	425	49
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	879	59	260	39	1,138	68	1,138	68
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	19	10	19	10	--	--	2	2	2	2	20	10
Total	81	22	262	39	343	44	887	59	354	45	1,241	71	1,584	79
State and local government:														
Local	31	14	65	20	96	25	--	--	6	5	6	5	102	25
State	21	11	27	13	48	17	67	20	59	19	126	27	174	31
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	52	18	92	24	144	30	67	20	65	19	132	28	276	40
Private:														
Corporate	2,087	102	324	43	2,411	109	--	--	--	--	--	--	2,411	109
Noncorporate private:														
Total, noncorporate private	851	68	1,907	96	2,758	116	--	--	--	--	--	--	2,758	116
All private	2,938	114	2,232	102	5,169	146	--	--	--	--	--	--	5,169	146
All owners	8,468	176	3,373	128	11,842	206	2,192	100	1,037	75	3,229	116	15,071	225

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A16: Area of forest land by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Owner class	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>													
USDA Forest Service:														
National Forest	130	28	339	42	469	50	110	27	151	30	268	40	737	64
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	130	28	339	42	469	50	110	27	151	30	268	40	737	64
Other federal government:														
Bureau of Land Management	--	--	25	11	25	11	--	--	23	11	23	11	48	16
Department of Defense and Energy	2	2	3	3	5	4	--	--	--	--	--	--	5	4
National Park Service	--	--	--	--	--	--	--	--	93	23	93	23	93	23
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	21	11	21	11	--	--	1	1	1	1	22	11
Total	2	2	49	16	51	16	--	--	117	26	117	26	168	31
State and local government:														
Local	--	--	19	10	19	10	--	--	3	3	3	3	22	10
State	--	--	--	--	--	--	10	8	45	16	55	18	55	18
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	19	10	19	10	10	8	48	17	58	18	77	21
Private:														
Corporate	5	5	52	18	57	19	--	--	--	--	--	--	57	19
Noncorporate private:														
Total, noncorporate private	15	9	207	33	222	34	--	--	--	--	--	--	222	34
All private	19	10	259	38	279	39	--	--	--	--	--	--	279	39
All owners	152	29	666	59	818	66	120	28	317	43	443	51	1,260	84

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table A17: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: All California

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner Total
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	4,111	120	1,056	70	52	17	396	45	30	13	49	17	1,761	92	--	--	442	50	3	3	7,899
Douglas-fir	173	31	161	31	19	11	50	18	29	13	29	14	331	43	--	--	334	43	--	--	1,126
Fir / spruce / mountain hemlock	1,117	76	429	49	--	--	200	34	11	8	11	8	192	33	--	--	61	20	--	--	2,020
Western Hemlock / Sitka spruce	--	--	--	--	--	--	1	1	1	1	1	1	22	12	--	--	3	2	--	--	28
Lodgepole pine	221	35	487	50	--	--	230	35	9	8	6	6	24	12	--	--	29	13	--	--	1,005
Pinyon / juniper	11	8	713	60	--	--	540	55	--	--	73	21	--	--	41	16	--	--	122	26	1,499
Ponderosa pine	1,257	76	219	35	29	13	46	16	4	4	18	10	535	54	4	3	253	37	2	2	2,367
Redwood	3	3	16	10	--	--	31	14	44	15	65	19	428	49	--	--	191	33	--	--	778
Western juniper	127	27	615	57	22	11	320	42	--	--	17	11	11	7	66	20	23	11	264	39	1,465
Western white pine	30	13	117	27	--	--	13	9	--	--	--	--	--	--	--	--	--	--	--	--	160
Other western softwoods	37	14	327	42	3	2	151	29	--	--	17	11	16	10	--	--	15	10	6	6	572
Total	7,087	129	4,140	117	124	27	1,976	89	128	26	286	39	3,319	114	111	26	1,351	83	397	47	18,919
Hardwoods:																					
Alder / maple	34	13	15	8	12	7	28	13	--	--	7	6	90	22	1	1	26	12	12	6	226
Aspen / birch	8	6	54	17	--	--	9	7	--	--	1	1	4	4	--	--	--	--	--	--	77
Elm / ash / cottonwood	--	--	5	5	--	--	1	1	--	--	8	6	--	--	3	2	--	--	17	8	34
Tanoak / laurel	185	32	230	37	13	7	57	19	10	8	150	30	510	54	24	11	546	56	90	22	1,816
Western oak	891	69	1,588	90	95	24	531	53	13	9	435	44	334	44	742	63	627	60	3,496	121	8,753
Woodland hardwoods	14	9	48	16	--	--	55	17	--	--	9	7	--	--	6	6	--	--	29	12	160
Exotic hardwoods	--	--	--	--	2	2	--	--	--	--	--	--	--	--	--	--	--	--	2	2	5
Other hardwoods	131	27	78	21	11	7	16	10	4	4	36	15	70	19	3	3	90	23	103	24	543
Total	1,263	81	2,018	100	133	28	696	60	28	12	646	54	1,008	73	780	65	1,290	83	3,751	123	11,614
Nonstocked	437	48	293	41	15	9	112	26	--	--	15	9	207	32			28	12	29	12	1,138
All forest types	8,787	121	6,451	132	273	40	2,785	95	156	29	946	61	4,534	122	891	69	2,669	111	4,178	130	31,670

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A18: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner Total
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--	15	10	--	--	--	16
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	39	15	--	--	40	15	--	--	1	1	--	--	8	7	--	--	22	11	110
Ponderosa pine	--	--	4	4	--	--	6	6	--	--	6	6	--	--	--	--	--	--	--	--	16
Redwood	--	--	16	10	--	--	--	--	7	6	27	13	7	6	--	--	86	22	--	--	144
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	7	6	--	--	11	8	--	--	17
Total	--	--	59	18	--	--	47	17	7	6	35	14	14	9	8	7	112	26	22	11	303
Hardwoods:																					
Alder / maple	--	--	--	--	--	--	--	--	--	--	5	5	--	--	--	--	--	--	5	4	10
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	1	--	--	--	3	2	--	--	1	1	4
Tanoak / laurel	2	1	16	9	--	--	1	2	5	6	56	18	17	10	14	7	12	8	35	14	159
Western oak	--	--	139	28	--	--	81	21	--	--	229	31	7	7	115	25	18	10	636	57	1,225
Woodland hardwoods	--	--	3	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2	2
Other hardwoods	--	--	10	7	--	--	--	--	2	3	22	12	--	--	--	--	16	9	24	11	73
Total	2	1	168	31	--	--	83	21	7	6	312	37	24	12	131	26	47	16	703	60	1,477
Nonstocked	--	--	8	7	--	--	--	--	--	--	2	2	--	--	--	--	5	5	1	1	16
All forest types	2	1	235	36	--	--	129	27	15	9	349	39	39	15	139	27	163	31	726	61	1,796

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A19: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Central Valley

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Total
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:																					
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	5	5	--	--	--	--	--	--	7	6	--	--	12
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	--	--	--	--	1	1	--	--	4	3	--	--	--	--	--	--	71	19	76
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	1	1	--	--	9	6	--	--	--	--	--	--	78	20	89
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	--	--	--	--	1	1	--	--	9	6	--	--	--	--	--	--	78	20	89

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A20: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Eastside

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner Total
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	174	31	7	6			2	2	--	--	--	--	76	21	--	--	23	12	--	--	281
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	70	19	22	12	--	--	--	--	--	--	5	5	2	2	--	--	9	8	--	--	108
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	22	11	19	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40
Pinyon / juniper	6	6	333	43	--	--	271	39	--	--	6	6	--	--	2	2	--	--	14	9	631
Ponderosa pine	245	36	25	12	3	3	--	--	--	--	--	--	98	24	4	3	23	11	--	--	398
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	72	20	390	45	22	11	269	39	--	--	9	8	2	2	66	20	7	5	118	27	956
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	4	4	71	21	--	--	2	2	--	--	--	--	--	--	--	--	--	--	--	--	77
Total	592	56	866	67	25	12	544	54	--	--	20	11	178	32	72	21	62	19	132	28	2,491
Hardwoods:																					
Alder / maple	--	--			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	7	6	27	13	--	--	1	1	--	--	1	1	--	--	--	--	--	--	--	--	36
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	4	4	2	2	--	--	12	9	--	--	--	--	1	2	1	1	--	--	--	--	20
Woodland hardwoods	14	9	6	6	--	--	19	11	--	--	--	--	--	--	--	--	--	--	--	--	39
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	17	9	4	4	--	--	--	--	--	--	--	--	5	5	--	--	7	7	--	--	33
Total	41	15	39	15	--	--	33	14	--	--	1	1	6	5	1	1	7	7	--	--	128
Nonstocked	52	17	32	13	--	--	18	11	--	--	--	--	62	19	--	--	12	8	9	7	185
All forest types	686	60	938	69	25	12	594	56	--	--	21	12	246	38	73	21	81	22	141	29	2,803

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A21: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Total
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	1,386	81	583	53	35	15	4	4	10	7	5	5	479	52	--	--	164	31	--	--	2,667
Douglas-fir	160	30	149	30	4	5	7	7	2	2	--	--	60	18	--	--	129	27	--	--	511
Fir / spruce / mountain hemlock	98	24	165	31	--	--	--	--	--	--	--	--	31	14	--	--	--	--	--	--	294
Western Hemlock / Sitka spruce	--	--	--	--	--	--	1	1	--	--	1	1	--	--	--	--	--	--	--	--	2
Lodgepole pine	6	6	12	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18
Pinyon / juniper	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--	2	2	3
Ponderosa pine	100	22	39	14	9	8	5	5	--	--	--	--	35	13	--	--	21	11	--	--	209
Redwood	--	--	--	--	--	--	19	11	--	--	--	--	3	3	--	--	6	6	--	--	28
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	8	14
Western white pine	12	9	35	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47
Other western softwoods	17	10	32	13	1	1	11	9	--	--	5	6	--	--	--	--	--	--	6	6	72
Total	1,779	90	1,014	66	49	17	47	17	12	7	12	8	607	58	--	--	320	43	22	11	3,864
Hardwoods:																					
Alder / maple	28	11	10	7	11	7	22	12	--	--	--	--	11	8	--	--	22	11	7	5	111
Aspen / birch	--	--	5	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5
Elm / ash / cottonwood	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--	5	3	5
Tanoak / laurel	173	32	203	35	3	3	6	6	--	--	3	5	70	21	4	4	162	31	16	9	640
Western oak	443	50	636	61	43	16	193	32	4	5	43	15	183	33	269	39	219	37	901	69	2,934
Woodland hardwoods	--	--	5	5	--	--	2	2	--	--	--	--	--	--	--	--	--	--	2	1	9
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	48	16	39	16	7	7	6	6	--	--	--	--	33	13	--	--	20	11	9	7	161
Total	693	61	897	71	63	19	229	35	4	5	46	16	297	42	272	39	423	50	940	70	3,865
Nonstocked	77	21	99	24	5	4	--	--	--	--	--	--	37	13	--	--	7	7	2	2	226
All forest types	2,548	105	2,010	93	117	27	277	39	16	9	57	18	941	72	272	39	750	66	965	71	7,955

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A22: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: North Coast

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Total
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	12	8	12	9	14	9	43	17	28	13	29	14	270	39	--	--	190	33	--	--	599
Fir / spruce / mountain hemlock	5	4	--	--	--	--	--	--	--	--	--	--	5	5	--	--	--	--	--	--	10
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	1	1	--	--	22	12	--	--	3	2	--	--	26
Lodgepole pine	--	--	--	--	--	--	4	4	--	--	--	--	--	--	--	--	--	--	--	--	4
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	12	9	37	14	37	14	419	49	--	--	98	23	--	--	603
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	1	1	--	--	12	9	1	1	--	--	5	5	--	--	19
Total	17	10	12	9	14	9	60	19	66	19	79	21	716	63	--	--	297	40	--	--	1,260
Hardwoods:																					
Alder / maple	6	6	--	--	1	1	6	6	--	--	2	2	74	20	1	1	--	--	--	--	90
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	10	7	49	17	5	5	84	23	380	47	7	7	364	47	29	13	928
Western oak	--	--	7	6	17	10	--	--	2	1	29	12	16	10	22	10	112	26	123	25	328
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	1
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	1	1	13	9	23	11	--	--	36	15	2	2	75
Total	6	6	7	6	28	13	55	18	8	5	130	27	494	52	30	12	512	55	153	28	1,422
Nonstocked	--	--	--	--	6	6	--	--	--	--	--	--	8	5	--	--	--	--	--	--	13
All forest types	23	12	18	11	48	17	115	26	73	20	209	32	1,218	80	30	12	809	67	153	28	2,696

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A23: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owner Total
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	
<i>thousand acres</i>																					
Softwoods:																					
California mixed conifer	2,521	107	440	51	17	10	390	45	19	11	39	15	1,206	79	--	--	255	38	3	3	4,890
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	933	70	243	38	--	--	200	34	11	8	6	7	155	30	--	--	52	18	--	--	1,598
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	194	33	438	47	--	--	226	35	9	8	6	6	24	12	--	--	29	13	--	--	925
Pinyon / juniper	5	5	171	32	--	--	124	27	--	--	39	16	--	--	--	--	--	--	19	9	359
Ponderosa pine	906	67	117	26	17	10	35	14	4	4	11	8	398	47	--	--	209	33	2	2	1,699
Redwood	3	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Western juniper	44	15	220	36	--	--	50	18	--	--	8	7	8	6	--	--	16	10	132	28	479
Western white pine	18	10	81	23	--	--	13	9	--	--	--	--	--	--	--	--	--	--	--	--	112
Other western softwoods	16	9	217	34	2	2	134	28	--	--	--	--	8	7	--	--	--	--	--	--	377
Total	4,640	130	1,927	91	35	14	1,172	72	43	16	109	26	1,799	95	--	--	560	56	156	29	10,442
Hardwoods:																					
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	5	5	--	--	4	4	--	--	9
Aspen / birch	2	2	22	10	--	--	8	7	--	--	--	--	4	4	--	--	--	--	--	--	36
Elm / ash / cottonwood	--	--	5	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	4	10
Tanoak / laurel	10	7	12	8	--	--	--	--	--	--	--	--	43	16	--	--	7	7	11	8	83
Western oak	407	48	528	54	36	15	233	36	7	7	107	26	126	28	321	43	263	38	1,654	90	3,684
Woodland hardwoods	--	--	20	10	--	--	6	6	--	--	--	--	--	--	--	--	--	--	12	8	38
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	66	19	19	10	4	4	11	8	1	1	1	1	9	6	3	3	11	8	57	18	182
Total	485	52	605	57	40	15	258	38	9	7	108	26	187	33	324	43	286	40	1,739	92	4,042
Nonstocked	273	39	111	26	5	6	72	21	--	--	8	7	101	22	--	--	4	3	12	8	588
All forest types	5,398	134	2,644	107	81	22	1,503	77	52	18	225	36	2,087	102	324	43	851	68	1,907	96	15,071

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table A24: Area of Forest Land by Forest Type, Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	USDA Forest Service				Other federal				State and local government				Private corporate				Private non-corporate				All owners	
	Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Timberland ¹		Other forest land ²		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand acres</i>																					
Softwoods:																						
California mixed conifer	31	14	27	14	--	--	--	--	--	--	5	6	--	--	--	--	--	--	--	--	62	20
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	10	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	8
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	18	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	11
Pinyon / juniper	--	--	170	32	--	--	104	25	--	--	27	13	--	--	31	14	--	--	65	19	397	49
Ponderosa pine	6	6	34	15	--	--	--	--	--	--	--	--	5	5	--	--	--	--	--	--	45	17
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	12	8	5	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	10
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	7	7	--	--	2	3	--	--	--	--	--	--	--	--	--	--	--	--	10	7
Total	59	19	261	40	--	--	106	25	--	--	32	14	5	5	31	14	--	--	65	19	559	58
Hardwoods:																						
Alder / maple	--	--	5	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	4
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	3	4	--	--	--	--	--	--	--	--	3	4
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	7	7	--	--	--	--	--	--	--	--	7	7
Western oak	37	14	276	38	--	--	10	7	--	--	23	10	--	--	15	10	15	9	111	23	486	51
Woodland hardwoods	--	--	14	9	--	--	28	11	--	--	8	7	--	--	6	6	--	--	15	8	70	19
Exotic hardwoods	--	--	--	--	2	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2
Other hardwoods	--	--	7	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	7	18	10
Total	37	14	302	40	2	2	38	13	--	--	40	15	--	--	21	12	15	9	136	26	591	56
Nonstocked	35	14	43	15	--	--	22	12	--	--	4	5	--	--	--	--	--	--	6	4	110	25
All forest types	130	28	606	58	2	2	166	30	--	--	77	21	5	5	52	18	15	9	207	33	1,260	84

Note: Totals may be off because of rounding; data subject to sampling error; SE = standard error; -- = less than 500 acre were estimated.

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment and not in reserved status.

²Combination of productive reserved forest land (capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment) and low-productive forest land (not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment).

Table B1: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2009-2018: All California

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate					
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>														
Standing Live tree														
Mortality	-27,538	1,256	-3,780	600	-1,388	262	-3,990	274	-4,675	325	-8,665	402	-41,371	1,465
Cut	-2,141	375	-33	22	-129	111	-10,163	1,034	-1,270	265	-11,433	1,056	-13,736	1,126
Gross Growth	30,746	521	4,030	294	3,239	324	18,926	701	13,014	597	31,939	713	69,954	924
Net	1,067	1,386	217	612	1,722	300	4,773	1,170	7,068	593	11,842	1,295	14,847	2,025
Foliage	141	70	19	28	85	16	280	60	321	28	601	66	846	102
Roots														
Live	418	276	83	109	339	67	1,064	242	1,354	123	2,418	268	3,258	408
Dead	988	190	-6	93	-9	31	-12	52	161	54	149	75	1,123	227
Standing Dead	6,046	910	305	506	-35	118	385	202	991	224	1,376	301	7,692	1,090
Dead Woody Debris	-186	590	373	284	108	153	-1,546	440	273	290	-1,273	527	-979	854
Understory Vegetation														
Above Ground	-44	48	6	23	-17	6	1	38	-59	18	-58	42	-112	68
Below Ground	-5	5	1	3	-2	1		4	-7	2	-6	5	-12	8
Total (excluding soils)	8,426	1,284	998	612	2,192	376	4,945	1,551	10,103	726	15,048	1,695	26,663	2,242
Forest Floor	-78	123	-66	57		14	-14	86	161	54	147	102	4	170
Soils	-619	220	-71	80	-44	47	175	228	90	102	265	249	-468	346
Total (including soils and forest floor)	7,729	1,371	861	653	2,149	380	5,106	1,612	10,354	750	15,460	1,758	26,199	2,352

Table B2: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: Central Coast and Interior Ranges

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality	-636	302	-43	43	-448	111	-76	29	-678	124	-754	127	-1,881	348
Cut	--	--	--	--	-3	3	--	--	-182	84	-182	84	-184	84
Gross Growth	182	56	46	17	892	197	325	96	1,536	258	1,861	274	2,981	344
Net	-454	274	3	32	441	176	249	88	677	196	926	214	916	392
Foliage	-15	10	1		22	8	6	4	24	9	31	9	38	15
Roots														
Live	-71	44	4	5	81	37	28	16	81	36	108	39	123	70
Dead	17	19	2	3	22	12	2	4	39	13	41	14	81	26
Standing Dead	92	87	7	8	53	27	13	20	215	61	228	64	381	112
Dead Woody Debris	14	65	32	25	153	63	-53	64	170	122	117	138	316	167
Understory Vegetation														
Above Ground		1			-4	3	-1	1	1	1		1	-4	3
Below Ground														
Total (excluding soils)	-417	267	48	18	767	230	245	111	1,207	296	1,452	316	1,849	474
Forest Floor	-5	6	2	1	-6	7	2	5	31	12	33	13	25	16
Soils	-34	30	1	1	-11	33	-11	8	34	28	23	30	-21	54
Total (including soils and forest floor)	-455	270	51	19	750	228	236	112	1,271	298	1,507	318	1,854	477

Table B3: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: Central Valley

	Public						Private							
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total		Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality					-11	11			-31	18	-31	18	-42	22
Cut					--	--			-4	4	-4	4	-4	4
Gross Growth					9	6			62	31	62	31	71	31
Net					-2	8			28	20	28	20	26	21
Foliage										1		1		1
Roots														
Live						1			5	4	5	4	5	4
Dead					2	2			3	2	3	2	5	3
Standing Dead					6	6			13	7	13	7	18	10
Dead Woody Debris					5	4			32	20	32	20	36	21
Understory Vegetation														
Above Ground														
Below Ground														
Total (excluding soils)					10	9			80	36	80	36	90	37
Forest Floor					1	1			1	1	1	1	2	1
Soils					--	--			--	--	--	--	--	--
Total (including soils and forest floor)					11	9			82	36	82	36	92	37

Table B4: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: Eastside

	Public						Private						Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality	-551	102	-28	12			-263	103	-15	9	-278	103	-857	146
Cut	-188	84	--	--	--	--	-292	94	-65	30	-358	99	-546	130
Gross Growth	1,239	130	123	20	16	16	424	94	106	35	530	100	1,909	168
Net	500	138	95	21	16	16	-132	124	26	20	-106	126	506	190
Foliage	31	8	6	1	1	1	-7	7	3	1	-3	7	34	11
Roots														
Live	101	30	18	4	2	3	-20	23	7	4	-13	24	108	39
Dead	-49	24	-5	2	-1	1	12	10	-5	3	7	10	-48	26
Standing Dead	-186	112	-19	9	-5	7	61	47	-20	15	41	50	-169	123
Dead Woody Debris	-124	97	44	49	-5	6	-18	56	-25	24	-43	61	-128	125
Understory Vegetation														
Above Ground	-44	24	12	21	-1	1	4	12	-23	12	-18	17	-51	36
Below Ground	-5	3	1	2				1	-3	1	-2	2	-6	4
Total (excluding soils)	224	206	154	61	7	5	-99	161	-39	39	-138	166	246	272
Forest Floor	26	25	-10	10	2	2	-25	17	-5	10	-30	20	-13	33
Soils	-76	46	-79	56	--	--	-27	19	-11	16	-38	25	-193	77
Total (including soils and forest floor)	174	233	64	82	8	7	-151	177	-55	50	-206	184	40	309

Table B5: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: Klamath Interior Coast Ranges

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality	-10,722	927	-425	132	-97	67	-1,053	161	-1,138	141	-2,191	212	-13,436	967
Cut	-198	83	-33	22	-1	1	-1,945	474	-137	50	-2,082	476	-2,313	484
Gross Growth	11,012	462	962	199	109	41	3,458	313	3,673	344	7,131	450	19,214	676
Net	92	915	504	144	11	69	460	529	2,398	292	2,858	603	3,465	1,128
Foliage	15	48	24	8	2	2	15	29	107	14	122	32	163	60
Roots														
Live	24	191	111	33	6	11	98	115	473	60	571	130	712	239
Dead	498	136	6	13	1	2	18	22	2	26	20	34	524	141
Standing Dead	2,773	625	57	41	22	17	168	95	65	104	233	140	3,085	642
Dead Woody Debris	-335	350	-56	134	8	22	-101	204	114	121	13	237	-369	443
Understory Vegetation														
Above Ground	-22	22	-9	4	-3	2	24	15	-30	8	-7	18	-40	28
Below Ground	-2	2	-1				3	2	-3	1	-1	2	-4	3
Total (excluding soils)	3,042	779	636	196	48	54	685	638	3,125	386	3,810	744	7,536	1,108
Forest Floor	63	57	30	21	6	4	16	46	98	31	113	55	212	83
Soils	-227	143	13	34	1	1	26	42	75	55	102	69	-111	162
Total (including soils and forest floor)	2,878	820	680	205	55	56	727	683	3,298	409	4,025	794	7,637	1,174

Table B6: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: North Coast

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality	-53	33	-192	97	-590	231	-1,045	127	-666	98	-1,711	158	-2,547	297
Cut	--	--			-123	111	-3,297	711	-414	216	-3,711	741	-3,834	749
Gross Growth	200	97	690	195	1,559	313	7,575	624	4,003	417	11,578	715	14,028	802
Net	147	75	498	183	846	247	3,233	801	2,923	405	6,156	888	7,647	940
Foliage	3	4	21	10	40	15	202	41	137	19	339	45	403	48
Roots														
Live	16	15	79	39	167	58	721	169	594	82	1,315	186	1,577	198
Dead	3	6	-51	28	-12	22	-38	39	-32	18	-71	43	-131	56
Standing Dead	25	17	-176	101	-67	96	82	137	-11	60	71	150	-147	205
Dead Woody Debris	4	40	174	131	-72	122	-761	327	-141	161	-902	364	-796	408
Understory Vegetation														
Above Ground		1		1	-4	2	-31	8	-7	2	-38	8	-42	8
Below Ground							-3	1	-1		-4	1	-5	1
Total (excluding soils)	196	109	546	261	898	304	3,405	1,138	3,462	472	6,867	1,224	8,507	1,289
Forest Floor	1	1	-2	3	-4	6	6	18	35	10	41	21	36	22
Soils					15	11	237	121	4	64	240	137	255	137
Total (including soils and forest floor)	197	109	545	261	909	307	3,647	1,150	3,500	474	7,148	1,234	8,798	1,300

Table B7: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: Sierra Cascades

	Public						Private				Total		Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate					
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons CO2 equivalent per year</i>													
Standing Live tree														
Mortality	-14,558	908	-3,036	590	-203	50	-1,552	176	-2,008	255	-3,560	303	-21,357	1,120
Cut	-1,718	356	--	--	-2	3	-4,629	633	-451	117	-5,079	641	-6,800	733
Gross Growth	17,728	552	2,195	187	635	145	7,127	454	3,536	272	10,663	495	31,221	759
Net	1,452	980	-842	554	429	120	947	655	1,077	287	2,024	714	3,064	1,342
Foliage	139	49	-32	24	21	6	61	33	52	15	113	36	241	65
Roots														
Live	492	188	-122	94	85	24	232	128	214	63	445	143	901	256
Dead	505	128	42	87	-12	15	-4	23	152	42	148	48	683	163
Standing Dead	3,261	646	438	492	-15	41	61	102	696	178	758	204	4,441	838
Dead Woody Debris	113	454	150	202	-11	40	-620	193	86	162	-534	253	-281	559
Understory Vegetation														
Above Ground	6	35	2	8	-6	5	5	32		10	5	33	8	49
Below Ground	1	4		1	-1	1	1	4		1	1	4	1	5
Total (excluding soils)	5,969	965	-363	510	491	139	682	815	2,277	334	2,960	881	9,057	1,406
Forest Floor	-96	102	-84	51	2	9	-13	68	5	40	-8	79	-187	140
Soils	-214	153	-4	46	-49	31	-50	187	-13	48	-63	193	-329	253
Total (including soils and forest floor)	5,659	1,033	-451	551	444	146	620	873	2,269	356	2,889	942	8,541	1,507

Table B8: Annual Net Change in Carbon Stocks on Forest Land for All Pools by Owner Group, 2001-2008 to 2011-2018: South Coast Mountains and Deserts

	Public						Private						Total	
	National forest		Other federal		State and local govt.		Corporate		Non Corporate		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>														
Standing Live tree														
Mortality	-1,017	224	-56	36	-39	23	--	--	-140	65	-140	65	-1,252	238
Cut	-37	29	--	--	--	--	--	--	-17	14	-17	14	-55	32
Gross Growth	384	61	14	7	19	13	16	12	97	27	113	29	530	69
Net	-670	202	-42	34	-20	21	16	12	-61	59	-44	60	-777	214
Foliage	-31	9	-1	1		1	1	1	-2	2	-1	2	-33	10
Roots														
Live	-143	42	-8	6	-3	5	5	4	-18	14	-13	15	-167	46
Dead	15	30		6	-8	10			2	5	2	5	9	32
Standing Dead	81	128	-1	24	-29	45	-1	1	33	27	32	27	83	140
Dead Woody Debris	142	77	28	26	30	41	6	5	37	40	44	40	244	100
Understory Vegetation														
Above Ground	15	6	1	1	1								17	6
Below Ground	2	1											2	1
Total (excluding soils)	-589	189	-23	33	-29	32	27	19	-9	74	18	76	-623	209
Forest Floor	-67	25	-2	2		5			-3	5	-3	5	-72	26
Soils	-69	36	-3	5	--	--	--	--	1	2	1	2	-70	36
Total (including soils and forest floor)	-724	216	-28	34	-29	32	28	19	-11	78	16	80	-765	235

Table B9.1: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: All California

	USDA Forest Service								Other Public				Private				Total		Total	
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate					
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE		
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	-207	72	-6	6	-3	3	-216	73			-15	12	-415	70	-237	69	-652	97	-883	122
Cut	-1,124	226	-3	3	--	--	-1,127	226	-17	16	-18	19	-8,250	945	-867	249	-9,117	969	-10,279	996
Gross Growth	1,067	163	14	15	1	1	1,081	164	13	12	16	14	3,663	334	971	213	4,634	386	5,743	420
Net Live	-264	188	5	6	-2	2	-261	188	-5	15	-17	17	-5,002	817	-133	215	-5,135	844	-5,418	865
Standing Dead Change	-198	128	--	--	1	1	-197	128	-2	2	4	3	-99	72	52	56	-47	91	-241	157
Dead Woody Debris Change	-3	81	-1	1	7	7	3	82	17	16	13	23	-564	273	93	139	-471	307	-439	319
Total Net ¹	-548	263	5	5	6	5	-537	263	8	13	-2	6	-6,821	1,142	-17	289	-6,838	1,178	-7,370	1,207
Cut and Fire																				
Mortality	-327	129	--	--	--	--	-327	129	--	--	-17	18	-517	154	-30	30	-547	157	-891	204
Cut	-593	239	--	--	--	--	-593	239	--	--	-105	109	-1,144	401	--	--	-1,144	401	-1,842	480
Gross Growth	261	77	--	--	--	--	261	77	--	--	53	55	223	61	5	5	228	61	541	113
Net Live	-660	247	--	--	--	--	-660	247	--	--	-69	72	-1,439	448	-25	25	-1,464	449	-2,192	517
Standing Dead Change	35	60	--	--	--	--	35	60	--	--	-1	1	67	56	-7	7	60	57	94	83
Dead Woody Debris Change	-33	41	--	--	--	--	-33	41	--	--	12	13	82	98	-7	7	75	99	55	107
Total Net ¹	-798	305	--	--	--	--	-798	305	--	--	-69	72	-1,600	499	-44	44	-1,643	501	-2,510	591
Fire																				
Mortality	-6,743	831	-5,407	816	-989	249	-13,139	1,185	-1,328	427	-274	122	-321	95	-667	175	-987	199	-15,728	1,280
Cut	-190	176	--	--	-2	1	-192	176	--	--	--	--	-13	11	-38	22	-50	25	-242	177
Gross Growth	2,016	210	1,200	154	187	44	3,403	264	459	103	42	29	213	61	327	80	540	101	4,444	302
Net Live	-4,917	768	-4,207	737	-804	225	-9,928	1,083	-869	383	-232	103	-120	80	-377	143	-497	164	-11,526	1,165
Standing Dead Change	2,850	547	1,954	463	290	149	5,094	730	20	353	59	32	26	61	191	83	217	103	5,390	819
Dead Woody Debris Change	-378	198	-15	151	-27	44	-420	253	-98	91	38	42	-118	47	148	83	30	95	-450	288
Total Net ¹	-3,004	579	-2,834	551	-689	179	-6,527	817	-1,153	429	-174	98	-227	129	-87	107	-314	168	-8,169	942
Insect and Disease																				
Mortality	-3,384	379	-950	240	-159	69	-4,493	453	-1,262	433	-181	80	-379	82	-477	126	-856	149	-6,792	647
Cut	-64	30	--	--	--	--	-64	30	--	--	--	--	-48	19	-30	19	-78	27	-143	41
Gross Growth	4,308	328	706	122	77	24	5,091	350	572	115	284	107	1,090	189	886	186	1,976	263	7,923	462
Net Live	860	330	-244	204	-82	52	534	392	-690	372	103	74	663	139	379	155	1,041	207	989	586
Standing Dead Change	419	279	196	173	53	47	667	332	542	329	-98	96	-27	41	131	103	104	111	1,215	490
Dead Woody Debris Change	238	219	245	184	-7	33	476	288	168	96	21	82	-59	61	7	53	-52	81	612	324
Total Net ¹	1,828	351	202	187	-45	46	1,986	401	-12	156	42	152	722	163	628	174	1,350	237	3,365	513
Other cut and weather																				
Mortality	-876	218	-306	118	-115	45	-1,297	251	-173	85	-5	5	-235	82	-521	137	-756	159	-2,231	309
Cut	-123	52	-12	10	--	--	-135	53	-15	15	-2	3	-246	85	-155	60	-401	103	-554	117
Gross Growth	1,033	165	292	74	71	30	1,395	182	155	58	33	34	725	169	702	139	1,426	217	3,010	291
Net Live	34	184	-26	87	-44	27	-37	206	-33	68	25	31	244	132	26	153	270	202	225	298
Standing Dead Change	418	183	68	123	64	33	551	223	49	29	-7	13	49	21	279	110	328	112	920	251
Dead Woody Debris Change	-7	112	20	63	20	29	33	132	20	32	36	30	-221	129	211	100	-10	163	80	214
Total Net ¹	520	157	66	99	41	35	627	188	39	69	57	38	135	174	585	164	720	239	1,444	314
Less than 25% disturbed																				
Mortality	-5,502	392	-2,216	237	-348	63	-8,067	456	-1,018	171	-896	229	-2,123	179	-2,743	201	-4,866	257	-14,847	594
Cut	-28	14	-1	1	-1	1	-30	14			-3	3	-462	108	-181	61	-643	124	-677	125
Gross Growth	14,192	513	4,443	314	879	114	19,515	571	2,831	289	2,812	341	13,012	678	10,123	541	23,135	756	48,293	1,019
Net Live	8,661	495	2,227	289	530	104	11,418	565	1,813	260	1,912	253	10,427	612	7,199	483	17,626	703	32,769	956
Standing Dead Change	312	287	-342	212	-74	45	-104	359	-305	151	8	58	369	164	345	134	714	211	313	448
Dead Woody Debris Change	-153	329	-41	244	-51	82	-245	418	266	248	-11	115	-668	296	-178	212	-846	364	-836	617
Total Net ¹	10,948	634	2,253	391	474	131	13,676	735	2,116	381	2,338	303	12,735	805	9,037	620	21,773	926	39,902	1,261
Total																				
Mortality	-17,039	941	-8,884	830	-1,615	268	-27,538	1,256	-3,780	600	-1,388	262	-3,990	274	-4,675	325	-8,665	402	-41,371	1,465
Cut	-2,122	375	-16	10	-3	2	-2,141	375	-33	22	-129	111	-10,163	1,034	-1,270	265	-11,433	1,056	-13,736	1,126
Gross Growth	22,876	505	6,654	314	1,215	127	30,746	521	4,030	294	3,239	324	18,926	701	13,014	597	31,939	713	69,954	924
Net Live	3,715	1,073	-2,246	841	-402	256	1,067	1,386	217	612	1,722	300	4,773	1,170	7,068	593	11,842	1,295	14,847	2,025
Standing Dead Change	3,836	709	1,876	553	334	166	6,046	910	305	506	-35	118	385	202	991	224	1,376	301	7,692	1,090
Dead Woody Debris Change	-337	466	208	348	-58	103	-186	590	373	284	108	153	-1,546	440	273	290	-1,273	527	-979	854
Total Net ¹	8,947	1,044	-308	725	-214	231	8,426	1,284	998	612	2,192	376	4,945	1,551	10,103	726	15,048	1,695	26,663	2,242

¹Total Net value includes change from roots and understorey vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table B 9.2 Average annual carbon (CO2e) flux in live trees from growth, harvest, mortality, 2001-2008 to 2011-2018: COUNTY

County	Standing Live														All Pools			
	Gross Growth		Harvest		Fire killed		Cut and fire		Insects and disease		Natural/other		Total Mortality		Net Flux		Net Flux	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Thousand Metric Tons CO2 equivalent per year</i>																	
Alameda	120	40	-5	5	--	--	--	--	--	--	-38	21	-38	21	77	30	103	48
Alpine	515	95	-3	3	-7	7	--	--	-172	58	-164	52	-343	77	169	65	194	131
Amador	490	130	-40	24	-43	34	-95	100	-30	29	-151	61	-320	125	130	130	112	152
Butte	1,839	271	-296	141	-143	73	-49	43	-29	13	-567	113	-788	143	755	251	1,047	310
Calaveras	1,183	195	-260	104	-164	116	--	--	-28	17	-329	163	-521	200	403	217	691	191
Colusa	144	41	-1	1	-257	142	--	--	--	--	-68	36	-326	146	-182	131	-86	87
Contra Costa	55	24	-6	6	--	--	--	--	--	--	-19	14	-19	14	30	22	46	31
Del Norte	2,863	433	-423	251	-259	134	--	--	-16	7	-764	235	-1,039	270	1,401	380	1,285	463
El Dorado	2,571	293	-557	226	-405	207	-97	80	-265	74	-643	109	-1,410	257	604	358	1,221	423
Fresno	1,673	196	-121	94	-436	199	-43	32	-228	128	-1,214	258	-1,921	352	-369	339	409	276
Glenn	377	87	-1	1	-127	106	--	--	-22	14	-114	44	-263	115	113	95	118	130
Humboldt	8,947	672	-2,307	601	-182	111	--	--	-43	25	-1,650	196	-1,876	225	4,764	755	4,903	1,130
Imperial			--	--	--	--	--	--	--	--	--	--	--	--	--	--	-1	1
Inyo	96	15	--	--	--	--	--	--	--	--	-22	9	-22	9	74	14	6	50
Kern	381	72	--	--	-105	51	--	--	-86	51	-253	75	-444	105	-63	102	-17	157
Lake	654	123	-9	7	-89	70	--	--	-5	7	-190	106	-284	127	361	149	443	152
Lassen	1,785	184	-504	136	-142	66	-14	13	-123	41	-304	66	-582	103	699	185	469	291
Los Angeles	80	25	--	--	-179	101	--	--	--	--	-40	22	-219	103	-139	89	-113	96
Madera	1,164	183	-32	20	-264	180	--	--	-651	250	-668	174	-1,584	353	-452	310	530	259
Marin	314	139	-2	2	--	--	--	--	-155	105	-19	13	-173	106	138	142	94	162
Mariposa	1,284	186	-55	41	-524	206	--	--	-392	149	-394	109	-1,309	272	-81	222	361	284
Mendocino	6,635	532	-1,399	429	-241	111	-20	18	-146	51	-850	113	-1,256	167	3,980	588	5,303	721
Merced	11	7	--	--	--	--	--	--	--	--	--	--	--	--	11	7	-9	23
Modoc	1,348	155	-423	108	-77	55	-159	88	-128	45	-182	49	-546	122	378	158	246	223
Mono	320	55	-45	34	-36	26	--	--	-92	53	-106	28	-234	65	41	71	106	127
Monterey	382	83	-1	1	-701	310	--	--	--	--	-186	75	-887	319	-506	286	-349	282
Napa	398	101	-36	32	-87	66	--	--	--	--	-163	55	-250	86	113	95	287	112
Nevada	1,077	179	-201	100	--	--	--	--	-189	82	-250	72	-439	109	437	146	673	182
Orange	3	3	--	--	--	--	--	--	--	--	--	--	--	--	3	3	9	9
Placer	1,851	238	-339	191	-97	56	-7	7	-255	88	-527	120	-885	159	627	251	950	348
Plumas	3,882	331	-1,075	321	-1,846	516	-89	51	-470	118	-712	123	-3,117	545	-311	621	119	697
Riverside	54	24	--	--	-4	6	--	--	-69	42	-9	9	-83	43	-29	30	14	41
Sacramento	6	5	--	--	--	--	--	--	--	--	-1	1	-1	1	5	4	5	5
San Benito	107	46	--	--	--	--	--	--	--	--	-34	19	-34	19	73	44	108	45
San Bernardino	165	43	-37	29	-220	122	-14	15	-15	11	-140	54	-389	134	-262	132	-355	156
San Diego	56	21	-14	13	-59	34	--	--	--	--	-38	21	-97	40	-55	42	-84	54
San Joaquin	22	23	-4	4	--	--	--	--	--	--	-15	15	-15	15	4	4	18	16
Obispo	192	39	--	--	--	--	--	--	--	--	-130	42	-130	42	62	34	251	58
San Mateo	482	166	-65	49	--	--	--	--	-30	39	-151	60	-181	74	236	134	496	193
Santa Barbara	80	29	--	--	-268	143	--	--	--	--	-61	25	-329	145	-250	121	-189	113
Santa Clara	347	83	--	--	-24	25	--	--	--	--	-176	59	-200	64	147	62	202	66
Santa Cruz	1,245	274	-108	67	-8	7	--	--	-85	52	-257	73	-350	90	787	216	966	314
Shasta	4,458	345	-1,780	430	-860	242	-202	90	-224	66	-1,036	168	-2,322	326	356	583	1,419	656
Sierra	1,292	182	-389	163	-78	80	--	--	-153	47	-219	54	-450	106	452	171	179	278
Siskiyou	6,939	411	-1,539	401	-3,068	684	-88	61	-529	127	-1,466	180	-5,151	714	250	782	1,457	791
Solano	10	8	--	--	--	--	--	--	--	--	--	--	--	--	10	8	9	7
Sonoma	1,421	225	-143	79	-7	6	--	--	-161	71	-200	48	-368	86	910	161	1,169	241
Stanislaus	28	9	--	--	-6	6	--	--	--	--	-12	9	-18	11	10	8	25	31
Sutter	19	18	--	--	--	--	--	--	--	--	-1	1	-1	1	19	18	23	22
Tehama	1,685	205	-329	142	-308	152	--	--	-184	67	-639	147	-1,131	220	225	212	499	303
Trinity	4,514	334	-745	259	-2,373	542	-14	13	-237	81	-1,241	172	-3,865	565	-96	581	990	583
Tulare	1,583	192	-3	4	-787	263	--	--	-390	184	-696	144	-1,873	350	-294	315	212	300
Tuolumne	2,205	243	-392	176	-1,135	422	-1	1	-1,187	446	-646	142	-2,969	627	-1,156	576	-735	536
Ventura	68	19	-4	4	-114	62	--	--	-1	1	-27	15	-142	64	-78	57	-78	62
Yolo	25	9	--	--	--	--	--	--	--	--	-12	10	-12	10	13	9	26	11
Yuba	511	133	-43	37	--	--	--	--	--	--	-169	55	-169	55	299	99	417	160
All counties	69,954	924	-13,736	1,126	-15,728	1,280	-891	204	-6,792	647	-17,961	659	-41,371	1,465	14,847	2,025	26,199	2,352

Table B 9.3 Average annual carbon (CO2e) flux in live trees from growth, harvest, mortality, 2001-2008 to 2011-2018: NATIONAL FOREST

	Standing Live														All Pools			
	Gross Growth		Harvest		Fire killed		Cut and fire		Insects and disease		Natural/other		Total Mortality		Net Flux		Net Flux	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>Thousand Metric Tons CO2 equivalent per year</i>																	
Region 5																		
Angeles	89	27	--	--	-179	101	--	--	--	--	-40	22	-219	103	-131	90	-114	97
Cleveland	8	6	--	--	-6	6	--	--	--	--	--	--	-6	6	2	8	5	13
Eldorado	1,932	249	-331	213	-434	209	-108	100	-241	68	-469	101	-1,253	259	347	342	639	387
Inyo	439	80	-45	34	-2	2	--	--	-51	31	-160	45	-213	54	180	69	136	175
Klamath	2,818	253	-160	76	-2,656	670	-66	58	-314	102	-777	127	-3,814	689	-1,156	638	42	462
Lake Tahoe Basin	247	75	-32	29	--	--	-7	6	-84	44	-71	54	-161	70	54	65	5	103
Lassen	2,443	251	-315	121	-1,073	390	-36	22	-324	96	-689	140	-2,122	423	6	406	377	429
Los Padres	329	65	--	--	-917	329	--	--	-1	1	-143	42	-1,061	331	-732	297	-637	294
Mendocino	1,649	192	-13	8	-1,043	389	--	--	-126	52	-480	127	-1,649	411	-13	379	360	334
Modoc	1,196	138	-94	48	-23	13	-37	39	-182	52	-233	62	-475	90	627	111	434	165
Plumas	3,033	286	-378	193	-1,359	403	--	--	-296	85	-658	122	-2,313	427	341	479	786	551
San Bernardino	161	42	-37	29	-184	117	-14	15	-77	43	-126	52	-401	136	-278	130	-388	150
Sequoia	1,238	175	-9	5	-925	270	--	--	-272	163	-578	148	-1,774	347	-544	323	19	303
Shasta-Trinity	4,719	336	-213	79	-2,055	437	-1	2	-277	87	-1,442	193	-3,776	473	731	455	2,197	461
Sierra	2,198	240	-131	96	-625	259	-43	32	-800	276	-1,446	277	-2,914	469	-847	425	470	328
Six Rivers	3,300	322	-54	51	-969	254	-14	13	-125	63	-904	167	-2,012	308	1,234	338	1,335	440
Stanislaus	1,937	230	-77	46	-531	201	--	--	-671	209	-628	201	-1,829	350	30	287	496	266
Tahoe	2,373	259	-250	123	-102	81	--	--	-523	126	-532	110	-1,156	184	967	220	1,212	316
Toiyabe	320	56	--	--	-43	27	--	--	-128	58	-101	38	-271	74	49	67	51	106
Total	30,427	517	-2,139	375	-13,124	1,184	-327	129	-4,492	453	-9,479	508	-27,422	1,255	866	1,384	7,424	1,367
Region 6																		
Rogue River / Siskyou	319	72	-2	4	-15	26	--	--	-1	2	-101	43	-116	47	200	84	305	104
Total	319	72	-2	4	-15	26	--	--	-1	2	-101	43	-116	47	200	84	305	104
All National Forests	30,746	521	-2,141	375	-13,139	1,185	-327	129	-4,493	453	-9,580	509	-27,538	1,256	1,067	1,386	7,729	1,371

Table B9.4: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Coastal Forest Practice District

	USDA Forest Service						Other Public				Private				Total		Total				
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate						Non Corporate		
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE			
<i>thousand metric tons CO2 equivalent per year</i>																					
Cut																					
Mortality	--	--	--	--	--	--	--	--	--	--	--	-105	33	-111	42	-216	53	-216	53		
Cut	--	--	--	--	--	--	--	--	--	--	--	-3,048	715	-510	228	-3,558	747	-3,558	747		
Gross Growth	--	--	--	--	--	--	--	--	--	--	--	954	199	525	175	1,480	263	1,480	263		
Net Live	--	--	--	--	--	--	--	--	--	--	--	-2,199	610	-96	203	-2,295	642	-2,295	642		
Standing Dead Change	--	--	--	--	--	--	--	--	--	--	--	-5	56	30	30	25	64	25	64		
Dead Woody Debris Change	--	--	--	--	--	--	--	--	--	--	--	-370	242	-44	97	-414	261	-414	261		
Total Net ¹	--	--	--	--	--	--	--	--	--	--	--	-3,129	901	-131	255	-3,260	936	-3,260	936		
Cut and Fire																					
Mortality	--	--	--	--	--	--	--	--	--	-17	18	-3	2	--	--	-3	2	-20	18		
Cut	--	--	--	--	--	--	--	--	--	-105	109	-67	62	--	--	-67	62	-171	126		
Gross Growth	--	--	--	--	--	--	--	--	--	53	55	14	13	--	--	14	13	67	57		
Net Live	--	--	--	--	--	--	--	--	--	-69	72	-55	51	--	--	-55	51	-124	88		
Standing Dead Change	--	--	--	--	--	--	--	--	--	-1	1	1	1	--	--	1	1	1	1		
Dead Woody Debris Change	--	--	--	--	--	--	--	--	--	12	13	13	9	--	--	13	9	25	15		
Total Net ¹	--	--	--	--	--	--	--	--	--	-69	72	-53	58	--	--	-53	58	-122	92		
Fire																					
Mortality	-277	122	-259	134	--	--	-535	181	--	--	-73	77	-70	52	-46	33	-116	61	-725	206	
Cut	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-1	1	-1	1	-1	1	
Gross Growth	114	46	121	54	--	--	235	71	--	--	26	27	66	41	67	38	133	56	393	95	
Net Live	-162	91	-138	91	--	--	-301	129	--	--	-48	50	-4	36	20	38	16	52	-332	148	
Standing Dead Change	52	43	15	46	--	--	67	63	--	--	9	10	25	25	14	8	39	27	115	69	
Dead Woody Debris Change	53	43	62	55	--	--	115	70	--	--	-24	25	-49	32	32	29	-17	43	74	86	
Total Net ¹	-112	57	-95	105	--	--	-207	119	--	--	-71	74	-21	46	76	44	55	64	-223	154	
Insect and Disease																					
Mortality	-22	21	-15	7	--	--	-37	22	-30	39	-119	73	-100	43	-187	75	-288	86	-474	121	
Cut	--	--	--	--	--	--	--	--	--	--	--	--	-14	13	-13	11	-26	17	-26	17	
Gross Growth	65	39	55	27	--	--	120	47	4	5	82	51	235	107	403	153	638	187	844	199	
Net Live	43	25	40	22	--	--	83	34	-26	34	-38	29	121	65	203	122	324	138	343	148	
Standing Dead Change	-1	2	-7	6	--	--	-8	6	5	6	-74	91	3	20	29	25	31	32	-45	97	
Dead Woody Debris Change	-9	6	-15	20	--	--	-24	21	15	19	60	72	1	9	19	34	20	36	71	84	
Total Net ¹	36	25	28	17	--	--	64	30	-8	10	-65	121	166	95	297	131	463	162	454	205	
Other cut and weather																					
Mortality	-67	40	-14	11	--	--	-81	42	--	--	--	--	-87	60	-46	28	-132	66	-213	78	
Cut	--	--	--	--	--	--	--	--	--	--	--	--	-125	74	-45	26	-170	78	-170	78	
Gross Growth	150	73	22	16	--	--	172	75	--	--	--	--	285	118	236	101	521	154	693	171	
Net Live	83	54	8	6	--	--	91	55	--	--	--	--	73	91	146	68	219	114	310	126	
Standing Dead Change	21	17	6	5	--	--	27	18	--	--	--	--	14	8	6	4	20	9	48	20	
Dead Woody Debris Change	16	16	3	3	--	--	18	16	--	--	--	--	-36	45	44	43	8	62	26	65	
Total Net ¹	145	74	18	14	--	--	163	75	--	--	--	--	76	130	234	107	310	168	473	184	
Less than 25% disturbed																					
Mortality	-433	113	-247	80	--	--	-681	138	-255	97	-550	222	-784	112	-847	117	-1,631	159	-3,117	320	
Cut	--	--	--	--	--	--	--	--	--	--	-3	3	-255	90	-63	40	-319	98	-321	98	
Gross Growth	1,222	209	870	182	--	--	2,092	275	923	220	1,874	323	5,991	568	4,596	451	10,587	689	15,476	833	
Net Live	789	175	622	154	--	--	1,411	232	667	166	1,321	230	4,952	500	3,687	393	8,638	607	12,038	705	
Standing Dead Change	8	63	37	38	--	--	45	74	-73	58	29	36	215	116	93	59	308	130	309	164	
Dead Woody Debris Change	-80	58	-71	59	--	--	-151	83	-77	136	-47	67	-472	241	-242	147	-714	282	-988	331	
Total Net ¹	908	206	708	191	--	--	1,616	279	633	228	1,612	283	6,004	665	4,399	487	10,403	793	14,263	912	
Total																					
Mortality	-800	171	-535	156	--	--	-1,335	230	-285	106	-760	241	-1,149	145	-1,237	150	-2,386	204	-4,765	403	
Cut	--	--	--	--	--	--	--	--	--	--	-107	110	-3,509	736	-631	232	-4,140	767	-4,248	775	
Gross Growth	1,552	227	1,067	192	--	--	2,619	294	926	220	2,034	321	7,545	610	5,828	508	13,372	742	18,952	881	
Net Live	752	207	532	182	--	--	1,285	274	641	168	1,167	262	2,887	806	3,959	463	6,847	920	9,940	1,007	
Standing Dead Change	80	78	51	61	--	--	132	99	-68	59	-36	99	254	133	171	71	425	150	452	214	
Dead Woody Debris Change	-21	75	-21	86	--	--	-42	114	-62	137	2	102	-913	344	-192	187	-1,105	392	-1,206	442	
Total Net ¹	976	227	660	219	--	--	1,636	314	625	228	1,407	348	3,043	1,137	4,874	573	7,917	1,268	11,585	1,368	

¹ Total Net value includes change from roots and understory vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table B9.5: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Northern Forest Practice District

	USDA Forest Service								Other Public				Private				Total			
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate				Total	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE		
<i>thousand metric tons CO2 equivalent per year</i>																				
Cut																				
Mortality	-85	39	--	--	--	--	-85	39	--	--	--	--	-210	53	-18	9	-229	53	-314	66
Cut	-786	188	--	--	--	--	-786	188	-5	5	--	--	-4,106	591	-260	95	-4,366	597	-5,156	626
Gross Growth	704	138	--	--	--	--	704	138	11	12	--	--	1,979	236	239	84	2,218	248	2,933	284
Net Live	-167	124	--	--	--	--	-167	124	6	7	--	--	-2,337	513	-39	64	-2,376	517	-2,537	532
Standing Dead Change	-69	34	--	--	--	--	-69	34	--	--	--	--	-75	43	-18	15	-93	45	-162	56
Dead Woody Debris Change	-10	48	--	--	--	--	-10	48	3	4	--	--	-161	113	-4	23	-165	115	-172	125
Total Net ¹	-277	195	--	--	--	--	-277	195	11	12	--	--	-3,074	674	-83	84	-3,158	679	-3,423	707
Cut and Fire																				
Mortality	-104	48	--	--	--	--	-104	48	--	--	--	--	-314	112	-30	30	-344	116	-448	125
Cut	-344	201	--	--	--	--	-344	201	--	--	--	--	-862	352	--	--	-862	352	-1,206	405
Gross Growth	111	45	--	--	--	--	111	45	--	--	--	--	127	45	5	5	132	45	244	64
Net Live	-336	197	--	--	--	--	-336	197	--	--	--	--	-1,049	376	-25	25	-1,074	377	-1,410	425
Standing Dead Change	32	42	--	--	--	--	32	42	--	--	--	--	67	56	-7	7	60	56	92	70
Dead Woody Debris Change	-40	31	--	--	--	--	-40	31	--	--	--	--	75	95	-7	7	67	95	27	100
Total Net ¹	-414	248	--	--	--	--	-414	248	--	--	--	--	-1,128	402	-44	44	-1,172	404	-1,586	474
Fire																				
Mortality	-4,435	705	-2,824	670	-221	97	-7,481	977	-166	94	-76	65	-205	77	-165	74	-369	106	-8,092	990
Cut	-13	13	--	--	-2	1	-15	13	--	--	--	--	-13	11	-22	18	-34	21	-49	25
Gross Growth	1,461	190	717	134	69	25	2,248	234	155	58	8	7	115	44	112	51	227	67	2,638	250
Net Live	-2,987	622	-2,107	604	-153	87	-5,248	870	-12	68	-68	58	-102	70	-74	42	-176	81	-5,503	879
Standing Dead Change	1,790	457	1,197	408	31	41	3,019	613	38	29	18	16	-12	54	8	42	-4	69	3,072	618
Dead Woody Debris Change	-242	158	-30	104	13	26	-259	191	19	24	21	18	-59	34	56	57	-3	66	-221	205
Total Net ¹	-1,740	430	-1,185	388	-142	85	-3,066	585	48	61	-38	33	-188	120	-26	65	-215	137	-3,271	604
Insect and Disease																				
Mortality	-1,600	207	-208	76	-9	9	-1,817	220	-91	39	-5	7	-238	66	-89	26	-328	71	-2,241	234
Cut	-51	27	--	--	--	--	-51	27	--	--	--	--	-28	13	--	--	-28	13	-78	30
Gross Growth	2,552	258	259	85	18	13	2,829	272	93	44	13	16	742	148	228	59	970	158	3,904	317
Net Live	901	189	52	54	9	14	962	197	1	37	7	9	476	118	138	45	615	126	1,585	237
Standing Dead Change	-121	135	34	48	-1	7	-88	143	34	16	3	4	-7	26	-10	39	-17	47	-68	151
Dead Woody Debris Change	266	141	18	44	-25	25	258	150	-9	23	--	--	-103	54	-23	26	-126	60	123	163
Total Net ¹	1,259	253	128	64	-14	23	1,373	262	44	44	13	17	464	124	144	72	608	143	2,037	302
Other cut and weather																				
Mortality	-200	73	-22	11	--	--	-222	74	--	--	--	--	-121	53	-2	1	-123	53	-345	91
Cut	-79	47	-10	9	--	--	-90	48	--	--	-2	3	-113	42	-51	45	-164	61	-257	78
Gross Growth	503	119	39	20	1	2	542	121	41	40	30	34	421	122	116	47	537	130	1,150	185
Net Live	224	91	6	23	1	2	231	94	41	40	27	31	187	95	63	50	250	107	548	151
Standing Dead Change	-34	51	-49	46	--	--	-83	69	4	4	-11	12	22	16	-8	6	15	17	-75	72
Dead Woody Debris Change	30	105	27	26	-3	3	54	108	-5	5	--	--	-179	120	2	24	-177	123	-129	163
Total Net ¹	261	124	-23	51	-3	5	236	133	52	51	19	22	69	115	70	72	138	136	445	198
Less than 25% disturbed																				
Mortality	-2,984	260	-764	138	-107	33	-3,856	294	-276	118	-94	31	-840	115	-830	107	-1,670	156	-5,896	355
Cut	-26	13	--	--	-1	1	-27	13	--	--	-1	1	-129	40	-30	18	-159	43	-187	46
Gross Growth	8,615	434	1,309	175	451	84	10,375	465	564	113	323	87	4,632	356	2,865	260	7,497	425	18,760	643
Net Live	5,605	378	545	135	343	69	6,492	403	288	126	229	76	3,663	314	2,005	222	5,668	374	12,677	566
Standing Dead Change	22	173	-215	158	-50	24	-243	236	83	45	26	14	131	91	18	95	149	132	14	275
Dead Woody Debris Change	-124	275	106	84	-55	67	-73	295	85	42	-31	17	-124	140	-4	110	-128	178	-147	347
Total Net ¹	6,813	510	529	242	275	89	7,617	564	559	131	280	88	4,553	407	2,469	317	7,023	504	15,479	770
Total																				
Mortality	-9,408	755	-3,819	672	-337	103	-13,565	1,013	-534	156	-175	72	-1,928	199	-1,134	144	-3,063	242	-17,337	1,054
Cut	-1,298	280	-10	9	-3	2	-1,312	280	-5	5	-3	3	-5,250	687	-363	109	-5,613	694	-6,933	748
Gross Growth	13,946	495	2,325	208	540	89	16,810	530	863	137	374	95	8,017	441	3,565	285	11,582	493	29,629	733
Net Live	3,239	809	-1,505	629	199	112	1,934	1,030	324	154	195	101	838	732	2,068	248	2,906	773	5,359	1,300
Standing Dead Change	1,620	511	968	442	-20	48	2,567	678	159	56	37	25	126	131	-17	113	109	173	2,873	702
Dead Woody Debris Change	-120	367	120	141	-70	77	-69	400	94	54	-10	25	-552	245	19	131	-533	278	-518	491
Total Net ¹	5,903	798	-551	470	117	126	5,468	931	714	159	274	98	696	911	2,529	357	3,225	979	9,682	1,363

¹ Total Net value includes change from roots and understorey vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table B9.6: Annual Net Change in Carbon Stocks for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: Southern Forest Practice District

	USDA Forest Service						Other Public				Private				Total																									
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate				Non Corporate																							
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE																								
<i>thousand metric tons CO2 equivalent per year</i>																																								
Cut																																								
Mortality	-53	44	-6	6	--	--	-59	45	--	--	-3	3	-36	21	-74	48	-110	52	-172	69																				
Cut	-65	30	-3	3	--	--	-68	30	--	--	--	--	-604	215	-43	21	-647	216	-716	218																				
Gross Growth	219	73	14	15	--	--	233	74	--	--	3	2	341	106	122	77	463	130	699	152																				
Net Live	101	56	5	6	--	--	106	56	--	--	-1	1	-299	168	5	28	-294	171	-188	180																				
Standing Dead Change	-54	52	--	--	--	--	-54	52	--	--	3	2	-12	13	50	42	38	44	-13	68																				
Dead Woody Debris Change	-55	42	-1	1	--	--	-57	42	--	--	-8	7	8	40	69	65	77	76	12	88																				
Total Net ¹		96		5		5		4		96		-6		5		-368		194		140		92		-228		215		-229		235										
Cut and Fire																																								
Mortality	-159	106	--	--	--	--	-159	106	--	--	--	--	-85	80	--	--	-85	80	-244	133																				
Cut	-98	47	--	--	--	--	-98	47	--	--	--	--	-18	16	--	--	-18	16	-116	49																				
Gross Growth	91	46	--	--	--	--	91	46	--	--	--	--	42	33	--	--	42	33	133	57																				
Net Live	-166	97	--	--	--	--	-166	97	--	--	--	--	-61	77	--	--	-61	77	-227	124																				
Standing Dead Change	8	33	--	--	--	--	8	33	--	--	--	--	7	6	--	--	7	6	15	33																				
Dead Woody Debris Change	-7	19	--	--	--	--	-7	19	--	--	--	--	1	--	--	--	1	--	-6	19																				
Total Net ¹		-194		106		--		-194		106		--		-64		88		-64		88		--		-64		88		-258		138										
Fire																																								
Mortality	-1,056	302	-1,761	432	-428	138	-3,245	543	-978	403	-114	69	-4	3	-274	104	-278	104	-4,615	687																				
Cut	-11	12	--	--	--	--	-11	12	--	--	--	--	--	--	-14	13	-14	13	-25	18																				
Gross Growth	233	67	288	70	67	29	588	101	269	85	8	6	3	2	62	24	64	24	930	135																				
Net Live	-834	262	-1,473	383	-361	125	-2,668	478	-709	362	-106	69	-1	1	-226	89	-227	89	-3,710	610																				
Standing Dead Change	526	235	609	201	73	89	1,208	321	24	335	29	26	--	--	76	40	76	40	1,338	466																				
Dead Woody Debris Change	-115	66	-20	86	-25	35	-160	114	-77	83	39	28	1	1	24	36	25	36	-173	148																				
Total Net ¹		-506		173		-1,069		312		-390		138		-1,966		382		-928		382		-55		55		-1		1		-165		65		-166		65		-3,115		547
Insect and Disease																																								
Mortality	-946	217	-521	172	-125	63	-1,592	284	-884	412	-51	34	-5	4	-125	83	-130	83	-2,657	509																				
Cut	-14	14	--	--	--	--	-14	14	--	--	--	--	--	--	-16	16	-16	16	-30	21																				
Gross Growth	1,118	183	313	83	50	19	1,481	201	347	94	178	94	48	30	147	68	195	74	2,201	252																				
Net Live	158	190	-208	138	-75	47	-125	240	-537	362	127	66	44	30	6	74	49	80	-486	446																				
Standing Dead Change	148	157	40	81	46	45	235	182	490	320	-21	32	-25	22	52	82	27	85	731	379																				
Dead Woody Debris Change	9	149	289	169	31	17	330	226	128	85	-20	25	24	22	-16	19	8	29	445	244																				
Total Net ¹		387		213		99		165		-8		33		478		272		52		105		114		82		45		28		53		51		98		58		743		308
Other cut and weather																																								
Mortality	-449	155	-258	116	-96	41	-802	198	-129	78	-5	5	-7	5	-392	128	-398	128	-1,335	249																				
Cut	-18	17	-2	2	--	--	-20	17	--	--	--	--	--	--	-51	29	-51	29	-71	34																				
Gross Growth	278	81	209	69	65	30	552	110	82	36	3	2	9	7	287	78	297	78	934	140																				
Net Live	-189	100	-50	84	-31	21	-270	132	-47	44	-2	4	3	7	-156	122	-153	123	-472	186																				
Standing Dead Change	296	125	121	114	55	32	472	172	38	28	4	3	-1	1	242	107	241	107	755	204																				
Dead Woody Debris Change	-53	32	34	44	20	28	61		24		36	30	-10	12	131	83	120	84	156	111																				
Total Net ¹		55		50		111		77		47		32		214		98		-15		41		39		31		-9		10		234		93		225		94		462		145
Less than 25% disturbed																																								
Mortality	-1,434	266	-827	145	-179	45	-2,440	306	-330	71	-99	30	-102	33	-752	106	-854	110	-3,723	334																				
Cut	-3	2	--	--	--	--	-3	2	--	--	--	--	-72	46	-88	43	-160	63	-163	63																				
Gross Growth	2,811	288	1,622	180	339	72	4,772	343	952	130	284	80	807	178	1,630	159	2,438	237	8,445	442																				
Net Live	1,374	280	794	173	160	74	2,328	336	622	125	185	76	633	164	790	140	1,424	214	4,559	424																				
Standing Dead Change	286	184	-159	117	-26	37	101	221	-271	109	-57	42	50	23	195	59	246	63	19	258																				
Dead Woody Debris Change	-53	130	-34	189	17	45	-70	234	173	158	91	45	-93	36	-54	90	-147	97	47	302																				
Total Net ¹		2,037		318		761		208		181		90		2,980		388		611		225		231		91		742		189		1,112		183		1,854		261		5,675		527
Total																																								
Mortality	-4,098	486	-3,373	490	-828	163	-8,298	703	-2,321	570	-272	82	-238	89	-1,617	216	-1,856	233	-12,746	937																				
Cut	-209	61	-5	4	--	--	-215	61	--	--	--	--	-695	229	-212	59	-907	236	-1,121	244																				
Gross Growth	4,751	354	2,446	211	520	84	7,718	410	1,649	170	476	120	1,251	213	2,249	203	3,500	291	13,342	542																				
Net Live	444	458	-932	453	-307	154	-794	662	-672	529	204	121	318	249	420	221	737	334	-525	920																				
Standing Dead Change	1,209	363	612	272	149	111	1,970	466	281	474	-42	59	19	35	616	157	635	160	2,845	687																				
Dead Woody Debris Change	-273	218	267	274	43	66	37	356	222	199	138	67	-71	61	155	144	84	157	481	442																				
Total Net ¹		1,780		450		-93		417		-169		172		1,517		636		-280		462		322		136		344		284		1,374		239		1,719		371		3,277		880

¹ Total Net value includes change from roots and understory vegetation which are not enumerated in this table. Excludes change from SOC and forest floor (litter).

Table B10: Annual Net Change Per Acre in Carbon Stock for Aboveground Pools on Forest Land by Disturbance, Forest Land Status and Owner Group, 2001-2008 to 2011-2018: All California

	USDA Forest Service								Other Public				Private				Total	Total		
	Timberland		Reserved		Low productive, unreserved		Total		Other federal		State and local govt.		Corporate		Non Corporate				Total	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE			Mean	SE
<i>metric tons CO2 equivalent per year and acre</i>																				
Cut																				
Mortality	-0.0236	0.0082	-0.0014	0.0014	-0.0014	0.0014	-0.0144	0.0049	-0.0001	0.0001	-0.0138	0.0116	-0.0754	0.0126	-0.0382	0.0110	-0.0557	0.0083	-0.0289	0.0040
Cut	-0.1281	0.0257	-0.0007	0.0007	--	--	-0.0755	0.0151	-0.0062	0.0057	-0.0169	0.0169	-1.4972	0.1675	-0.1397	0.0400	-0.7784	0.0828	-0.3371	0.0326
Gross Growth	0.1215	0.0185	0.0035	0.0035	0.0003	0.0003	0.0724	0.0110	0.0045	0.0043	0.0145	0.0130	0.6648	0.0585	0.1565	0.0340	0.3957	0.0330	0.1883	0.0138
Net Live	-0.0301	0.0214	0.0013	0.0013	-0.0011	0.0011	-0.0175	0.0126	-0.0018	0.0054	-0.0162	0.0163	-0.9077	0.1464	-0.0214	0.0347	-0.4384	0.0721	-0.1777	0.0284
Standing Dead Change	-0.0225	0.0146	--	--	0.0004	0.0004	-0.0132	0.0086	-0.0006	0.0006	0.0038	0.0026	-0.0179	0.0130	0.0084	0.0091	-0.0040	0.0078	-0.0079	0.0052
Dead Woody Debris Change	-0.0003	0.0093	-0.0003	0.0003	0.0035	0.0035	0.0002	0.0055	0.0060	0.0059	0.0118	0.0216	-0.1023	0.0495	0.0149	0.0224	-0.0402	0.0262	-0.0144	0.0104
Total Net ¹	-0.0624	0.0299	0.0012	0.0012	0.0026	0.0026	-0.0360	0.0176	0.0028	0.0046	-0.0023	0.0057	-1.2379	0.2046	-0.0027	0.0466	-0.5838	0.1006	-0.2417	0.0396
Cut and Fire																				
Mortality	-0.0373	0.0147	--	--	--	--	-0.0219	0.0086	--	--	-0.0159	0.0159	-0.0938	0.0278	-0.0048	0.0048	-0.0467	0.0134	-0.0292	0.0067
Cut	-0.0676	0.0273	--	--	--	--	-0.0398	0.0160	--	--	-0.0979	0.0979	-0.2077	0.0726	--	--	-0.0977	0.0342	-0.0604	0.0157
Gross Growth	0.0297	0.0087	--	--	--	--	0.0175	0.0051	--	--	0.0494	0.0494	0.0404	0.0111	0.0008	0.0008	0.0194	0.0052	0.0177	0.0037
Net Live	-0.0752	0.0282	--	--	--	--	-0.0442	0.0166	--	--	-0.0643	0.0643	-0.2611	0.0810	-0.0040	0.0040	-0.1250	0.0383	-0.0719	0.0170
Standing Dead Change	0.0040	0.0068	--	--	--	--	0.0023	0.0040	--	--	-0.0007	0.0007	0.0122	0.0102	-0.0011	0.0011	-0.0051	0.0049	-0.0031	0.0027
Dead Woody Debris Change	-0.0037	0.0046	--	--	--	--	-0.0022	0.0027	--	--	0.0112	0.0112	0.0150	0.0178	-0.0012	0.0012	0.0064	0.0084	0.0018	0.0035
Total Net ¹	-0.0909	0.0348	--	--	--	--	-0.0534	0.0204	--	--	-0.0642	0.0642	-0.2903	0.0903	-0.0071	0.0071	-0.1403	0.0428	-0.0823	0.0194
Fire																				
Mortality	-0.7685	0.0944	-1.3367	0.2023	-0.4690	0.1146	-0.8801	0.0793	-0.4765	0.1527	-0.2562	0.1134	-0.0582	0.0171	-0.1075	0.0280	-0.0843	0.0169	-0.5157	0.0420
Cut	-0.0216	0.0200	--	--	-0.0009	0.0006	-0.0128	0.0118	--	--	--	--	-0.0023	0.0023	-0.0061	0.0036	-0.0043	0.0021	-0.0079	0.0058
Gross Growth	0.2297	0.0238	0.2966	0.0382	0.0889	0.0199	0.2279	0.0177	0.1646	0.0364	0.0396	0.0268	0.0386	0.0111	0.0527	0.0129	0.0461	0.0086	0.1457	0.0099
Net Live	-0.5604	0.0873	-1.0401	0.1826	-0.3810	0.1041	-0.6650	0.0725	-0.3120	0.1374	-0.2167	0.0956	-0.0218	0.0144	-0.0608	0.0231	-0.0425	0.0140	-0.3780	0.0382
Standing Dead Change	0.3248	0.0623	0.4831	0.1145	0.1376	0.0703	0.3412	0.0489	0.0073	0.1268	0.0553	0.0297	0.0047	0.0110	0.0308	0.0134	0.0185	0.0088	0.1768	0.0269
Dead Woody Debris Change	-0.0431	0.0225	-0.0037	0.0374	-0.0128	0.0210	-0.0282	0.0169	-0.0351	0.0325	0.0353	0.0389	-0.0214	0.0086	0.0239	0.0134	0.0026	0.0081	-0.0148	0.0095
Total Net ¹	-0.3424	0.0659	-0.7007	0.1365	-0.3267	0.0826	-0.4372	0.0547	-0.4139	0.1537	-0.1630	0.0915	-0.0412	0.0234	-0.0140	0.0173	-0.0268	0.0143	-0.2679	0.0309
Insect and Disease																				
Mortality	-0.3856	0.0429	-0.2349	0.0592	-0.0754	0.0322	-0.3009	0.0303	-0.4529	0.1547	-0.1695	0.0745	-0.0688	0.0148	-0.0770	0.0202	-0.0731	0.0127	-0.2227	0.0212
Cut	-0.0073	0.0034	--	--	--	--	-0.0043	0.0020	--	--	--	--	-0.0087	0.0035	-0.0049	0.0031	-0.0067	0.0023	-0.0047	0.0013
Gross Growth	0.4910	0.0366	0.1745	0.0302	0.0366	0.0113	0.3410	0.0233	0.2054	0.0409	0.2656	0.1004	0.1978	0.0340	0.1429	0.0297	0.1687	0.0224	0.2598	0.0192
Net Live	0.0980	0.0376	-0.0604	0.0503	-0.0388	0.0245	-0.0358	0.0262	-0.2475	0.1332	-0.0960	0.0695	0.1203	0.0250	0.0611	0.0249	0.0889	0.0176	0.0324	0.0152
Standing Dead Change	0.0477	0.0319	0.0485	0.0426	0.0249	0.0220	0.0447	0.0222	0.1947	0.1178	-0.0919	0.0904	-0.0050	0.0074	0.0211	0.0166	0.0089	0.0094	0.0399	0.0161
Dead Woody Debris Change	0.0271	0.0249	0.0606	0.0456	-0.0033	0.0155	0.0319	0.0193	0.0601	0.0345	0.0194	0.0766	-0.0107	0.0111	0.0011	0.0085	-0.0044	0.0069	0.0201	0.0106
Total Net ¹	0.2084	0.0399	0.0500	0.0461	-0.0214	0.0220	0.1330	0.0268	-0.0044	0.0561	0.0389	0.1421	0.1310	0.0294	0.1013	0.0279	0.1153	0.0202	0.1104	0.0168
Other cut and weather																				
Mortality	-0.0998	0.0249	-0.0756	0.0289	-0.0545	0.0213	-0.0869	0.0168	-0.0620	0.0304	-0.0049	0.0044	-0.0426	0.0148	-0.0840	0.0219	-0.0645	0.0136	-0.0732	0.0101
Cut	-0.0140	0.0059	-0.0030	0.0024	--	--	-0.0090	0.0036	-0.0055	0.0054	-0.0023	0.0023	-0.0447	0.0154	-0.0250	0.0096	-0.0342	0.0088	-0.0182	0.0038
Gross Growth	0.1177	0.0188	0.0721	0.0182	0.0336	0.0142	0.0935	0.0122	0.0557	0.0206	0.0307	0.0321	0.1316	0.0304	0.1131	0.0222	0.1218	0.0185	0.0987	0.0096
Net Live	0.0039	0.0210	-0.0065	0.0216	-0.0210	0.0127	-0.0025	0.0138	-0.0117	0.0244	0.0235	0.0292	0.0443	0.0240	0.0042	0.0247	0.0230	0.0173	0.0074	0.0098
Standing Dead Change	0.0477	0.0208	0.0168	0.0304	0.0305	0.0156	0.0369	0.0149	0.0174	0.0103	-0.0065	0.0119	0.0089	0.0038	0.0449	0.0178	0.0280	0.0096	0.0302	0.0082
Dead Woody Debris Change	-0.0008	0.0128	0.0051	0.0156	0.0096	0.0136	0.0022	0.0088	0.0073	0.0114	0.0336	0.0276	-0.0401	0.0234	0.0340	0.0161	-0.0008	0.0139	0.0026	0.0070
Total Net ¹	0.0593	0.0179	0.0162	0.0245	0.0195	0.0166	0.0420	0.0126	0.0142	0.0248	0.0537	0.0355	0.0246	0.0316	0.0943	0.0263	0.0615	0.0204	0.0473	0.0103
Less than 25% disturbed																				
Mortality	-0.6271	0.0441	-0.5479	0.0576	-0.1651	0.0287	-0.5404	0.0305	-0.3652	0.0604	-0.8387	0.2107	-0.3854	0.0311	-0.4423	0.0304	-0.4155	0.0216	-0.4869	0.0194
Cut	-0.0032	0.0015	-0.0002	0.0001	-0.0006	0.0006	-0.0020	0.0009	-0.0001	0.0001	-0.0032	0.0024	-0.0838	0.0196	-0.0292	0.0099	-0.0549	0.0106	-0.0222	0.0041
Gross Growth	1.6174	0.0550	1.0985	0.0703	0.4169	0.0492	1.3072	0.0379	1.0161	0.0979	2.6312	0.2984	2.3614	0.1095	1.6324	0.0746	1.9754	0.0632	1.5836	0.0333
Net Live	0.9871	0.0551	0.5505	0.0685	0.2512	0.0473	0.7648	0.0377	0.6508	0.0901	1.7894	0.2266	1.8923	0.1015	1.1609	0.0704	1.5050	0.0593	1.0746	0.0313
Standing Dead Change	0.0356	0.0327	-0.0846	0.0524	-0.0352	0.0213	-0.0070	0.0241	-0.1093	0.0541	0.0075	0.0544	0.0670	0.0296	0.0556	0.0216	0.0610	0.0180	0.0103	0.0147
Dead Woody Debris Change	-0.0174	0.0375	-0.0101	0.0604	-0.0243	0.0390	-0.0164	0.0280	0.0955	0.0888	-0.0106	0.1079	-0.1212	0.0536	-0.0288	0.0342	-0.0722	0.0311	-0.0274	0.0202
Total Net ¹	1.2477	0.0708	0.5571	0.0942	0.2246	0.0612	0.9160	0.0493	0.7595	0.1338	2.1878	0.2689	2.3112	0.1356	1.4573	0.0910	1.8591	0.0784	1.3085	0.0414
Total																				
Mortality	-1.9419	0.1049	-2.1965	0.2038	-0.7654	0.1189	-1.8446	0.0840	-1.3567	0.2117	-1.2990	0.2368	-0.7241	0.0463	-0.7539	0.0485	-0.7399	0.0335	-1.3566	0.0481
Cut	-0.2419	0.0427	-0.0039	0.0025	-0.0014	0.0009	-0.1434	0.0251	-0.0118	0.0078	-0.1203	0.1038	-1.8443	0.1821	-0.2049	0.0423	-0.9762	0.0902	-0.4504	0.0369
Gross Growth	2.6071	0.0471	1.6452	0.0657	0.5761	0.0507	2.0595	0.0339	1.4463	0.0939	3.0310	0.2801	3.4346	0.0977	2.0985	0.0770	2.7271	0.0586	2.2939	0.0303
Net Live	0.4233	0.1221	-0.5552	0.2088	-0.1907	0.1206	0.0714	0.0929	0.0777	0.2197	1.6117	0.2750	0.8662	0.2117	1.1398	0.0899	1.0111	0.1105	0.4869	0.0664
Standing Dead Change	0.4372	0.0808	0.4638	0.1363	0.1583	0.0781	0.4050	0.0610	0.1095	0.1814	-0.0326	0.1105	0.0699	0.0366	0.1597	0.0359	0.1175	0.0257	0.2522	0.0358
Dead Woody Debris Change	-0.0384	0.0531	0.0515	0.08																

Table B11: Annual Net Change in Carbon Stocks for Aboveground Pools on Timberland by Disturbance, and Owner Group, 2001-2008 to 2011-2018: All California

	USDA Forest Service		Other Public				Private				Total		Total	
			Other federal		State and local govt.		Corporate		Non Corporate					
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons CO2 equivalent per year</i>														
Cut														
Mortality	-207	72	--	--	--	--	-415	70	-209	67	-624	96	-831	120
Cut	-1,124	226	-5	5	--	--	-8,250	945	-786	247	-9,036	969	-10,164	996
Gross Growth	1,067	163	10	12	--	--	3,663	334	908	211	4,572	386	5,648	420
Net Live	-264	188	6	7	--	--	-5,002	817	-86	214	-5,088	844	-5,347	865
Standing Dead Change	-198	128	--	--	--	--	-99	72	56	56	-43	91	-241	157
Dead Woody Debris Change	-3	81	3	4	--	--	-564	273	94	139	-469	307	-469	317
Total Net ¹	-548	263	10	12	--	--	-6,821	1,142	61	286	-6,761	1,178	-7,298	1,207
Cut and Fire														
Mortality	-327	129	--	--	-17	18	-517	154	-30	30	-547	157	-891	204
Cut	-593	239	--	--	-105	109	-1,144	401	--	--	-1,144	401	-1,842	480
Gross Growth	261	77	--	--	53	55	223	61	5	5	228	61	541	113
Net Live	-660	247	--	--	-69	72	-1,439	448	-25	25	-1,464	449	-2,192	517
Standing Dead Change	35	60	--	--	-1	1	67	56	-7	7	60	57	94	83
Dead Woody Debris Change	-33	41	--	--	12	13	82	98	-7	7	75	99	55	107
Total Net ¹	-798	305	--	--	-69	72	-1,600	499	-44	44	-1,643	501	-2,510	591
Fire														
Mortality	-6,743	831	-39	21	--	--	-281	92	-309	141	-590	168	-7,372	848
Cut	-190	176	--	--	--	--	-13	11	-22	18	-35	21	-225	177
Gross Growth	2,016	210	37	23	--	--	189	60	188	71	377	93	2,430	231
Net Live	-4,917	768	-1	24	--	--	-105	78	-144	117	-249	141	-5,167	781
Standing Dead Change	2,850	547	4	3	--	--	15	60	125	70	140	92	2,994	555
Dead Woody Debris Change	-378	198	1	12	--	--	-117	47	52	44	-65	65	-442	209
Total Net ¹	-3,004	579	7	25	--	--	-220	129	38	76	-182	150	-3,179	599
Insect and Disease														
Mortality	-3,384	379	-14	12	-42	48	-334	79	-401	123	-735	145	-4,175	409
Cut	-64	30	--	--	--	--	-48	19	-30	19	-78	27	-143	41
Gross Growth	4,308	328	11	9	32	30	1,017	186	772	184	1,789	259	6,141	419
Net Live	860	330	-3	3	-10	24	635	137	341	153	976	204	1,823	389
Standing Dead Change	419	279	9	7	-40	56	-28	37	99	100	71	106	459	304
Dead Woody Debris Change	238	219	-11	9	54	70	-61	61	-8	47	-69	77	211	242
Total Net ¹	1,828	351	-4	4	3	21	693	161	522	168	1,216	232	3,043	421
Other cut and weather														
Mortality	-876	218	-7	5	--	--	-182	76	-107	44	-289	88	-1,172	236
Cut	-123	52	-15	15	--	--	-221	83	-143	59	-364	102	-502	115
Gross Growth	1,033	165	63	44	--	--	702	168	492	130	1,194	212	2,291	272
Net Live	34	184	41	43	--	--	299	129	243	97	541	161	616	248
Standing Dead Change	418	183	9	6	--	--	28	16	-11	11	17	20	444	184
Dead Woody Debris Change	-7	112	7	13	--	--	-251	127	115	92	-135	157	-136	193
Total Net ¹	520	157	69	54	--	--	151	173	405	155	556	233	1,145	286
Less than 25% disturbed														
Mortality	-5,502	392	-124	50	-76	28	-1,939	173	-1,571	168	-3,509	231	-9,212	458
Cut	-28	14	--	--	-3	3	-396	98	-105	45	-500	107	-531	108
Gross Growth	14,192	513	479	124	828	211	12,309	673	7,444	529	19,753	756	35,252	934
Net Live	8,661	495	355	105	749	193	9,975	606	5,769	462	15,744	691	25,509	869
Standing Dead Change	312	287	19	18	-23	14	313	161	162	97	474	187	782	344
Dead Woody Debris Change	-153	329	61	46	-59	33	-673	294	-178	189	-851	349	-1,001	483
Total Net ¹	10,948	634	516	143	833	219	12,151	798	7,159	592	19,310	910	31,607	1,130
Total														
Mortality	-17,039	941	-184	54	-135	58	-3,668	267	-2,626	263	-6,294	355	-23,652	1,010
Cut	-2,122	375	-20	16	-108	110	-10,072	1,033	-1,086	259	-11,158	1,055	-13,408	1,125
Gross Growth	22,876	505	601	134	913	217	18,104	697	9,809	590	27,913	727	52,303	898
Net Live	3,715	1,073	397	116	671	212	4,364	1,167	6,097	554	10,460	1,275	15,243	1,694
Standing Dead Change	3,836	709	40	20	-63	58	297	198	423	166	720	258	4,533	756
Dead Woody Debris Change	-337	466	61	51	7	78	-1,583	437	69	261	-1,514	510	-1,783	697
Total Net ¹	8,947	1,044	599	154	767	236	4,354	1,546	8,142	696	12,496	1,679	22,810	2,000

¹Total Net value includes change from roots and understory vegetation which are not enumerated in this table.

Table B12: Annual Net Change Per Acre in Carbon Stock for Aboveground Pools on Timberland by Disturbance, and Owner Group, 2001-2008 to 2011-2018: All California

	USDA Forest Service		Other Public				Corporate		Private		Total		Total	
	Mean	SE	Other federal		State and local govt.		Mean	SE	Non Corporate		Mean	SE	Mean	SE
			Mean	SE	Mean	SE			Mean	SE				
	<i>metric tons CO2 equivalent per year and acre</i>													
Cut														
Mortality	-0.0236	0.0082	--	--	--	--	-0.0881	0.0147	-0.0861	0.0273	-0.0874	0.0134	-0.0510	0.0074
Cut	-0.1281	0.0257	-0.0211	0.0211	--	--	-1.7498	0.1942	-0.3248	0.1009	-1.2863	0.1345	-0.6241	0.0608
Gross Growth	0.1215	0.0185	0.0473	0.0473	--	--	0.7770	0.0676	0.3752	0.0853	0.6407	0.0533	0.3468	0.0256
Net Live	-0.0301	0.0214	0.0261	0.0261	--	--	-1.0609	0.1703	-0.0357	0.0883	-0.7130	0.1178	-0.3283	0.0530
Standing Dead Change	-0.0225	0.0146	--	--	--	--	-0.0210	0.0151	0.0230	0.0232	-0.0061	0.0128	-0.0148	0.0097
Dead Woody Debris Change	-0.0003	0.0093	0.0152	0.0152	--	--	-0.1196	0.0578	0.0390	0.0573	-0.0658	0.0430	-0.0288	0.0195
Total Net ¹	-0.0624	0.0299	0.0488	0.0488	--	--	-1.4468	0.2381	0.0250	0.1183	-0.9474	0.1643	-0.4481	0.0739
Cut and Fire														
Mortality	-0.0373	0.0147	--	--	-0.1036	0.1036	-0.1096	0.0325	-0.0123	0.0123	-0.0766	0.0219	-0.0547	0.0125
Cut	-0.0676	0.0273	--	--	-0.6381	0.6381	-0.2427	0.0848	--	--	-0.1604	0.0562	-0.1131	0.0294
Gross Growth	0.0297	0.0087	--	--	0.3223	0.3223	0.0472	0.0129	0.0020	0.0020	0.0319	0.0086	0.0332	0.0069
Net Live	-0.0752	0.0282	--	--	-0.4194	0.4194	-0.3051	0.0945	-0.0103	0.0103	-0.2051	0.0628	-0.1346	0.0317
Standing Dead Change	0.0040	0.0068	--	--	-0.0045	0.0045	0.0142	0.0120	-0.0029	0.0029	0.0084	0.0080	0.0058	0.0051
Dead Woody Debris Change	-0.0037	0.0046	--	--	0.0730	0.0730	0.0175	0.0209	-0.0030	0.0030	0.0105	0.0138	0.0034	0.0066
Total Net ¹	-0.0909	0.0348	--	--	-0.4185	0.4185	-0.3393	0.1054	-0.0181	0.0181	-0.2303	0.0701	-0.1541	0.0363
Fire														
Mortality	-0.7685	0.0944	-0.1814	0.0970	--	--	-0.0597	0.0195	-0.1277	0.0577	-0.0827	0.0235	-0.4526	0.0520
Cut	-0.0216	0.0200	--	--	--	--	-0.0027	0.0027	-0.0093	0.0074	-0.0049	0.0029	-0.0138	0.0109
Gross Growth	0.2297	0.0238	0.1749	0.1051	--	--	0.0401	0.0127	0.0776	0.0290	0.0528	0.0130	0.1492	0.0141
Net Live	-0.5604	0.0873	-0.0064	0.1145	--	--	-0.0223	0.0166	-0.0594	0.0484	-0.0349	0.0198	-0.3172	0.0479
Standing Dead Change	0.3248	0.0623	0.0199	0.0137	--	--	0.0032	0.0127	0.0517	0.0288	0.0197	0.0129	0.1838	0.0341
Dead Woody Debris Change	-0.0431	0.0225	0.0029	0.0571	--	--	-0.0248	0.0100	0.0216	0.0184	-0.0091	0.0091	-0.0272	0.0128
Total Net ¹	-0.3424	0.0659	0.0352	0.1148	--	--	-0.0467	0.0273	0.0158	0.0315	-0.0255	0.0210	-0.1952	0.0367
Insect and Disease														
Mortality	-0.3856	0.0429	-0.0676	0.0676	-0.2565	0.2847	-0.0708	0.0166	-0.1656	0.0501	-0.1030	0.0203	-0.2563	0.0250
Cut	-0.0073	0.0034	--	--	--	--	-0.0102	0.0040	-0.0125	0.0079	-0.0110	0.0038	-0.0088	0.0025
Gross Growth	0.4910	0.0366	0.0513	0.0513	0.1979	0.1759	0.2157	0.0391	0.3188	0.0743	0.2507	0.0361	0.3770	0.0254
Net Live	0.0980	0.0376	-0.0163	0.0163	-0.0585	0.1468	0.1348	0.0289	0.1407	0.0627	0.1368	0.0286	0.1120	0.0238
Standing Dead Change	0.0477	0.0319	0.0401	0.0401	-0.2439	0.3371	-0.0058	0.0079	0.0409	0.0411	0.0100	0.0149	0.0282	0.0187
Dead Woody Debris Change	0.0271	0.0249	-0.0520	0.0520	0.3310	0.4203	-0.0130	0.0130	-0.0033	0.0192	-0.0097	0.0108	0.0130	0.0149
Total Net ¹	0.2084	0.0399	-0.0208	0.0208	0.0209	0.1287	0.1470	0.0339	0.2158	0.0688	0.1704	0.0324	0.1868	0.0258
Other cut and weather														
Mortality	-0.0998	0.0249	-0.0325	0.0244	--	--	-0.0387	0.0162	-0.0441	0.0182	-0.0405	0.0123	-0.0720	0.0145
Cut	-0.0140	0.0059	-0.0717	0.0690	--	--	-0.0469	0.0176	-0.0589	0.0244	-0.0510	0.0142	-0.0308	0.0071
Gross Growth	0.1177	0.0188	0.2974	0.1996	--	--	0.1489	0.0354	0.2033	0.0534	0.1674	0.0296	0.1406	0.0167
Net Live	0.0039	0.0210	0.1933	0.2005	--	--	0.0633	0.0273	0.1002	0.0400	0.0758	0.0226	0.0378	0.0152
Standing Dead Change	0.0477	0.0208	0.0408	0.0271	--	--	0.0060	0.0034	-0.0047	0.0047	0.0024	0.0028	0.0273	0.0113
Dead Woody Debris Change	-0.0008	0.0128	0.0312	0.0615	--	--	-0.0531	0.0269	0.0477	0.0379	-0.0189	0.0220	-0.0083	0.0119
Total Net ¹	0.0593	0.0179	0.3258	0.2445	--	--	0.0320	0.0367	0.1673	0.0640	0.0779	0.0326	0.0703	0.0176
Less than 25% disturbed														
Mortality	-0.6271	0.0441	-0.5833	0.2044	-0.4617	0.1384	-0.4112	0.0350	-0.6488	0.0616	-0.4918	0.0312	-0.5656	0.0276
Cut	-0.0032	0.0015	--	--	-0.0186	0.0153	-0.0839	0.0206	-0.0432	0.0185	-0.0701	0.0150	-0.0326	0.0066
Gross Growth	1.6174	0.0550	2.2480	0.4068	5.0526	0.7629	2.6108	0.1248	3.0746	0.1576	2.7881	0.0924	2.1644	0.0533
Net Live	0.9871	0.0551	1.6647	0.3879	4.5724	0.7196	2.1157	0.1157	2.3826	0.1502	2.2063	0.0911	1.5662	0.0511
Standing Dead Change	0.0356	0.0327	0.0869	0.0799	-0.1374	0.0815	0.0663	0.0341	0.0667	0.0399	0.0665	0.0262	0.0480	0.0211
Dead Woody Debris Change	-0.0174	0.0375	0.2873	0.2150	-0.3590	0.1885	-0.1428	0.0621	-0.0734	0.0780	-0.1192	0.0488	-0.0615	0.0296
Total Net ¹	1.2477	0.0708	2.4229	0.5086	5.0796	0.8375	2.5772	0.1553	2.9571	0.1981	2.7061	0.1216	1.9406	0.0669
Total														
Mortality	-1.9419	0.1049	-0.8648	0.2097	-0.8217	0.3030	-0.7780	0.0523	-1.0847	0.0953	-0.8820	0.0475	-1.4522	0.0607
Cut	-0.2419	0.0427	-0.0928	0.0727	-0.6567	0.6550	-2.1362	0.1050	-0.4487	0.1050	-1.5637	0.1460	-0.8232	0.0686
Gross Growth	2.6071	0.0471	2.8190	0.3516	5.5729	0.6622	3.8397	0.1064	4.0515	0.1443	3.9116	0.0834	3.2112	0.0458
Net Live	0.4233	0.1221	1.8613	0.4110	4.0944	0.9891	0.9255	0.2466	2.5182	0.1927	1.4659	0.1775	0.9359	0.1035
Standing Dead Change	0.4372	0.0808	0.1876	0.0863	-0.3858	0.3419	0.0629	0.0421	0.1747	0.0681	0.1009	0.0361	0.2783	0.0465
Dead Woody Debris Change	-0.0384	0.0531	0.2845	0.2376	0.0451	0.4780	-0.3358	0.0921	0.0286	0.1077	-0.2122	0.0713	-0.1094	0.0427
Total Net ¹	1.0197	0.1184	2.8119	0.5022	4.6819	1.0751	0.9234	0.3277	3.3628	0.2385	1.7511	0.2345	1.4004	0.1222

¹Total Net value includes change from roots and understory vegetation which are not enumerated in this table.

Table C1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: All California

*information duplicated in Table C9.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	382,565	8,169	25,382	2,043	407,948	7,997	128,734	5,990	16,786	1,645	145,520	5,956	553,468	9,003
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	382,565	8,169	25,382	2,043	407,948	7,997	128,734	5,990	16,786	1,645	145,520	5,956	553,468	9,003
Other federal government:														
Bureau of Land Management	8,940	2,026	6,728	959	15,668	2,223	3,436	1,140	1,267	307	4,703	1,181	20,371	2,486
Department of Defense and Energy	274	201	877	291	1,152	353	--	--	148	153	148	153	1,299	385
National Park Service	--	--	--	--	--	--	58,370	5,742	6,838	1,223	65,208	5,810	65,208	5,810
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	13	14	41	31	41	31
Other federal	--	--	274	112	274	112	--	--	67	54	67	54	341	124
Total	9,215	2,035	7,880	1,004	17,094	2,245	61,834	5,801	8,332	1,259	70,166	5,861	87,260	5,944
State and local government:														
Local	3,480	1,339	1,807	446	5,286	1,411	3,852	1,521	3,419	765	7,270	1,665	12,556	2,173
State	7,805	2,032	730	404	8,535	2,043	29,612	6,570	4,450	1,143	34,062	6,639	42,597	6,287
Other public	--	--	--	--	--	--	326	363	38	42	365	365	365	365
Total	11,285	2,387	2,537	602	13,822	2,434	33,790	6,726	7,907	1,356	41,696	6,808	55,518	6,503
Private:														
Corporate	169,888	6,499	14,188	1,544	184,077	6,605	--	--	--	--	--	--	184,077	6,605
Noncorporate private:														
Total, noncorporate private	129,779	6,702	54,675	2,357	184,455	6,858	--	--	--	--	--	--	184,455	6,858
All private	299,668	7,598	68,864	2,722	368,531	7,510	--	--	--	--	--	--	368,531	7,510
All owners	702,733	11,353	104,662	3,586	807,395	11,167	224,357	10,702	33,025	2,472	257,383	10,763	1,064,778	13,954

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	6	5	681	343	686	343	2,922	1,839	1,604	601	4,526	1,961	5,212	1,991
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	6	5	681	343	686	343	2,922	1,839	1,604	601	4,526	1,961	5,212	1,991
Other federal government:														
Bureau of Land Management	--	--	140	56	140	56	--	--	13	9	13	9	153	57
Department of Defense and Energy	--	--	703	276	703	276	--	--	--	--	--	--	703	276
National Park Service	--	--	--	--	--	--	--	--	189	210	189	210	189	210
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	47	52	47	52	--	--	--	--	--	--	47	52
Total	--	--	890	285	890	285	--	--	202	210	202	210	1,091	354
State and local government:														
Local	--	--	622	298	622	298	3,852	1,521	2,224	592	6,076	1,593	6,697	1,618
State	1,425	942	94	57	1,520	958	5,203	2,364	1,948	517	7,152	2,420	8,672	2,577
Other public	--	--	--	--	--	--	326	363	38	42	365	365	365	365
Total	1,425	942	716	303	2,141	1,004	9,381	2,819	4,211	765	13,592	2,885	15,734	3,000
Private:														
Corporate	2,785	1,196	3,599	881	6,384	1,485	--	--	--	--	--	--	6,384	1,485
Noncorporate private:														
Total, noncorporate private	14,596	3,100	11,217	1,135	25,812	3,283	--	--	--	--	--	--	25,812	3,283
All private	17,380	3,310	14,816	1,426	32,196	3,585	--	--	--	--	--	--	32,196	3,585
All owners	18,811	3,465	17,103	1,524	35,914	3,768	12,303	3,366	6,016	987	18,319	3,490	54,233	5,153

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	13	14	13	14	13	14
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	13	14	13	14	13	14
State and local government:														
Local	--	--	81	72	81	72	--	--	--	--	--	--	81	72
State	--	--	--	--	--	--	--	--	145	148	145	148	145	148
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	81	72	81	72	--	--	145	148	145	148	226	165
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	1,017	375	1,017	375	--	--	--	--	--	--	1,017	375
All private	--	--	1,017	375	1,017	375	--	--	--	--	--	--	1,017	375
All owners	--	--	1,098	382	1,098	382	--	--	158	149	158	149	1,256	410

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	13,082	1,506	4,484	575	17,566	1,610	1,901	901	1,338	440	3,239	1,000	20,805	1,894
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	13,082	1,506	4,484	575	17,566	1,610	1,901	901	1,338	440	3,239	1,000	20,805	1,894
Other federal government:														
Bureau of Land Management	250	121	1,752	256	2,002	281	--	--	327	134	327	134	2,329	307
Department of Defense and Energy	--	--	109	64	109	64	--	--	--	--	--	--	109	64
National Park Service	--	--	--	--	--	--	--	--	360	136	360	136	360	136
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	250	121	1,860	262	2,110	287	--	--	687	190	687	190	2,797	335
State and local government:														
Local	--	--	52	53	52	53	--	--	--	--	--	--	52	53
State	--	--	--	--	--	--	175	194	54	46	228	200	228	200
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	52	53	52	53	175	194	54	46	228	200	281	206
Private:														
Corporate	2,983	630	294	103	3,277	639	--	--	--	--	--	--	3,277	639
Noncorporate private:														
Total, noncorporate private	1,220	394	572	158	1,792	426	--	--	--	--	--	--	1,792	426
All private	4,203	740	866	189	5,069	765	--	--	--	--	--	--	5,069	765
All owners	17,535	1,699	7,263	662	24,798	1,822	2,075	922	2,079	481	4,154	1,038	28,952	2,094

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	135,617	6,956	8,438	1,436	144,055	7,030	64,870	4,386	4,304	908	69,175	4,442	213,229	8,096
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	135,617	6,956	8,438	1,436	144,055	7,030	64,870	4,386	4,304	908	69,175	4,442	213,229	8,096
Other federal government:														
Bureau of Land Management	4,119	1,208	2,772	723	6,892	1,408	435	431	367	228	802	488	7,693	1,487
Department of Defense and Energy	--	--	--	--	--	--	--	--	148	153	148	153	148	153
National Park Service	--	--	--	--	--	--	8,847	3,932	748	383	9,595	3,952	9,595	3,952
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	30	19	30	19	--	--	16	17	16	17	46	26
Total	4,119	1,208	2,803	723	6,922	1,408	9,282	3,949	1,278	470	10,560	3,978	17,482	4,185
State and local government:														
Local	456	393	163	110	619	408	--	--	105	108	105	108	724	422
State	485	295	75	60	559	301	508	452	467	312	975	601	1,534	672
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	941	491	238	125	1,179	507	508	452	572	330	1,080	611	2,258	794
Private:														
Corporate	30,001	2,824	4,043	710	34,045	2,920	--	--	--	--	--	--	34,045	2,920
Noncorporate private:														
Total, noncorporate private	35,801	3,752	14,777	1,324	50,578	3,961	--	--	--	--	--	--	50,578	3,961
All private	65,802	4,559	18,821	1,490	84,623	4,769	--	--	--	--	--	--	84,623	4,769
All owners	206,479	8,436	30,299	2,202	236,778	8,641	74,660	5,914	6,155	1,074	80,815	5,990	317,593	10,307

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	1,547	942	53	51	1,600	944	2,140	1,672	--	--	2,140	1,672	3,740	1,918
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,547	942	53	51	1,600	944	2,140	1,672	--	--	2,140	1,672	3,740	1,918
Other federal government:														
Bureau of Land Management	2,613	1,470	--	--	2,613	1,470	2,717	1,024	--	--	2,717	1,024	5,330	1,790
Department of Defense and Energy	271	201	--	--	271	201	--	--	--	--	--	--	271	201
National Park Service	--	--	--	--	--	--	5,830	2,712	136	105	5,966	2,712	5,966	2,712
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	--	--	28	28	28	28
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,884	1,483	--	--	2,884	1,483	8,574	2,883	136	105	8,710	2,881	11,595	3,223
State and local government:														
Local	1,973	1,160	22	22	1,995	1,160	--	--	681	318	681	318	2,676	1,203
State	4,550	1,637	12	11	4,561	1,637	19,934	6,545	1,012	936	20,946	6,612	25,507	6,515
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	6,523	1,970	34	25	6,556	1,970	19,934	6,545	1,693	989	21,627	6,619	28,184	6,577
Private:														
Corporate	71,394	5,608	918	378	72,312	5,620	--	--	--	--	--	--	72,312	5,620
Noncorporate private:														
Total, noncorporate private	49,943	4,631	4,300	944	54,243	4,711	--	--	--	--	--	--	54,243	4,711
All private	121,337	6,879	5,218	1,014	126,556	6,927	--	--	--	--	--	--	126,556	6,927
All owners	132,291	7,332	5,305	1,015	137,596	7,376	30,649	7,344	1,829	994	32,478	7,410	170,074	10,198

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	229,699	7,833	9,273	1,283	238,972	7,807	54,832	4,666	8,099	1,151	62,931	4,702	301,903	8,843
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	229,699	7,833	9,273	1,283	238,972	7,807	54,832	4,666	8,099	1,151	62,931	4,702	301,903	8,843
Other federal government:														
Bureau of Land Management	1,958	752	2,026	591	3,984	960	285	256	526	159	810	301	4,794	998
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	43,693	3,925	5,245	1,131	48,938	4,024	48,938	4,024
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	174	96	174	96	--	--	49	51	49	51	223	109
Total	1,958	752	2,200	598	4,158	963	43,978	3,931	5,820	1,141	49,798	4,028	53,955	4,064
State and local government:														
Local	1,050	541	690	278	1,740	609	--	--	406	354	406	354	2,145	704
State	1,345	854	550	396	1,895	929	3,635	1,507	687	253	4,321	1,521	6,216	1,717
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,395	1,011	1,239	483	3,634	1,110	3,635	1,507	1,092	435	4,727	1,562	8,361	1,855
Private:														
Corporate	62,588	3,959	5,209	987	67,797	4,048	--	--	--	--	--	--	67,797	4,048
Noncorporate private:														
Total, noncorporate private	27,958	2,622	20,307	1,384	48,266	2,906	--	--	--	--	--	--	48,266	2,906
All private	90,546	4,499	25,516	1,663	116,063	4,638	--	--	--	--	--	--	116,063	4,638
All owners	324,599	9,048	38,228	2,229	362,827	9,103	102,444	6,284	15,011	1,678	117,455	6,381	480,282	10,629

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	2,615	782	2,453	465	5,069	915	2,069	701	1,441	457	3,510	835	8,579	1,237
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,615	782	2,453	465	5,069	915	2,069	701	1,441	457	3,510	835	8,579	1,237
Other federal government:														
Bureau of Land Management	--	--	38	26	38	26	--	--	34	23	34	23	72	35
Department of Defense and Energy	3	3	66	68	69	68	--	--	--	--	--	--	69	68
National Park Service	--	--	--	--	--	--	--	--	161	64	161	64	161	64
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	23	15	23	15	--	--	1	1	1	1	24	15
Total	3	3	127	74	130	74	--	--	196	68	196	68	327	101
State and local government:														
Local	--	--	177	113	177	113	--	--	3	3	3	3	180	113
State	--	--	--	--	--	--	157	210	137	74	294	222	294	222
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	177	113	177	113	157	210	140	75	297	222	474	249
Private:														
Corporate	137	136	125	75	262	155	--	--	--	--	--	--	262	155
Noncorporate private:														
Total, noncorporate private	261	203	2,485	689	2,746	727	--	--	--	--	--	--	2,746	727
All private	398	244	2,610	693	3,008	744	--	--	--	--	--	--	3,008	744
All owners	3,017	819	5,367	844	8,385	1,185	2,226	732	1,777	468	4,003	866	12,388	1,467

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	373,849	8,877	29,602	2,074	403,450	8,840	121,333	6,844	17,210	1,732	138,542	6,990	541,993	8,812
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	373,849	8,877	29,602	2,074	403,450	8,840	121,333	6,844	17,210	1,732	138,542	6,990	541,993	8,812
Other federal government:														
Bureau of Land Management	10,193	1,809	5,994	820	16,187	1,961	1,000	511	1,244	246	2,245	567	18,432	2,022
Department of Defense and Energy	137	150	753	260	889	300	--	--	--	--	--	--	889	300
National Park Service	--	--	--	--	--	--	56,194	6,096	6,207	1,056	62,402	6,034	62,402	6,034
U.S. Fish and Wildlife Service	--	--	--	--	--	--	58	71	2	2	60	71	60	71
Other federal	--	--	610	285	610	285	1,262	909	349	280	1,611	950	2,222	992
Total	10,330	1,815	7,357	897	17,687	1,991	58,514	6,161	7,803	1,112	66,318	6,095	84,004	6,288
State and local government:														
Local	1,710	911	1,988	567	3,699	1,082	2,576	1,180	3,866	850	6,442	1,449	10,141	1,805
State	6,348	1,898	572	292	6,920	1,919	31,706	7,542	5,079	1,232	36,785	7,633	43,705	7,684
Other public	--	--	22	20	22	20	447	400	40	38	487	402	508	403
Total	8,058	2,101	2,583	638	10,641	2,199	34,729	7,640	8,985	1,489	43,714	7,769	54,355	7,882
Private:														
Corporate	139,808	5,665	6,745	894	146,553	5,710	--	--	--	--	--	--	146,553	5,710
Noncorporate private:														
Total, noncorporate private	136,572	6,591	61,819	2,531	198,390	6,824	--	--	--	--	--	--	198,390	6,824
All private	276,380	7,125	68,564	2,626	344,943	7,154	--	--	--	--	--	--	344,943	7,154
All owners	668,616	11,576	108,105	3,499	776,721	11,570	214,576	11,485	33,998	2,537	248,574	11,615	1,025,295	14,010

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	380,191	9,035	29,240	2,099	409,431	9,002	123,054	6,951	17,513	1,770	140,567	7,099	549,998	8,999
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	380,191	9,035	29,240	2,099	409,431	9,002	123,054	6,951	17,513	1,770	140,567	7,099	549,998	8,999
Other federal government:														
Bureau of Land Management	10,220	1,820	5,917	816	16,137	1,975	1,021	532	1,275	251	2,296	587	18,433	2,042
Department of Defense and Energy	150	156	780	259	930	303	--	--	--	--	--	--	930	303
National Park Service	--	--	--	--	--	--	57,347	6,161	6,331	1,068	63,678	6,096	63,678	6,096
U.S. Fish and Wildlife Service	--	--	--	--	--	--	58	71	2	2	60	71	60	71
Other federal	--	--	606	284	606	284	1,256	907	351	281	1,607	948	2,213	990
Total	10,370	1,826	7,303	893	17,673	2,005	59,681	6,226	7,959	1,124	67,640	6,158	85,313	6,353
State and local government:														
Local	1,616	926	2,020	573	3,636	1,097	2,640	1,217	3,919	863	6,558	1,486	10,194	1,844
State	6,332	1,891	669	382	7,001	1,928	32,172	7,571	5,340	1,264	37,512	7,667	44,512	7,724
Other public	--	--	23	20	23	20	460	406	32	37	493	408	515	409
Total	7,948	2,102	2,711	689	10,659	2,214	35,272	7,674	9,291	1,522	44,562	7,809	55,221	7,931
Private:														
Corporate	137,062	5,645	8,697	1,112	145,759	5,718	--	--	--	--	--	--	145,759	5,718
Noncorporate private:														
Total, noncorporate private	138,397	6,690	59,900	2,464	198,297	6,912	--	--	--	--	--	--	198,297	6,912
All private	275,458	7,262	68,598	2,631	344,056	7,288	--	--	--	--	--	--	344,056	7,288
All owners	673,968	11,698	107,852	3,524	781,819	11,689	218,007	11,621	34,763	2,587	252,769	11,754	1,034,589	14,120

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	377,970	7,980	26,957	2,018	404,927	7,803	126,839	6,058	18,631	1,821	145,470	6,031	550,397	8,811
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	377,970	7,980	26,957	2,018	404,927	7,803	126,839	6,058	18,631	1,821	145,470	6,031	550,397	8,811
Other federal government:														
Bureau of Land Management	10,886	1,879	6,199	867	17,084	2,053	1,319	630	1,067	258	2,386	681	19,470	2,142
Department of Defense and Energy	257	200	710	248	966	319	--	--	142	147	142	147	1,109	351
National Park Service	--	--	--	--	--	--	57,324	5,580	6,549	1,169	63,872	5,627	63,872	5,627
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	651	286	651	286	540	571	368	291	909	640	1,559	698
Total	11,142	1,884	7,559	941	18,701	2,084	59,183	5,580	8,126	1,221	67,309	5,623	86,010	5,698
State and local government:														
Local	1,803	990	1,748	506	3,551	1,120	3,189	1,354	3,481	785	6,670	1,519	10,221	1,874
State	6,502	1,876	717	420	7,219	1,881	29,192	6,658	4,658	1,147	33,850	6,722	41,069	6,342
Other public	--	--	23	20	23	20	308	356	38	41	345	358	368	359
Total	8,305	2,113	2,487	658	10,792	2,182	32,689	6,785	8,177	1,360	40,866	6,861	51,658	6,550
Private:														
Corporate	138,858	5,529	8,913	1,134	147,771	5,608	--	--	--	--	--	--	147,771	5,608
Noncorporate private:														
Total, noncorporate private	141,064	6,814	58,289	2,420	199,353	6,973	--	--	--	--	--	--	199,353	6,973
All private	279,922	7,111	67,202	2,609	347,124	7,062	--	--	--	--	--	--	347,124	7,062
All owners	677,339	10,791	104,206	3,480	781,545	10,623	218,711	10,661	34,934	2,576	253,645	10,710	1,035,190	13,525

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	381,415	8,037	26,395	2,021	407,810	7,857	127,014	6,138	18,548	1,839	145,562	6,096	553,373	8,911
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	381,415	8,037	26,395	2,021	407,810	7,857	127,014	6,138	18,548	1,839	145,562	6,096	553,373	8,911
Other federal government:														
Bureau of Land Management	10,901	1,906	6,227	871	17,128	2,078	1,707	714	1,174	267	2,881	762	20,009	2,190
Department of Defense and Energy	257	200	728	252	984	322	--	--	142	147	142	147	1,127	354
National Park Service	--	--	--	--	--	--	58,486	5,664	6,766	1,204	65,252	5,723	65,252	5,723
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	14	14	42	32	42	32
Other federal	--	--	483	157	483	157	--	--	79	54	79	54	562	166
Total	11,158	1,910	7,437	916	18,595	2,098	60,220	5,673	8,176	1,227	68,396	5,724	86,991	5,795
State and local government:														
Local	1,877	1,022	1,884	520	3,761	1,155	3,381	1,344	3,452	764	6,832	1,511	10,593	1,894
State	6,811	1,959	717	420	7,528	1,961	29,069	6,664	4,652	1,156	33,720	6,729	41,249	6,332
Other public	--	--	23	20	23	20	333	371	38	41	370	373	393	374
Total	8,688	2,200	2,624	668	11,312	2,267	32,782	6,787	8,141	1,358	40,923	6,865	52,235	6,544
Private:														
Corporate	142,964	5,664	9,804	1,223	152,769	5,751	--	--	--	--	--	--	152,769	5,751
Noncorporate private:														
Total, noncorporate private	142,251	6,926	57,721	2,372	199,973	7,066	--	--	--	--	--	--	199,973	7,066
All private	285,216	7,243	67,525	2,602	352,741	7,173	--	--	--	--	--	--	352,741	7,173
All owners	686,477	10,943	103,981	3,472	790,458	10,761	220,017	10,757	34,865	2,590	254,882	10,803	1,045,340	13,672

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	383,675	8,009	26,274	2,040	409,949	7,818	129,836	6,208	18,523	1,843	148,358	6,143	558,307	8,940
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	383,675	8,009	26,274	2,040	409,949	7,818	129,836	6,208	18,523	1,843	148,358	6,143	558,307	8,940
Other federal government:														
Bureau of Land Management	11,531	2,231	6,334	885	17,865	2,381	2,207	812	1,159	267	3,365	855	21,230	2,497
Department of Defense and Energy	257	200	762	279	1,019	343	--	--	142	147	142	147	1,161	373
National Park Service	--	--	--	--	--	--	59,328	5,722	6,776	1,218	66,103	5,782	66,103	5,782
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	14	14	41	31	41	31
Other federal	--	--	482	157	482	157	--	--	79	54	79	54	561	166
Total	11,787	2,237	7,578	936	19,365	2,404	61,562	5,737	8,169	1,241	69,731	5,787	89,096	5,905
State and local government:														
Local	2,649	1,138	2,037	531	4,687	1,263	3,384	1,344	3,441	754	6,825	1,498	11,512	1,953
State	7,233	1,982	770	422	8,002	1,991	28,984	6,468	4,672	1,153	33,655	6,534	41,658	6,134
Other public	--	--	22	20	22	20	333	371	38	41	370	373	393	373
Total	9,882	2,276	2,830	678	12,712	2,349	32,700	6,593	8,151	1,353	40,851	6,670	53,562	6,368
Private:														
Corporate	144,722	5,665	10,804	1,278	155,526	5,762	--	--	--	--	--	--	155,526	5,762
Noncorporate private:														
Total, noncorporate private	139,978	6,842	58,362	2,398	198,340	6,992	--	--	--	--	--	--	198,340	6,992
All private	284,700	7,145	69,166	2,635	353,866	7,076	--	--	--	--	--	--	353,866	7,076
All owners	690,044	10,941	105,847	3,514	795,891	10,753	224,098	10,710	34,843	2,597	258,941	10,742	1,054,832	13,632

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	385,079	8,046	25,740	2,028	410,819	7,858	130,176	6,189	17,456	1,709	147,632	6,136	558,451	8,969
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	385,079	8,046	25,740	2,028	410,819	7,858	130,176	6,189	17,456	1,709	147,632	6,136	558,451	8,969
Other federal government:														
Bureau of Land Management	11,455	2,183	6,142	871	17,597	2,329	2,852	1,055	1,299	314	4,151	1,100	21,748	2,548
Department of Defense and Energy	257	200	791	281	1,047	345	--	--	145	150	145	150	1,192	376
National Park Service	--	--	--	--	--	--	59,901	5,744	6,716	1,214	66,617	5,807	66,617	5,807
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	14	14	41	31	41	31
Other federal	--	--	498	158	498	158	--	--	80	55	80	55	578	167
Total	11,712	2,188	7,431	924	19,142	2,352	62,781	5,790	8,254	1,249	71,035	5,845	90,177	5,937
State and local government:														
Local	2,590	1,123	2,089	537	4,679	1,253	3,524	1,409	3,371	750	6,895	1,554	11,573	1,990
State	7,823	2,071	607	398	8,431	2,076	29,409	6,499	4,666	1,162	34,076	6,566	42,506	6,177
Other public	--	--	22	20	22	20	326	363	38	41	364	366	386	366
Total	10,413	2,345	2,719	669	13,132	2,414	33,259	6,637	8,075	1,359	41,334	6,714	54,466	6,413
Private:														
Corporate	152,156	5,956	12,276	1,375	164,432	6,067	--	--	--	--	--	--	164,432	6,067
Noncorporate private:														
Total, noncorporate private	136,913	6,780	56,579	2,373	193,492	6,928	--	--	--	--	--	--	193,492	6,928
All private	289,069	7,284	68,855	2,651	357,924	7,209	--	--	--	--	--	--	357,924	7,209
All owners	696,272	11,050	104,745	3,513	801,017	10,857	226,216	10,754	33,785	2,512	260,001	10,796	1,061,018	13,733

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	385,136	8,094	24,929	2,003	410,065	7,907	130,657	6,171	17,172	1,678	147,828	6,125	557,893	9,046
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	385,136	8,094	24,929	2,003	410,065	7,907	130,657	6,171	17,172	1,678	147,828	6,125	557,893	9,046
Other federal government:														
Bureau of Land Management	10,611	2,143	6,157	874	16,769	2,296	3,498	1,148	1,291	311	4,789	1,189	21,558	2,556
Department of Defense and Energy	297	210	807	281	1,104	351	--	--	156	156	156	156	1,260	384
National Park Service	--	--	--	--	--	--	60,639	5,796	6,782	1,219	67,422	5,858	67,422	5,858
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	14	14	41	31	41	31
Other federal	--	--	440	153	440	153	--	--	84	56	84	56	524	163
Total	10,908	2,150	7,404	926	18,313	2,320	64,165	5,853	8,328	1,254	72,492	5,905	90,805	6,005
State and local government:														
Local	3,424	1,318	2,132	537	5,556	1,427	3,586	1,443	3,368	751	6,954	1,586	12,511	2,127
State	7,392	1,968	710	407	8,102	1,977	29,845	6,583	4,670	1,154	34,515	6,647	42,617	6,240
Other public	--	--	22	20	22	20	326	363	37	40	363	366	386	366
Total	10,816	2,358	2,864	674	13,680	2,427	33,758	6,724	8,075	1,353	41,832	6,798	55,513	6,514
Private:														
Corporate	158,252	6,120	12,810	1,391	171,062	6,225	--	--	--	--	--	--	171,062	6,225
Noncorporate private:														
Total, noncorporate private	133,508	6,804	56,084	2,396	189,592	6,966	--	--	--	--	--	--	189,592	6,966
All private	291,760	7,408	68,894	2,677	360,654	7,337	--	--	--	--	--	--	360,654	7,337
All owners	698,620	11,170	104,092	3,519	802,712	10,979	228,579	10,830	33,575	2,490	262,153	10,874	1,064,865	13,892

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	383,952	8,128	25,373	2,053	409,325	7,939	129,909	6,141	16,859	1,656	146,768	6,103	556,093	9,074
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	383,952	8,128	25,373	2,053	409,325	7,939	129,909	6,141	16,859	1,656	146,768	6,103	556,093	9,074
Other federal government:														
Bureau of Land Management	10,554	2,143	6,078	863	16,632	2,296	3,474	1,145	1,293	310	4,766	1,186	21,398	2,556
Department of Defense and Energy	297	210	801	280	1,097	350	--	--	145	150	145	150	1,242	380
National Park Service	--	--	--	--	--	--	59,078	5,739	6,901	1,243	65,978	5,805	65,978	5,805
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	14	14	41	31	41	31
Other federal	--	--	369	148	369	148	--	--	66	53	66	53	434	157
Total	10,850	2,149	7,247	915	18,097	2,320	62,579	5,798	8,417	1,277	70,996	5,854	89,094	5,965
State and local government:														
Local	3,481	1,327	2,099	534	5,581	1,433	3,745	1,510	3,222	750	6,967	1,648	12,548	2,178
State	7,381	1,966	715	408	8,097	1,975	30,027	6,586	4,464	1,143	34,491	6,653	42,587	6,243
Other public	--	--	22	20	22	20	326	363	38	42	365	365	387	366
Total	10,863	2,361	2,837	672	13,700	2,429	34,098	6,739	7,724	1,347	41,822	6,818	55,522	6,533
Private:														
Corporate	162,641	6,188	13,546	1,443	176,188	6,296	--	--	--	--	--	--	176,188	6,296
Noncorporate private:														
Total, noncorporate private	131,759	6,827	55,193	2,375	186,952	6,989	--	--	--	--	--	--	186,952	6,989
All private	294,400	7,471	68,740	2,684	363,140	7,404	--	--	--	--	--	--	363,140	7,404
All owners	700,065	11,235	104,196	3,550	804,262	11,046	226,586	10,793	33,001	2,484	259,587	10,848	1,063,849	13,954

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C9.9: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2009-2018

**information duplicated in Table C1*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	382,565	8,169	25,382	2,043	407,948	7,997	128,734	5,990	16,786	1,645	145,520	5,956	553,468	9,003
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	382,565	8,169	25,382	2,043	407,948	7,997	128,734	5,990	16,786	1,645	145,520	5,956	553,468	9,003
Other federal government:														
Bureau of Land Management	8,940	2,026	6,728	959	15,668	2,223	3,436	1,140	1,267	307	4,703	1,181	20,371	2,486
Department of Defense and Energy	274	201	877	291	1,152	353	--	--	148	153	148	153	1,299	385
National Park Service	--	--	--	--	--	--	58,370	5,742	6,838	1,223	65,208	5,810	65,208	5,810
U.S. Fish and Wildlife Service	--	--	--	--	--	--	28	28	13	14	41	31	41	31
Other federal	--	--	274	112	274	112	--	--	67	54	67	54	341	124
Total	9,215	2,035	7,880	1,004	17,094	2,245	61,834	5,801	8,332	1,259	70,166	5,861	87,260	5,944
State and local government:														
Local	3,480	1,339	1,807	446	5,286	1,411	3,852	1,521	3,419	765	7,270	1,665	12,556	2,173
State	7,805	2,032	730	404	8,535	2,043	29,612	6,570	4,450	1,143	34,062	6,639	42,597	6,287
Other public	--	--	--	--	--	--	326	363	38	42	365	365	365	365
Total	11,285	2,387	2,537	602	13,822	2,434	33,790	6,726	7,907	1,356	41,696	6,808	55,518	6,503
Private:														
Corporate	169,888	6,499	14,188	1,544	184,077	6,605	--	--	--	--	--	--	184,077	6,605
Noncorporate private:														
Total, noncorporate private	129,779	6,702	54,675	2,357	184,455	6,858	--	--	--	--	--	--	184,455	6,858
All private	299,668	7,598	68,864	2,722	368,531	7,510	--	--	--	--	--	--	368,531	7,510
All owners	702,733	11,353	104,662	3,586	807,395	11,167	224,357	10,702	33,025	2,472	257,383	10,763	1,064,778	13,954

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C10: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: All California

*information duplicated in Table C18.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	42,652	1,965	2,777	403	45,430	1,983	19,455	1,412	2,342	337	21,797	1,424	67,227	2,392
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	42,652	1,965	2,777	403	45,430	1,983	19,455	1,412	2,342	337	21,797	1,424	67,227	2,392
Other federal government:														
Bureau of Land Management	319	97	292	60	611	112	337	167	93	29	430	169	1,042	201
Department of Defense and Energy	--	--	18	9	18	9	--	--	--	--	--	--	18	9
National Park Service	--	--	--	--	--	--	9,046	1,250	569	137	9,616	1,256	9,616	1,256
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	8	10	60	44	68	45	--	--	1	1	1	1	69	45
Total	327	97	370	75	697	121	9,391	1,256	663	139	10,055	1,262	10,752	1,257
State and local government:														
Local	188	85	67	24	255	89	144	76	125	50	269	91	524	127
State	295	157	28	17	323	158	1,010	218	213	76	1,223	228	1,546	255
Other public	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Total	483	174	95	30	578	177	1,155	229	339	91	1,494	244	2,072	275
Private:														
Corporate	8,773	696	535	87	9,308	700	--	--	--	--	--	--	9,308	700
Noncorporate private:														
Total, noncorporate private	5,066	481	2,666	304	7,732	562	--	--	--	--	--	--	7,732	562
All private	13,839	809	3,201	315	17,040	856	--	--	--	--	--	--	17,040	856
All owners	57,302	2,131	6,443	517	63,745	2,166	30,002	1,903	3,344	376	33,346	1,918	97,091	2,828

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C11: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	6	5	77	37	82	37	19	14	440	244	459	245	541	247
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	6	5	77	37	82	37	19	14	440	244	459	245	541	247
Other federal government:														
Bureau of Land Management	--	--	4	3	4	3	--	--	--	--	--	--	4	3
Department of Defense and Energy	--	--	10	7	10	7	--	--	--	--	--	--	10	7
National Park Service	--	--	--	--	--	--	--	--	23	25	23	25	23	25
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	14	8	14	8	--	--	23	25	23	25	37	26
State and local government:														
Local	--	--	32	20	32	20	144	76	78	45	222	88	254	90
State	14	12	1	1	15	12	61	30	60	37	121	47	136	49
Other public	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Total	14	12	33	20	46	24	207	81	138	58	345	100	391	102
Private:														
Corporate	47	23	96	40	143	47	--	--	--	--	--	--	143	47
Noncorporate private:														
Total, noncorporate private	545	149	517	112	1,062	185	--	--	--	--	--	--	1,062	185
All private	592	150	613	119	1,205	191	--	--	--	--	--	--	1,205	191
All owners	612	151	736	127	1,348	196	226	82	601	252	827	265	2,175	330

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C12: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
State and local government:														
Local	--	--	8	9	8	9	--	--	--	--	--	--	8	9
State	--	--	--	--	--	--	--	--	11	12	11	12	11	12
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	8	9	8	9	--	--	11	12	11	12	20	14
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	33	19	33	19	--	--	--	--	--	--	33	19
All private	--	--	33	19	33	19	--	--	--	--	--	--	33	19
All owners	--	--	41	21	41	21	--	--	11	12	11	12	53	24

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C13: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	984	193	331	127	1,316	231	125	55	113	43	239	69	1,554	241
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	984	193	331	127	1,316	231	125	55	113	43	239	69	1,554	241
Other federal government:														
Bureau of Land Management	5	4	74	26	79	26	--	--	15	9	15	9	95	28
Department of Defense and Energy	--	--	8	5	8	5	--	--	--	--	--	--	8	5
National Park Service	--	--	--	--	--	--	--	--	6	3	6	3	6	3
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	5	4	82	27	87	27	--	--	21	9	21	9	109	28
State and local government:														
Local	--	--	--	--	--	--	--	--	--	--	--	--	--	--
State	--	--	--	--	--	--	39	44	--	--	39	44	39	44
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	39	44	--	--	39	44	39	44
Private:														
Corporate	229	99	1	1	230	99	--	--	--	--	--	--	230	99
Noncorporate private:														
Total, noncorporate private	41	17	11	9	52	19	--	--	--	--	--	--	52	19
All private	270	101	12	9	283	101	--	--	--	--	--	--	283	101
All owners	1,260	218	425	130	1,685	254	165	70	135	44	299	82	1,985	267

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C14: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	15,043	1,396	698	208	15,740	1,407	11,244	1,209	444	122	11,687	1,212	27,428	1,849
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	15,043	1,396	698	208	15,740	1,407	11,244	1,209	444	122	11,687	1,212	27,428	1,849
Other federal government:														
Bureau of Land Management	243	91	89	38	332	98	6	6	--	--	6	6	337	98
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	302	122	14	11	317	123	317	123
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	8	10	--	--	8	10	--	--	1	1	1	1	9	10
Total	251	92	89	38	340	98	308	122	15	11	324	123	663	156
State and local government:														
Local	2	2	--	--	2	2	--	--	13	14	13	14	15	15
State	26	29	6	5	32	30	4	4	52	42	56	42	88	52
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	29	29	6	5	34	30	4	4	65	44	70	45	104	54
Private:														
Corporate	1,855	388	141	47	1,996	391	--	--	--	--	--	--	1,996	391
Noncorporate private:														
Total, noncorporate private	1,284	217	431	69	1,715	230	--	--	--	--	--	--	1,715	230
All private	3,139	442	572	83	3,711	450	--	--	--	--	--	--	3,711	450
All owners	18,461	1,468	1,364	228	19,825	1,482	11,556	1,215	524	130	12,081	1,219	31,906	1,911

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C15: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	130	77	9	9	139	78	90	75	--	--	90	75	229	108
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	130	77	9	9	139	78	90	75	--	--	90	75	229	108
Other federal government:														
Bureau of Land Management	25	21	--	--	25	21	308	165	--	--	308	165	333	166
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	446	259	--	--	446	259	446	259
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	25	21	--	--	25	21	761	306	--	--	761	306	786	306
State and local government:														
Local	122	78	4	4	126	78	--	--	11	6	11	6	136	79
State	93	42	--	--	93	42	700	211	11	10	711	212	804	208
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	215	86	4	4	219	87	700	211	21	12	721	212	940	217
Private:														
Corporate	3,745	509	41	20	3,786	510	--	--	--	--	--	--	3,786	510
Noncorporate private:														
Total, noncorporate private	1,499	234	72	29	1,571	235	--	--	--	--	--	--	1,571	235
All private	5,244	552	112	36	5,357	553	--	--	--	--	--	--	5,357	553
All owners	5,615	564	125	37	5,740	565	1,551	379	21	12	1,572	379	7,312	676

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C16: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	25,914	1,561	1,325	311	27,238	1,582	7,452	877	1,099	188	8,551	890	35,789	1,788
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	25,914	1,561	1,325	311	27,238	1,582	7,452	877	1,099	188	8,551	890	35,789	1,788
Other federal government:														
Bureau of Land Management	46	26	120	39	165	47	24	24	70	28	94	37	259	60
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	8,298	1,237	495	134	8,793	1,243	8,793	1,243
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	12	8	12	8	--	--	--	--	--	--	12	8
Total	46	26	132	39	177	48	8,322	1,238	565	136	8,887	1,243	9,064	1,242
State and local government:														
Local	63	34	16	7	80	34	--	--	9	9	9	9	89	36
State	162	151	21	16	183	152	177	74	31	18	209	76	392	166
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	225	155	38	18	263	156	177	74	40	20	218	76	481	170
Private:														
Corporate	2,897	319	229	54	3,127	323	--	--	--	--	--	--	3,127	323
Noncorporate private:														
Total, noncorporate private	1,619	340	1,410	267	3,029	430	--	--	--	--	--	--	3,029	430
All private	4,517	459	1,639	272	6,156	528	--	--	--	--	--	--	6,156	528
All owners	30,701	1,634	3,133	415	33,834	1,674	15,951	1,519	1,705	233	17,656	1,531	51,490	2,232

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C17: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	576	228	338	85	914	243	525	206	247	88	771	224	1,686	330
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	576	228	338	85	914	243	525	206	247	88	771	224	1,686	330
Other federal government:														
Bureau of Land Management	--	--	6	3	6	3	--	--	7	5	7	5	13	6
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	31	12	31	12	31	12
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	48	43	48	43	--	--	--	--	--	--	48	43
Total	--	--	54	43	54	43	--	--	39	13	39	13	92	45
State and local government:														
Local	--	--	7	6	7	6	--	--	14	14	14	14	21	15
State	--	--	--	--	--	--	27	26	48	46	75	52	75	52
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	7	6	7	6	27	26	62	48	90	53	96	54
Private:														
Corporate	--	--	26	23	26	23	--	--	--	--	--	--	26	23
Noncorporate private:														
Total, noncorporate private	77	47	192	66	269	81	--	--	--	--	--	--	269	81
All private	77	47	218	69	295	85	--	--	--	--	--	--	295	85
All owners	653	232	618	118	1,270	261	552	207	347	101	899	230	2,170	349

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	33,913	1,661	2,473	298	36,386	1,678	14,503	1,171	1,871	285	16,374	1,199	52,760	1,927
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	33,913	1,661	2,473	298	36,386	1,678	14,503	1,171	1,871	285	16,374	1,199	52,760	1,927
Other federal government:														
Bureau of Land Management	561	207	407	73	968	219	127	117	198	80	325	142	1,294	260
Department of Defense and Energy	--	--	13	9	13	9	--	--	--	--	--	--	13	9
National Park Service	--	--	--	--	--	--	7,513	953	661	156	8,174	946	8,174	946
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	7	5	7	5	130	124	9	8	140	124	147	125
Total	561	207	427	73	988	219	7,771	963	868	174	8,639	957	9,627	977
State and local government:														
Local	183	129	36	17	219	130	110	67	71	35	181	76	401	150
State	289	157	23	12	312	158	1,464	346	215	78	1,679	353	1,991	383
Other public	--	--	--	--	--	--	3	2	1	1	3	3	3	3
Total	472	203	60	21	531	204	1,577	352	287	85	1,864	360	2,395	410
Private:														
Corporate	7,254	675	158	37	7,411	676	--	--	--	--	--	--	7,411	676
Noncorporate private:														
Total, noncorporate private	5,281	540	1,871	239	7,152	588	--	--	--	--	--	--	7,152	588
All private	12,535	837	2,029	242	14,563	866	--	--	--	--	--	--	14,563	866
All owners	47,481	1,882	4,988	391	52,469	1,910	23,850	1,548	3,026	345	26,877	1,567	79,345	2,346

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	35,706	1,715	2,476	304	38,182	1,731	14,780	1,186	1,976	313	16,756	1,220	54,938	1,976
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	35,706	1,715	2,476	304	38,182	1,731	14,780	1,186	1,976	313	16,756	1,220	54,938	1,976
Other federal government:														
Bureau of Land Management	562	207	376	65	939	216	128	116	163	66	291	134	1,230	253
Department of Defense and Energy	--	--	19	10	19	10	--	--	--	--	--	--	19	10
National Park Service	--	--	--	--	--	--	7,541	954	669	156	8,210	947	8,210	947
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	7	5	7	5	131	125	9	8	141	125	148	125
Total	562	207	402	66	964	216	7,801	965	841	169	8,642	958	9,606	979
State and local government:														
Local	67	36	38	17	105	40	115	68	74	35	189	77	295	86
State	286	157	23	12	309	157	1,530	349	266	95	1,796	360	2,105	389
Other public	--	--	--	--	--	--	3	2	1	1	4	3	4	3
Total	354	161	61	21	414	162	1,648	355	341	101	1,989	368	2,404	397
Private:														
Corporate	7,408	679	236	54	7,644	680	--	--	--	--	--	--	7,644	680
Noncorporate private:														
Total, noncorporate private	5,412	550	1,689	182	7,100	576	--	--	--	--	--	--	7,100	576
All private	12,820	846	1,925	189	14,745	861	--	--	--	--	--	--	14,745	861
All owners	49,442	1,927	4,863	364	54,305	1,949	24,229	1,560	3,158	370	27,387	1,585	81,692	2,379

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	36,306	1,709	2,334	279	38,640	1,719	15,615	1,122	2,094	325	17,709	1,143	56,349	2,026
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	36,306	1,709	2,334	279	38,640	1,719	15,615	1,122	2,094	325	17,709	1,143	56,349	2,026
Other federal government:														
Bureau of Land Management	686	261	408	71	1,093	268	157	127	134	58	291	139	1,385	302
Department of Defense and Energy	--	--	17	10	17	10	--	--	--	--	--	--	17	10
National Park Service	--	--	--	--	--	--	7,626	949	677	164	8,303	959	8,303	959
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	51	42	51	42	114	121	10	9	124	121	175	128
Total	686	261	476	83	1,162	272	7,898	959	821	173	8,719	971	9,880	987
State and local government:														
Local	72	37	38	18	110	41	138	76	65	32	203	82	313	92
State	323	172	19	11	342	172	1,378	322	229	89	1,607	332	1,949	349
Other public	--	--	--	--	--	--	2	2	1	1	3	2	3	2
Total	395	176	57	21	452	177	1,518	330	295	94	1,813	341	2,265	359
Private:														
Corporate	7,498	652	204	48	7,702	653	--	--	--	--	--	--	7,702	653
Noncorporate private:														
Total, noncorporate private	5,370	541	1,644	176	7,014	566	--	--	--	--	--	--	7,014	566
All private	12,868	819	1,848	182	14,715	835	--	--	--	--	--	--	14,715	835
All owners	50,254	1,915	4,714	344	54,969	1,931	25,032	1,512	3,209	379	28,241	1,536	83,209	2,409

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	36,365	1,716	2,283	274	38,648	1,725	16,201	1,184	2,217	334	18,418	1,204	57,066	2,065
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	36,365	1,716	2,283	274	38,648	1,725	16,201	1,184	2,217	334	18,418	1,204	57,066	2,065
Other federal government:														
Bureau of Land Management	687	262	375	68	1,061	268	163	128	140	58	304	141	1,365	302
Department of Defense and Energy	--	--	17	9	17	9	--	--	--	--	--	--	17	9
National Park Service	--	--	--	--	--	--	7,966	976	687	164	8,653	986	8,653	986
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	51	42	51	42	--	--	1	1	1	1	52	42
Total	687	262	442	80	1,129	271	8,137	982	828	174	8,965	993	10,094	1,008
State and local government:														
Local	72	37	38	18	110	41	138	76	72	35	210	83	320	93
State	287	157	19	11	306	157	1,249	306	216	89	1,465	317	1,771	331
Other public	--	--	--	--	--	--	2	2	1	1	3	2	3	2
Total	360	161	57	21	416	162	1,389	314	289	95	1,678	326	2,094	342
Private:														
Corporate	7,587	655	236	52	7,823	657	--	--	--	--	--	--	7,823	657
Noncorporate private:														
Total, noncorporate private	4,736	424	1,722	177	6,458	456	--	--	--	--	--	--	6,458	456
All private	12,322	751	1,958	184	14,281	768	--	--	--	--	--	--	14,281	768
All owners	49,734	1,893	4,740	340	54,474	1,908	25,727	1,570	3,334	388	29,061	1,593	83,535	2,427

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	36,903	1,763	2,058	237	38,961	1,766	16,592	1,188	2,118	324	18,709	1,202	57,670	2,104
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	36,903	1,763	2,058	237	38,961	1,766	16,592	1,188	2,118	324	18,709	1,202	57,670	2,104
Other federal government:														
Bureau of Land Management	683	262	351	65	1,034	267	169	128	85	28	254	131	1,288	297
Department of Defense and Energy	--	--	17	9	17	9	--	--	--	--	--	--	17	9
National Park Service	--	--	--	--	--	--	8,081	974	642	157	8,723	983	8,723	983
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	51	43	51	43	--	--	1	1	1	1	52	43
Total	683	262	418	78	1,102	270	8,258	980	727	159	8,985	989	10,087	1,003
State and local government:														
Local	101	44	47	20	148	48	138	76	69	35	207	83	355	96
State	296	158	19	11	314	159	1,283	308	232	90	1,515	319	1,829	333
Other public	--	--	--	--	--	--	2	2	1	1	3	2	3	2
Total	397	164	65	23	462	166	1,423	317	302	96	1,725	328	2,187	345
Private:														
Corporate	7,891	674	218	50	8,108	675	--	--	--	--	--	--	8,108	675
Noncorporate private:														
Total, noncorporate private	4,646	416	1,731	178	6,377	449	--	--	--	--	--	--	6,377	449
All private	12,537	763	1,949	184	14,486	780	--	--	--	--	--	--	14,486	780
All owners	50,520	1,939	4,490	310	55,010	1,950	26,273	1,572	3,147	373	29,420	1,590	84,430	2,462

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	37,244	1,760	2,194	272	39,438	1,767	17,590	1,241	2,125	326	19,715	1,252	59,153	2,132
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	37,244	1,760	2,194	272	39,438	1,767	17,590	1,241	2,125	326	19,715	1,252	59,153	2,132
Other federal government:														
Bureau of Land Management	682	263	323	63	1,005	267	187	130	88	30	275	133	1,280	298
Department of Defense and Energy	--	--	17	9	17	9	--	--	--	--	--	--	17	9
National Park Service	--	--	--	--	--	--	8,175	986	658	159	8,833	996	8,833	996
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	51	43	51	43	--	--	1	1	1	1	52	43
Total	682	263	391	76	1,073	271	8,370	992	747	161	9,117	1,002	10,190	1,015
State and local government:														
Local	101	44	51	20	152	49	139	76	79	35	218	84	370	96
State	301	158	20	11	321	158	1,291	308	258	97	1,550	320	1,870	333
Other public	--	--	--	--	--	--	2	2	1	1	3	2	3	2
Total	402	164	71	23	473	165	1,432	316	339	103	1,770	330	2,243	345
Private:														
Corporate	8,118	654	320	63	8,438	656	--	--	--	--	--	--	8,438	656
Noncorporate private:														
Total, noncorporate private	4,716	424	1,828	186	6,544	459	--	--	--	--	--	--	6,544	459
All private	12,834	749	2,148	195	14,981	769	--	--	--	--	--	--	14,981	769
All owners	51,162	1,930	4,803	343	55,965	1,944	27,392	1,620	3,210	378	30,603	1,636	86,567	2,486

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	38,627	1,821	2,205	287	40,832	1,829	18,502	1,359	2,375	341	20,877	1,370	61,708	2,251
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	38,627	1,821	2,205	287	40,832	1,829	18,502	1,359	2,375	341	20,877	1,370	61,708	2,251
Other federal government:														
Bureau of Land Management	362	101	303	61	665	117	339	167	89	30	428	170	1,093	204
Department of Defense and Energy	--	--	18	9	18	9	--	--	--	--	--	--	18	9
National Park Service	--	--	--	--	--	--	8,172	897	628	142	8,800	905	8,800	905
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	60	44	60	44	--	--	1	1	1	1	61	44
Total	362	101	381	76	743	125	8,519	905	718	145	9,237	912	9,980	908
State and local government:														
Local	151	65	52	20	203	68	143	78	116	50	259	93	462	115
State	298	158	34	19	332	159	1,152	274	267	98	1,419	288	1,751	304
Other public	--	--	--	--	--	--	2	2	1	1	3	2	3	2
Total	449	171	85	28	535	173	1,298	283	383	110	1,681	301	2,215	323
Private:														
Corporate	8,303	685	397	73	8,701	687	--	--	--	--	--	--	8,701	687
Noncorporate private:														
Total, noncorporate private	4,548	406	1,937	172	6,485	437	--	--	--	--	--	--	6,485	437
All private	12,851	767	2,335	186	15,186	783	--	--	--	--	--	--	15,186	783
All owners	52,290	1,979	5,006	351	57,295	1,993	28,319	1,657	3,475	386	31,794	1,672	89,090	2,550

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	40,534	1,915	2,281	299	42,815	1,922	19,329	1,419	2,415	343	21,745	1,432	64,560	2,354
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	40,534	1,915	2,281	299	42,815	1,922	19,329	1,419	2,415	343	21,745	1,432	64,560	2,354
Other federal government:														
Bureau of Land Management	373	101	290	60	663	117	337	167	86	27	423	169	1,086	204
Department of Defense and Energy	--	--	18	9	18	9	--	--	--	--	--	--	18	9
National Park Service	--	--	--	--	--	--	9,354	1,286	581	138	9,935	1,291	9,935	1,291
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	--	--	60	44	60	44	--	--	1	1	1	1	61	44
Total	373	101	368	75	741	125	9,699	1,291	667	140	10,367	1,297	11,108	1,292
State and local government:														
Local	147	63	50	20	197	66	140	76	115	49	255	90	453	112
State	298	158	33	19	330	159	1,030	220	218	77	1,248	231	1,578	257
Other public	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Total	445	170	83	27	528	172	1,172	231	334	91	1,505	246	2,033	278
Private:														
Corporate	8,685	704	453	78	9,138	707	--	--	--	--	--	--	9,138	707
Noncorporate private:														
Total, noncorporate private	4,870	443	2,425	290	7,295	524	--	--	--	--	--	--	7,295	524
All private	13,555	799	2,878	299	16,433	842	--	--	--	--	--	--	16,433	842
All owners	54,907	2,078	5,610	430	60,517	2,101	30,200	1,933	3,416	382	33,617	1,947	94,134	2,807

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C18.9: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10-year averages): 2009-2018

**information duplicated in Table C10*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	42,652	1,965	2,777	403	45,430	1,983	19,455	1,412	2,342	337	21,797	1,424	67,227	2,392
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	42,652	1,965	2,777	403	45,430	1,983	19,455	1,412	2,342	337	21,797	1,424	67,227	2,392
Other federal government:														
Bureau of Land Management	319	97	292	60	611	112	337	167	93	29	430	169	1,042	201
Department of Defense and Energy	--	--	18	9	18	9	--	--	--	--	--	--	18	9
National Park Service	--	--	--	--	--	--	9,046	1,250	569	137	9,616	1,256	9,616	1,256
U.S. Fish and Wildlife Service	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Other federal	8	10	60	44	68	45	--	--	1	1	1	1	69	45
Total	327	97	370	75	697	121	9,391	1,256	663	139	10,055	1,262	10,752	1,257
State and local government:														
Local	188	85	67	24	255	89	144	76	125	50	269	91	524	127
State	295	157	28	17	323	158	1,010	218	213	76	1,223	228	1,546	255
Other public	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Total	483	174	95	30	578	177	1,155	229	339	91	1,494	244	2,072	275
Private:														
Corporate	8,773	696	535	87	9,308	700	--	--	--	--	--	--	9,308	700
Noncorporate private:														
Total, noncorporate private	5,066	481	2,666	304	7,732	562	--	--	--	--	--	--	7,732	562
All private	13,839	809	3,201	315	17,040	856	--	--	--	--	--	--	17,040	856
All owners	57,302	2,131	6,443	517	63,745	2,166	30,002	1,903	3,344	376	33,346	1,918	97,091	2,828

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C19: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: All California

**information combined with information from Table C28 in Table C27.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	7,698.79	158.10	4,160.93	190.14	11,859.72	213.92	2,384.34	103.48	1,734.26	118.38	4,128.75	138.39	15,988.46	236.14
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	7,698.79	158.10	4,160.93	190.14	11,859.72	213.92	2,384.34	103.48	1,734.26	118.38	4,128.75	138.39	15,988.46	236.14
Other federal government:														
Bureau of Land Management	309.67	51.66	1,746.90	146.24	2,056.57	153.60	89.21	26.78	320.02	55.21	409.22	61.35	2,465.79	160.68
Department of Defense and Energy	29.46	16.34	124.30	32.79	153.76	36.64	--	--	8.24	8.52	8.24	8.52	162.00	37.62
National Park Service	--	--	--	--	--	--	747.41	56.62	632.88	75.48	1,380.29	91.36	1,380.29	91.36
U.S. Fish and Wildlife Service	--	--	--	--	--	--	4.51	4.61	0.79	0.82	5.30	4.68	5.30	4.68
Other federal	4.81	5.98	91.93	28.64	96.74	29.26	--	--	6.97	4.12	6.97	4.12	103.71	29.55
Total	343.94	54.25	1,963.13	150.81	2,307.07	158.40	841.13	60.61	968.90	91.37	1,810.02	105.13	4,117.09	172.20
State and local government:														
Local	50.57	17.42	219.33	42.86	269.90	46.76	55.17	20.31	233.25	44.26	288.42	47.03	558.32	65.90
State	89.53	21.85	90.40	30.94	179.93	37.68	310.06	41.49	408.51	57.19	718.57	68.52	898.51	72.23
Other public	--	--	1.33	1.21	1.33	1.21	6.98	7.76	8.95	9.68	15.92	12.41	17.26	12.47
Total	140.10	27.59	311.07	52.80	451.17	59.78	372.20	46.10	650.71	69.69	1,022.92	79.67	1,474.09	92.76
Private:														
Corporate	4,869.95	167.93	1,401.85	110.88	6,271.81	196.26	--	--	--	--	--	--	6,271.81	196.26
Noncorporate private:														
Total, noncorporate private	2,997.08	135.50	6,625.12	213.68	9,622.20	239.31	--	--	--	--	--	--	9,622.20	239.31
All private	7,867.04	178.12	8,026.97	228.05	15,894.01	256.67	--	--	--	--	--	--	15,894.01	256.67
All owners	16,049.86	240.56	14,462.10	333.38	30,511.96	363.95	3,597.67	128.31	3,353.87	164.73	6,961.69	190.51	37,473.65	380.46

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C20: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	2.45	2.25	130.15	33.23	132.60	33.29	31.91	15.84	191.89	42.31	223.80	44.74	356.40	55.77
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2.45	2.25	130.15	33.23	132.60	33.29	31.91	15.84	191.89	42.31	223.80	44.74	356.40	55.77
Other federal government:														
Bureau of Land Management	--	--	88.07	30.18	88.07	30.18	--	--	17.12	12.50	17.12	12.50	105.19	32.67
Department of Defense and Energy	--	--	74.69	24.27	74.69	24.27	--	--	--	--	--	--	74.69	24.27
National Park Service	--	--	--	--	--	--	--	--	8.49	9.45	8.49	9.45	8.49	9.45
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	17.51	13.48	17.51	13.48	--	--	0.29	0.32	0.29	0.32	17.79	13.49
Total	--	--	180.27	40.78	180.27	40.78	--	--	25.90	15.68	25.90	15.68	206.17	43.68
State and local government:														
Local	--	--	44.89	17.65	44.89	17.65	55.17	20.31	144.47	32.98	199.65	36.61	244.54	40.24
State	16.47	10.25	20.21	14.86	36.68	18.39	44.24	18.83	179.63	37.69	223.87	41.91	260.55	45.68
Other public	--	--	--	--	--	--	6.98	7.76	8.95	9.68	15.92	12.41	15.92	12.41
Total	16.47	10.25	65.10	23.08	81.57	25.49	106.38	28.64	333.05	48.33	439.44	53.50	521.01	57.98
Private:														
Corporate	52.53	21.23	206.62	39.78	259.15	45.03	--	--	--	--	--	--	259.15	45.03
Noncorporate private:														
Total, noncorporate private	167.35	33.27	1,107.46	92.56	1,274.81	97.90	--	--	--	--	--	--	1,274.81	97.90
All private	219.88	39.33	1,314.07	99.79	1,533.96	106.81	--	--	--	--	--	--	1,533.96	106.81
All owners	238.80	40.76	1,689.61	115.17	1,928.41	121.76	138.29	32.73	550.84	65.84	689.13	71.14	2,617.54	139.77

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C21: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	0.79	0.82	0.79	0.82	0.79	0.82
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	0.79	0.82	0.79	0.82	0.79	0.82
State and local government:														
Local	--	--	6.61	4.59	6.61	4.59	--	--	--	--	--	--	6.61	4.59
State	--	--	--	--	--	--	--	--	7.58	6.87	7.58	6.87	7.58	6.87
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	6.61	4.59	6.61	4.59	--	--	7.58	6.87	7.58	6.87	14.19	8.27
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	119.99	30.77	119.99	30.77	--	--	--	--	--	--	119.99	30.77
All private	--	--	119.99	30.77	119.99	30.77	--	--	--	--	--	--	119.99	30.77
All owners	--	--	126.60	31.10	126.60	31.10	--	--	8.37	6.92	8.37	6.92	134.97	31.86

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C22: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	711.66	71.92	1,539.63	137.06	2,251.30	152.71	46.50	18.10	137.60	41.15	184.11	44.78	2,435.41	158.96
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	711.66	71.92	1,539.63	137.06	2,251.30	152.71	46.50	18.10	137.60	41.15	184.11	44.78	2,435.41	158.96
Other federal government:														
Bureau of Land Management	42.69	24.16	1,022.67	127.25	1,065.36	129.38	--	--	83.81	29.00	83.81	29.00	1,149.17	131.53
Department of Defense and Energy	--	--	44.95	21.66	44.95	21.66	--	--	--	--	--	--	44.95	21.66
National Park Service	--	--	--	--	--	--	--	--	106.56	32.43	106.56	32.43	106.56	32.43
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	42.69	24.16	1,067.63	128.62	1,110.32	130.73	--	--	190.37	43.33	190.37	43.33	1,300.68	135.59
State and local government:														
Local	--	--	9.78	9.86	9.78	9.86	--	--	--	--	--	--	9.78	9.86
State	--	--	--	--	--	--	4.96	5.52	16.24	13.93	21.20	14.98	21.20	14.98
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	9.78	9.86	9.78	9.86	4.96	5.52	16.24	13.93	21.20	14.98	30.97	17.93
Private:														
Corporate	335.91	62.59	157.63	46.50	493.54	78.36	--	--	--	--	--	--	493.54	78.36
Noncorporate private:														
Total, noncorporate private	85.39	23.83	316.95	71.99	402.34	76.05	--	--	--	--	--	--	402.34	76.05
All private	421.30	66.59	474.58	85.35	895.88	108.60	--	--	--	--	--	--	895.88	108.60
All owners	1,175.66	101.47	3,091.62	206.89	4,267.27	229.02	51.46	18.92	344.21	61.36	395.67	64.09	4,662.95	236.39

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C23: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	2,301.13	111.30	593.38	71.15	2,894.51	128.90	1,271.37	86.52	389.19	58.39	1,660.56	101.46	4,555.08	158.89
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,301.13	111.30	593.38	71.15	2,894.51	128.90	1,271.37	86.52	389.19	58.39	1,660.56	101.46	4,555.08	158.89
Other federal government:														
Bureau of Land Management	129.57	31.93	201.70	42.04	331.27	52.94	5.43	5.38	33.78	17.50	39.22	18.31	370.48	55.94
Department of Defense and Energy	--	--	--	--	--	--	--	--	8.24	8.52	8.24	8.52	8.24	8.52
National Park Service	--	--	--	--	--	--	74.87	24.10	60.87	22.74	135.74	33.64	135.74	33.64
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	4.81	5.98	11.57	8.61	16.38	10.48	--	--	1.74	1.92	1.74	1.92	18.11	10.66
Total	134.38	32.48	213.27	42.91	347.64	53.96	80.30	24.61	104.62	29.90	184.93	39.16	532.57	64.96
State and local government:														
Local	2.71	2.33	16.60	11.50	19.31	11.74	--	--	9.25	8.89	9.25	8.89	28.56	14.72
State	9.05	7.12	26.19	17.84	35.24	19.21	3.48	2.64	28.27	15.98	31.74	16.58	66.98	25.37
Other public	--	--	1.33	1.21	1.33	1.21	--	--	--	--	--	--	1.33	1.21
Total	11.76	7.49	44.12	21.26	55.88	22.54	3.48	2.64	37.52	18.29	40.99	18.81	96.87	29.22
Private:														
Corporate	1,028.42	90.23	413.70	58.94	1,442.13	107.23	--	--	--	--	--	--	1,442.13	107.23
Noncorporate private:														
Total, noncorporate private	881.18	81.95	1,476.26	108.52	2,357.44	134.49	--	--	--	--	--	--	2,357.44	134.49
All private	1,909.60	118.12	1,889.96	121.81	3,799.57	166.74	--	--	--	--	--	--	3,799.57	166.74
All owners	4,356.86	165.77	2,740.73	149.02	7,097.60	218.46	1,355.15	90.02	531.33	68.10	1,886.49	110.40	8,984.08	240.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C24: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	23.56	12.55	9.97	9.57	33.54	15.78	12.28	9.36	--	--	12.28	9.36	45.82	18.34
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	23.56	12.55	9.97	9.57	33.54	15.78	12.28	9.36	--	--	12.28	9.36	45.82	18.34
Other federal government:														
Bureau of Land Management	39.51	17.32	--	--	39.51	17.32	79.95	26.03	--	--	79.95	26.03	119.47	31.57
Department of Defense and Energy	25.76	15.90	0.15	0.16	25.91	15.90	--	--	--	--	--	--	25.91	15.90
National Park Service	--	--	--	--	--	--	48.87	19.13	10.05	9.72	58.92	21.05	58.92	21.05
U.S. Fish and Wildlife Service	--	--	--	--	--	--	4.51	4.61	--	--	4.51	4.61	4.51	4.61
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	65.28	23.51	0.15	0.16	65.43	23.51	133.33	32.18	10.05	9.72	143.38	32.89	208.81	40.33
State and local government:														
Local	18.19	8.96	10.71	7.71	28.90	13.77	--	--	66.08	27.21	66.08	27.21	94.98	30.49
State	52.21	17.41	2.73	2.48	54.94	17.58	199.26	38.22	13.26	10.66	212.52	39.69	267.46	39.48
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	70.40	19.34	13.44	8.09	83.84	22.13	199.26	38.22	79.34	29.22	278.60	48.11	362.44	49.44
Private:														
Corporate	1,444.75	97.28	44.52	18.23	1,489.27	98.85	--	--	--	--	--	--	1,489.27	98.85
Noncorporate private:														
Total, noncorporate private	1,030.01	87.81	227.58	41.02	1,257.59	96.35	--	--	--	--	--	--	1,257.59	96.35
All private	2,474.77	123.35	272.09	44.81	2,746.86	129.97	--	--	--	--	--	--	2,746.86	129.97
All owners	2,634.01	126.98	295.66	46.52	2,929.66	134.16	344.87	50.81	89.39	30.79	434.26	59.00	3,363.93	144.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C25: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:	4,506.70	144.78	1,351.28	121.80	5,857.97	179.64	901.44	68.20	798.52	85.24	1,699.96	103.39	7,557.94	203.54
National Forest														
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	4,506.70	144.78	1,351.28	121.80	5,857.97	179.64	901.44	68.20	798.52	85.24	1,699.96	103.39	7,557.94	203.54
Other federal government:														
Bureau of Land Management	97.90	28.32	393.10	61.63	491.00	67.35	3.82	3.28	148.60	38.50	152.42	38.64	643.42	76.26
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	623.67	51.01	296.64	52.84	920.32	71.49	920.32	71.49
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	28.79	15.30	28.79	15.30	--	--	2.81	2.90	2.81	2.90	31.60	15.57
Total	97.90	28.32	421.90	63.34	519.79	68.91	627.49	51.09	448.05	64.39	1,075.54	79.62	1,595.34	99.60
State and local government:														
Local	29.67	14.76	101.88	31.72	131.54	34.95	--	--	8.85	7.44	8.85	7.44	140.40	35.73
State	11.81	6.07	41.27	20.53	53.08	21.33	47.74	15.68	90.59	28.71	138.33	32.59	191.41	38.36
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	41.47	15.96	143.15	37.73	184.62	40.85	47.74	15.68	99.44	29.66	147.18	33.43	331.80	52.31
Private:														
Corporate	2,006.02	125.99	494.26	65.27	2,500.28	140.82	--	--	--	--	--	--	2,500.28	140.82
Noncorporate private:														
Total, noncorporate private	810.45	72.95	3,053.51	159.28	3,863.96	172.78	--	--	--	--	--	--	3,863.96	172.78
All private	2,816.46	139.92	3,547.77	167.63	6,364.24	210.44	--	--	--	--	--	--	6,364.24	210.44
All owners	7,462.53	202.64	5,464.10	218.99	12,926.63	285.24	1,576.68	86.48	1,346.01	110.77	2,922.69	134.27	15,849.32	308.54

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C26: Aboveground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	153.29	34.68	536.50	67.03	689.79	75.60	120.83	31.64	217.05	45.42	348.03	55.34	1,037.82	93.21
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	153.29	34.68	536.50	67.03	689.79	75.60	120.83	31.64	217.05	45.42	348.03	55.34	1,037.82	93.21
Other federal government:														
Bureau of Land Management	--	--	41.35	18.45	41.35	18.45	--	--	36.71	18.53	36.71	18.53	78.06	26.10
Department of Defense and Energy	3.70	3.78	4.51	4.61	8.21	5.96	--	--	--	--	--	--	8.21	5.96
National Park Service	--	--	--	--	--	--	--	--	150.26	37.63	150.26	37.63	150.26	37.63
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	34.06	18.20	34.06	18.20	--	--	2.14	2.19	2.14	2.19	36.20	18.33
Total	3.70	3.78	79.92	26.32	83.62	26.58	--	--	189.11	41.80	189.11	41.80	272.72	49.45
State and local government:														
Local	--	--	28.87	14.67	28.87	14.67	--	--	4.60	4.46	4.60	4.46	33.47	15.24
State	--	--	--	--	--	--	10.39	8.61	72.95	26.54	83.34	27.82	83.34	27.82
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	28.87	14.67	28.87	14.67	10.39	8.61	77.55	26.91	87.94	28.18	116.80	31.69
Private:														
Corporate	2.31	2.29	85.13	29.76	87.45	29.85	--	--	--	--	--	--	87.45	29.85
Noncorporate private:														
Total, noncorporate private	22.70	13.90	323.37	51.42	346.07	53.71	--	--	--	--	--	--	346.07	53.71
All private	25.01	14.09	408.50	59.37	433.51	61.41	--	--	--	--	--	--	433.51	61.41
All owners	182.00	37.62	1,053.78	94.14	1,235.79	101.68	131.22	32.79	483.71	67.34	625.07	74.86	1,860.86	125.78

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.1: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,768.23	195.43	5,850.31	243.56	14,618.54	274.97	2,449.18	123.75	1,899.31	130.25	4,348.49	172.12	18,967.03	260.35
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,768.23	195.43	5,850.31	243.56	14,618.54	274.97	2,449.18	123.75	1,899.31	130.25	4,348.49	172.12	18,967.03	260.35
Other federal government:														
Bureau of Land Management	395.48	59.65	2,206.59	161.30	2,602.07	166.88	26.54	13.18	490.88	64.16	517.42	65.46	3,119.49	174.95
Department of Defense and Energy	9.73	10.69	119.69	33.47	129.42	35.14	--	--	--	--	--	--	129.42	35.14
National Park Service	--	--	--	--	--	--	765.61	59.97	762.16	84.29	1,527.77	96.39	1,527.77	96.39
U.S. Fish and Wildlife Service	--	--	--	--	--	--	6.01	7.39	6.10	6.20	12.11	9.65	12.11	9.65
Other federal	--	--	178.65	45.48	178.65	45.48	10.08	7.36	28.11	14.86	38.19	16.57	216.84	48.39
Total	405.21	60.60	2,504.93	169.49	2,910.14	174.73	808.25	61.77	1,287.25	104.28	2,095.50	114.05	5,005.63	197.73
State and local government:														
Local	47.68	19.80	185.54	40.73	233.23	45.56	38.64	17.55	325.08	55.90	363.73	58.30	596.95	73.63
State	105.77	28.80	80.75	29.07	186.52	40.78	395.47	57.98	492.71	69.08	888.18	88.69	1,074.71	95.30
Other public	--	--	14.45	12.54	14.45	12.54	10.62	9.52	21.44	15.78	32.06	18.43	46.51	22.29
Total	153.46	34.92	280.74	51.55	434.20	62.31	444.74	61.27	839.23	89.06	1,283.97	106.14	1,718.16	120.41
Private:														
Corporate	5,017.88	182.73	844.11	91.52	5,861.98	201.05	--	--	--	--	--	--	5,861.98	201.05
Noncorporate private:														
Total, noncorporate private	4,110.40	163.75	8,889.44	258.37	12,999.84	287.46	--	--	--	--	--	--	12,999.84	287.46
All private	9,128.28	197.91	9,733.54	264.07	18,861.82	290.26	--	--	--	--	--	--	18,861.82	290.26
All owners	18,455.17	282.49	18,369.52	395.73	36,824.69	429.03	3,702.17	149.75	4,025.79	187.08	7,727.96	228.78	44,552.65	426.38

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.2: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	8,780.29	197.53	5,655.69	243.96	14,435.98	278.48	2,462.18	124.66	1,879.78	129.65	4,341.96	172.31	18,777.94	265.42
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,780.29	197.53	5,655.69	243.96	14,435.98	278.48	2,462.18	124.66	1,879.78	129.65	4,341.96	172.31	18,777.94	265.42
Other federal government:														
Bureau of Land Management	393.59	59.58	2,164.17	159.39	2,557.76	165.18	26.39	13.16	482.93	63.72	509.33	65.03	3,067.08	173.30
Department of Defense and Energy	14.19	11.81	142.71	36.79	156.90	38.62	--	--	--	--	--	--	156.90	38.62
National Park Service	--	--	--	--	--	--	770.94	60.06	757.96	83.30	1,528.91	95.42	1,528.91	95.42
U.S. Fish and Wildlife Service	--	--	--	--	--	--	6.01	7.39	6.04	6.17	12.05	9.63	12.05	9.63
Other federal	--	--	178.32	45.50	178.32	45.50	10.02	7.33	27.86	14.79	37.89	16.50	216.21	48.38
Total	407.78	60.74	2,485.21	168.34	2,892.98	173.82	813.37	61.86	1,274.80	103.72	2,088.17	113.45	4,981.15	196.64
State and local government:														
Local	34.10	14.91	186.90	40.76	221.00	43.65	37.81	17.34	319.44	55.19	357.25	57.56	578.25	71.90
State	107.24	28.77	80.08	28.93	187.32	40.66	403.37	58.36	519.71	70.83	923.09	90.42	1,110.41	96.88
Other public	--	--	14.73	12.78	14.73	12.78	10.94	9.66	8.60	9.84	19.54	13.79	34.27	18.80
Total	141.35	32.37	281.70	51.57	423.05	60.94	452.13	61.60	847.75	89.31	1,299.87	106.59	1,722.93	120.26
Private:														
Corporate	4,961.94	185.25	1,000.81	99.25	5,962.75	206.46	--	--	--	--	--	--	5,962.75	206.46
Noncorporate private:														
Total, noncorporate private	4,036.63	162.19	8,620.22	255.49	12,656.86	285.20	--	--	--	--	--	--	12,656.86	285.20
All private	8,998.57	201.92	9,621.04	262.63	18,619.61	292.79	--	--	--	--	--	--	18,619.61	292.79
All owners	18,327.98	284.23	18,043.64	393.86	36,371.62	429.58	3,727.68	150.66	4,002.33	186.49	7,730.01	228.78	44,101.63	426.44

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.3: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	8,825.40	186.94	5,264.09	232.75	14,089.49	260.10	2,564.74	115.79	1,948.38	124.83	4,513.12	147.29	18,602.61	277.47
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,825.40	186.94	5,264.09	232.75	14,089.49	260.10	2,564.74	115.79	1,948.38	124.83	4,513.12	147.29	18,602.61	277.47
Other federal government:														
Bureau of Land Management	427.22	62.77	2,142.02	173.41	2,569.24	182.73	35.74	17.04	403.22	65.41	438.96	67.58	3,008.20	189.54
Department of Defense and Energy	22.20	14.91	126.72	35.33	148.92	38.34	--	--	8.75	9.06	8.75	9.06	157.67	39.40
National Park Service	--	--	--	--	--	--	787.80	60.78	719.44	85.32	1,507.24	101.50	1,507.24	101.50
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	205.89	48.89	205.89	48.89	3.88	4.10	32.69	17.16	36.58	17.64	242.47	51.96
Total	449.42	63.84	2,474.63	181.35	2,924.05	190.36	827.43	62.10	1,164.10	105.75	1,991.53	117.88	4,915.58	204.07
State and local government:														
Local	44.54	19.07	177.21	40.45	221.75	44.98	44.94	19.67	308.61	54.48	353.55	56.82	575.30	71.86
State	96.98	26.98	89.41	32.07	186.40	41.50	365.36	49.04	480.22	65.10	845.57	78.74	1,031.97	82.32
Other public	--	--	14.92	12.77	14.92	12.77	7.31	8.46	10.09	10.93	17.40	13.82	32.32	18.82
Total	141.52	32.88	281.54	53.16	423.06	62.42	417.61	52.57	798.91	81.39	1,216.52	92.84	1,639.59	104.26
Private:														
Corporate	5,079.77	187.27	1,022.21	100.72	6,101.98	208.76	--	--	--	--	--	--	6,101.98	208.76
Noncorporate private:														
Total, noncorporate private	4,014.93	162.48	8,465.24	258.08	12,480.17	286.70	--	--	--	--	--	--	12,480.17	286.70
All private	9,094.70	201.90	9,487.45	267.32	18,582.14	297.97	--	--	--	--	--	--	18,582.14	297.97
All owners	18,511.04	277.83	17,507.71	396.98	36,018.74	430.99	3,809.78	141.35	3,911.39	182.15	7,721.17	209.03	43,739.91	444.79

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.4: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,687.24	181.84	5,111.75	227.50	13,798.99	252.47	2,543.69	114.01	1,911.01	125.02	4,454.70	146.63	18,253.69	270.90
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,687.24	181.84	5,111.75	227.50	13,798.99	252.47	2,543.69	114.01	1,911.01	125.02	4,454.70	146.63	18,253.69	270.90
Other federal government:														
Bureau of Land Management	421.54	62.53	2,062.31	168.60	2,483.86	178.11	46.15	19.31	424.92	66.93	471.07	69.64	2,954.93	185.67
Department of Defense and Energy	22.20	14.91	127.97	35.58	150.17	38.57	--	--	8.75	9.06	8.75	9.06	158.92	39.62
National Park Service	--	--	--	--	--	--	793.88	61.32	695.80	84.02	1,489.68	100.68	1,489.68	100.68
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.13	0.93	0.94	5.94	5.21	5.94	5.21
Other federal	--	--	198.79	47.94	198.79	47.94	--	--	24.61	15.19	24.61	15.19	223.40	50.28
Total	443.74	63.61	2,389.08	176.54	2,832.82	185.75	845.04	63.40	1,155.00	105.41	2,000.05	118.26	4,832.87	199.86
State and local government:														
Local	45.24	19.20	184.02	40.68	229.26	45.25	56.18	22.06	307.05	53.82	363.23	56.38	592.49	71.70
State	96.93	26.96	89.37	32.06	186.30	41.47	355.22	47.92	477.33	65.79	832.54	78.62	1,018.84	82.20
Other public	--	--	16.45	12.84	16.45	12.84	7.91	8.81	10.09	10.93	18.00	14.04	34.44	19.02
Total	142.17	32.93	289.84	53.34	432.01	62.60	419.30	52.68	794.46	81.60	1,213.76	92.56	1,645.77	104.08
Private:														
Corporate	5,097.17	187.54	1,101.76	106.74	6,198.93	211.91	--	--	--	--	--	--	6,198.93	211.91
Noncorporate private:														
Total, noncorporate private	3,885.20	159.98	8,185.54	252.06	12,070.74	280.87	--	--	--	--	--	--	12,070.74	280.87
All private	8,982.38	201.18	9,287.30	263.24	18,269.68	294.73	--	--	--	--	--	--	18,269.68	294.73
All owners	18,255.54	274.35	17,077.96	389.23	35,333.50	422.93	3,808.04	140.55	3,860.47	182.31	7,668.51	208.93	43,002.01	437.33

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.5: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,690.17	179.54	4,990.09	224.83	13,680.26	248.69	2,594.41	115.67	1,858.55	124.88	4,452.97	147.29	18,133.23	269.15
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,690.17	179.54	4,990.09	224.83	13,680.26	248.69	2,594.41	115.67	1,858.55	124.88	4,452.97	147.29	18,133.23	269.15
Other federal government:														
Bureau of Land Management	403.96	61.17	1,986.92	161.73	2,390.88	171.23	59.44	21.87	385.23	64.08	444.67	67.69	2,835.54	178.57
Department of Defense and Energy	22.21	14.90	123.89	35.16	146.10	38.19	--	--	8.75	9.05	8.75	9.05	154.85	39.25
National Park Service	--	--	--	--	--	--	797.05	60.97	685.25	83.05	1,482.30	99.76	1,482.30	99.76
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.13	0.93	0.93	5.94	5.21	5.94	5.21
Other federal	--	--	198.22	47.84	198.22	47.84	--	--	24.61	15.18	24.61	15.18	222.84	50.19
Total	426.17	62.48	2,309.03	169.94	2,735.20	179.20	861.50	63.79	1,104.77	103.29	1,966.27	116.43	4,701.47	193.57
State and local government:														
Local	53.91	20.12	193.64	41.45	247.56	46.34	56.23	22.07	297.04	53.06	353.27	55.68	600.83	71.88
State	99.31	26.66	91.23	32.07	190.54	41.46	353.83	47.53	472.08	65.16	825.91	77.89	1,016.44	81.64
Other public	--	--	15.55	12.77	15.55	12.77	7.91	8.81	10.09	10.92	18.00	14.03	33.55	18.97
Total	153.22	33.23	300.42	53.92	453.64	63.36	417.97	52.33	779.20	80.81	1,197.17	91.71	1,650.82	103.96
Private:														
Corporate	5,108.90	187.23	1,203.78	110.66	6,312.68	213.54	--	--	--	--	--	--	6,312.68	213.54
Noncorporate private:														
Total, noncorporate private	3,796.86	158.19	8,017.13	249.97	11,813.99	278.80	--	--	--	--	--	--	11,813.99	278.80
All private	8,905.76	200.24	9,220.91	261.71	18,126.67	292.90	--	--	--	--	--	--	18,126.67	292.90
All owners	18,175.32	272.14	16,820.45	383.98	34,995.77	416.78	3,873.89	141.95	3,742.52	180.66	7,616.41	208.03	42,612.18	432.54

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.6: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,685.70	179.91	4,803.88	221.31	13,489.57	246.09	2,642.32	116.20	1,889.11	127.66	4,531.43	150.01	18,021.00	269.25
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,685.70	179.91	4,803.88	221.31	13,489.57	246.09	2,642.32	116.20	1,889.11	127.66	4,531.43	150.01	18,021.00	269.25
Other federal government:														
Bureau of Land Management	386.94	58.50	1,986.13	165.05	2,373.07	173.69	68.73	23.71	374.61	63.09	443.34	67.38	2,816.41	180.87
Department of Defense and Energy	22.21	14.90	123.56	34.99	145.77	38.03	--	--	8.91	9.22	8.91	9.22	154.68	39.13
National Park Service	--	--	--	--	--	--	788.79	59.51	691.32	83.40	1,480.11	99.39	1,480.11	99.39
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.13	0.93	0.93	5.94	5.21	5.94	5.21
Other federal	--	--	201.76	48.01	201.76	48.01	--	--	24.67	15.19	24.67	15.19	226.43	50.35
Total	409.16	59.86	2,311.45	173.21	2,720.61	181.65	862.52	62.88	1,100.44	102.89	1,962.97	115.58	4,683.57	195.48
State and local government:														
Local	52.47	20.07	209.32	43.66	261.79	48.26	51.76	20.40	287.17	52.35	338.93	54.36	600.72	72.12
State	95.82	23.62	87.10	31.65	182.92	39.23	353.98	47.56	462.87	64.44	816.85	77.34	999.77	80.04
Other public	--	--	15.50	12.76	15.50	12.76	7.75	8.63	10.09	10.92	17.84	13.92	33.34	18.88
Total	148.29	30.79	311.91	55.39	460.21	63.36	413.49	51.66	760.13	79.77	1,173.62	90.46	1,633.82	102.93
Private:														
Corporate	5,198.93	186.55	1,368.07	117.95	6,567.00	216.31	--	--	--	--	--	--	6,567.00	216.31
Noncorporate private:														
Total, noncorporate private	3,684.97	156.92	7,718.54	245.89	11,403.50	275.38	--	--	--	--	--	--	11,403.50	275.38
All private	8,883.90	199.99	9,086.60	259.37	17,970.50	290.99	--	--	--	--	--	--	17,970.50	290.99
All owners	18,127.05	271.21	16,513.84	382.34	34,640.89	415.05	3,918.33	141.71	3,749.68	182.06	7,668.01	209.12	42,308.90	432.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.7: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,656.09	178.64	4,657.28	215.51	13,313.37	242.28	2,659.13	115.71	1,928.99	129.67	4,588.12	151.53	17,901.49	266.74
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,656.09	178.64	4,657.28	215.51	13,313.37	242.28	2,659.13	115.71	1,928.99	129.67	4,588.12	151.53	17,901.49	266.74
Other federal government:														
Bureau of Land Management	366.72	57.15	1,988.59	167.05	2,355.31	175.06	100.53	29.94	379.36	63.62	479.90	70.30	2,835.21	183.02
Department of Defense and Energy	34.50	18.73	133.25	36.17	167.75	40.73	--	--	9.63	9.60	9.63	9.60	177.38	41.85
National Park Service	--	--	--	--	--	--	793.99	59.54	703.97	84.11	1,497.96	99.91	1,497.96	99.91
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.13	0.93	0.93	5.94	5.21	5.94	5.21
Other federal	--	--	170.73	41.77	170.73	41.77	--	--	24.91	15.22	24.91	15.22	195.64	44.45
Total	401.22	59.53	2,292.57	173.86	2,693.79	182.08	899.53	64.34	1,118.80	103.97	2,018.34	117.17	4,712.13	196.82
State and local government:														
Local	61.24	21.04	236.93	46.49	298.17	51.81	51.84	20.41	285.21	52.24	337.05	54.25	635.22	74.46
State	92.40	23.03	93.32	32.39	185.72	39.48	348.31	46.15	467.11	64.68	815.42	76.85	1,001.14	79.66
Other public	--	--	15.48	12.76	15.48	12.76	7.75	8.63	9.93	10.75	17.68	13.79	33.16	18.79
Total	153.64	31.00	345.73	58.00	499.37	66.19	407.91	50.38	762.25	79.92	1,170.15	90.02	1,669.52	104.27
Private:														
Corporate	5,306.18	188.43	1,437.98	120.23	6,744.15	218.50	--	--	--	--	--	--	6,744.15	218.50
Noncorporate private:														
Total, noncorporate private	3,484.82	151.98	7,579.44	242.81	11,064.26	270.99	--	--	--	--	--	--	11,064.26	270.99
All private	8,791.00	199.36	9,017.42	257.34	17,808.42	289.15	--	--	--	--	--	--	17,808.42	289.15
All owners	18,001.95	270.00	16,313.00	377.92	34,314.95	411.76	3,966.57	141.46	3,810.04	184.15	7,776.61	210.90	42,091.56	430.01

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.8: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	8,613.08	177.29	4,678.70	215.61	13,291.78	241.39	2,657.61	114.39	1,925.81	129.49	4,583.42	150.68	17,875.20	265.25
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,613.08	177.29	4,678.70	215.61	13,291.78	241.39	2,657.61	114.39	1,925.81	129.49	4,583.42	150.68	17,875.20	265.25
Other federal government:														
Bureau of Land Management	376.73	58.11	1,970.70	165.68	2,347.43	173.97	100.16	29.90	372.12	63.06	472.28	69.78	2,819.72	182.12
Department of Defense and Energy	34.37	18.68	133.25	36.13	167.61	40.68	--	--	8.91	9.22	8.91	9.22	176.52	41.71
National Park Service	--	--	--	--	--	--	818.99	61.79	712.54	84.18	1,531.53	101.07	1,531.53	101.07
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.12	0.90	0.92	5.91	5.21	5.91	5.21
Other federal	--	--	105.73	32.04	105.73	32.04	--	--	7.66	4.52	7.66	4.52	113.39	32.36
Total	411.10	60.44	2,209.68	170.58	2,620.78	179.17	924.16	66.40	1,102.13	102.73	2,026.29	117.20	4,647.07	194.34
State and local government:														
Local	59.91	20.31	236.17	46.24	296.09	51.30	52.57	20.71	271.17	50.35	323.75	52.65	619.84	73.01
State	92.18	22.97	92.87	32.29	185.05	39.37	350.62	46.06	454.13	63.45	804.75	75.99	989.81	78.74
Other public	--	--	15.46	12.76	15.46	12.76	7.75	8.63	9.94	10.76	17.69	13.79	33.15	18.79
Total	152.09	30.47	344.50	57.75	496.60	65.72	410.94	50.39	735.25	78.08	1,146.20	88.60	1,642.79	102.87
Private:														
Corporate	5,362.64	188.06	1,506.31	122.40	6,868.95	219.08	--	--	--	--	--	--	6,868.95	219.08
Noncorporate private:														
Total, noncorporate private	3,385.84	150.89	7,481.11	239.16	10,866.96	267.44	--	--	--	--	--	--	10,866.96	267.44
All private	8,748.48	198.95	8,987.43	254.67	17,735.91	286.71	--	--	--	--	--	--	17,735.91	286.71
All owners	17,924.76	268.88	16,220.31	374.71	34,145.07	408.34	3,992.72	141.34	3,763.19	182.53	7,755.91	209.70	41,900.98	426.29

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C27.9: Aboveground and Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, All California (10 year averages): 2009-2018

**information combined from Table C19 and Table C28*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	8,554.21	175.67	4,623.25	211.27	13,177.47	237.69	2,649.27	114.98	1,926.96	131.53	4,587.50	153.77	17,764.96	262.38
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	8,554.21	175.67	4,623.25	211.27	13,177.47	237.69	2,649.27	114.98	1,926.96	131.53	4,587.50	153.77	17,764.96	262.38
Other federal government:														
Bureau of Land Management	344.08	57.40	1,941.00	162.49	2,285.08	170.67	99.12	29.76	355.58	61.34	454.69	68.17	2,739.77	178.53
Department of Defense and Energy	32.73	18.16	138.11	36.43	170.84	40.71	--	--	9.16	9.47	9.16	9.47	180.00	41.80
National Park Service	--	--	--	--	--	--	830.46	62.91	703.20	83.87	1,533.66	101.51	1,533.66	101.51
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5.01	5.12	0.88	0.91	5.89	5.20	5.89	5.20
Other federal	--	--	102.14	31.82	107.49	32.51	--	--	7.74	4.58	7.74	4.58	115.23	32.83
Total	382.16	60.28	2,181.26	167.57	2,563.41	176.00	934.59	67.34	1,076.55	101.52	2,011.13	116.81	4,574.54	191.33
State and local government:														
Local	56.19	19.36	243.70	47.62	299.89	51.96	61.30	22.57	259.17	49.18	320.47	52.26	620.36	73.22
State	99.48	24.28	100.44	34.38	199.92	41.87	344.51	46.10	453.90	63.54	798.41	76.13	998.34	80.26
Other public	--	--	1.48	1.34	1.48	1.34	7.76	8.62	9.94	10.76	17.69	13.79	19.18	13.86
Total	155.67	30.66	345.63	58.67	501.30	66.42	413.56	51.22	723.01	77.43	1,136.58	88.52	1,637.88	103.07
Private:														
Corporate	5,411.06	186.59	1,557.61	123.20	6,968.68	218.07	--	--	--	--	--	--	6,968.68	218.07
Noncorporate private:														
Total, noncorporate private	3,330.09	150.56	7,361.24	237.42	10,691.33	265.90	--	--	--	--	--	--	10,691.33	265.90
All private	8,741.16	197.91	8,918.86	253.39	17,660.01	285.19	--	--	--	--	--	--	17,660.01	285.19
All owners	17,833.18	267.29	16,069.00	370.42	33,902.18	404.39	3,997.41	142.57	3,726.52	183.03	7,735.21	211.68	41,637.39	422.73

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C28: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: All California

*information combined with information from Table C19 in Table C27.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	855.42	17.57	462.32	21.13	1,317.75	23.77	264.93	11.50	192.70	13.15	458.75	15.38	1,776.50	26.24
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	855.42	17.57	462.32	21.13	1,317.75	23.77	264.93	11.50	192.70	13.15	458.75	15.38	1,776.50	26.24
Other federal government:														
Bureau of Land Management	34.41	5.74	194.10	16.25	228.51	17.07	9.91	2.98	35.56	6.13	45.47	6.82	273.98	17.85
Department of Defense and Energy	3.27	1.82	13.81	3.64	17.08	4.07	--	--	0.92	0.95	0.92	0.95	18.00	4.18
National Park Service	--	--	--	--	--	--	83.05	6.29	70.32	8.39	153.37	10.15	153.37	10.15
U.S. Fish and Wildlife Service	--	--	--	--	--	--	0.50	0.51	0.09	0.09	0.59	0.52	0.59	0.52
Other federal	0.53	0.66	10.21	3.18	10.75	3.25	--	--	0.77	0.46	0.77	0.46	11.52	3.28
Total	38.22	6.03	218.13	16.76	256.34	17.60	93.46	6.73	107.65	10.15	201.11	11.68	457.45	19.13
State and local government:														
Local	5.62	1.94	24.37	4.76	29.99	5.20	6.13	2.26	25.92	4.92	32.05	5.23	62.04	7.32
State	9.95	2.43	10.04	3.44	19.99	4.19	34.45	4.61	45.39	6.35	79.84	7.61	99.83	8.03
Other public	--	--	0.15	0.13	0.15	0.13	0.78	0.86	0.99	1.08	1.77	1.38	1.92	1.39
Total	15.57	3.07	34.56	5.87	50.13	6.64	41.36	5.12	72.30	7.74	113.66	8.85	163.79	10.31
Private:														
Corporate	541.11	18.66	155.76	12.32	696.87	21.81	--	--	--	--	--	--	696.87	21.81
Noncorporate private:														
Total, noncorporate private	333.01	15.06	736.12	23.74	1,069.13	26.59	--	--	--	--	--	--	1,069.13	26.59
All private	874.12	19.79	891.89	25.34	1,766.00	28.52	--	--	--	--	--	--	1,766.00	28.52
All owners	1,783.32	26.73	1,606.90	37.04	3,390.22	40.44	399.74	14.26	372.65	18.30	773.52	21.17	4,163.74	42.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C29: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	0.27	0.25	14.46	3.69	14.73	3.70	3.55	1.76	21.32	4.70	24.87	4.97	39.60	6.20
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	0.27	0.25	14.46	3.69	14.73	3.70	3.55	1.76	21.32	4.70	24.87	4.97	39.60	6.20
Other federal government:														
Bureau of Land Management	--	--	9.79	3.35	9.79	3.35	--	--	1.90	1.39	1.90	1.39	11.69	3.63
Department of Defense and Energy	--	--	8.30	2.70	8.30	2.70	--	--	--	--	--	--	8.30	2.70
National Park Service	--	--	--	--	--	--	--	--	0.94	1.05	0.94	1.05	0.94	1.05
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	1.95	1.50	1.95	1.50	--	--	0.03	0.04	0.03	0.04	1.98	1.50
Total	--	--	20.03	4.53	20.03	4.53	--	--	2.88	1.74	2.88	1.74	22.91	4.85
State and local government:														
Local	--	--	4.99	1.96	4.99	1.96	6.13	2.26	16.05	3.66	22.18	4.07	27.17	4.47
State	1.83	1.14	2.25	1.65	4.08	2.04	4.92	2.09	19.96	4.19	24.87	4.66	28.95	5.08
Other public	--	--	--	--	--	--	0.78	0.86	0.99	1.08	1.77	1.38	1.77	1.38
Total	1.83	1.14	7.23	2.56	9.06	2.83	11.82	3.18	37.01	5.37	48.83	5.94	57.89	6.44
Private:														
Corporate	5.84	2.36	22.96	4.42	28.79	5.00	--	--	--	--	--	--	28.79	5.00
Noncorporate private:														
Total, noncorporate private	18.59	3.70	123.05	10.28	141.65	10.88	--	--	--	--	--	--	141.65	10.88
All private	24.43	4.37	146.01	11.09	170.44	11.87	--	--	--	--	--	--	170.44	11.87
All owners	26.53	4.53	187.73	12.80	214.27	13.53	15.37	3.64	61.20	7.32	76.57	7.90	290.84	15.53

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C30: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09
State and local government:														
Local	--	--	0.73	0.51	0.73	0.51	--	--	--	--	--	--	0.73	0.51
State	--	--	--	--	--	--	--	--	0.84	0.76	0.84	0.76	0.84	0.76
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	0.73	0.51	0.73	0.51	--	--	0.84	0.76	0.84	0.76	1.58	0.92
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	13.33	3.42	13.33	3.42	--	--	--	--	--	--	13.33	3.42
All private	--	--	13.33	3.42	13.33	3.42	--	--	--	--	--	--	13.33	3.42
All owners	--	--	14.07	3.46	14.07	3.46	--	--	0.93	0.77	0.93	0.77	15.00	3.54

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C31: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	79.07	7.99	171.07	15.23	250.14	16.97	5.17	2.01	15.29	4.57	20.46	4.98	270.60	17.66
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	79.07	7.99	171.07	15.23	250.14	16.97	5.17	2.01	15.29	4.57	20.46	4.98	270.60	17.66
Other federal government:														
Bureau of Land Management	4.74	2.68	113.63	14.14	118.37	14.38	--	--	9.31	3.22	9.31	3.22	127.69	14.61
Department of Defense and Energy	--	--	4.99	2.41	4.99	2.41	--	--	--	--	--	--	4.99	2.41
National Park Service	--	--	--	--	--	--	--	--	11.84	3.60	11.84	3.60	11.84	3.60
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	4.74	2.68	118.63	14.29	123.37	14.53	--	--	21.15	4.81	21.15	4.81	144.52	15.07
State and local government:														
Local	--	--	1.09	1.10	1.09	1.10	--	--	--	--	--	--	1.09	1.10
State	--	--	--	--	--	--	0.55	0.61	1.80	1.55	2.36	1.66	2.36	1.66
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	1.09	1.10	1.09	1.10	0.55	0.61	1.80	1.55	2.36	1.66	3.44	1.99
Private:														
Corporate	37.32	6.95	17.51	5.17	54.84	8.71	--	--	--	--	--	--	54.84	8.71
Noncorporate private:														
Total, noncorporate private	9.49	2.65	35.22	8.00	44.70	8.45	--	--	--	--	--	--	44.70	8.45
All private	46.81	7.40	52.73	9.48	99.54	12.07	--	--	--	--	--	--	99.54	12.07
All owners	130.63	11.27	343.51	22.99	474.14	25.45	5.72	2.10	38.25	6.82	43.96	7.12	518.10	26.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C32: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	255.68	12.37	65.93	7.91	321.61	14.32	141.26	9.61	43.24	6.49	184.51	11.27	506.12	17.65
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	255.68	12.37	65.93	7.91	321.61	14.32	141.26	9.61	43.24	6.49	184.51	11.27	506.12	17.65
Other federal government:														
Bureau of Land Management	14.40	3.55	22.41	4.67	36.81	5.88	0.60	0.60	3.75	1.94	4.36	2.03	41.16	6.22
Department of Defense and Energy	--	--	--	--	--	--	--	--	0.92	0.95	0.92	0.95	0.92	0.95
National Park Service	--	--	--	--	--	--	8.32	2.68	6.76	2.53	15.08	3.74	15.08	3.74
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	0.53	0.66	1.29	0.96	1.82	1.16	--	--	0.19	0.21	0.19	0.21	2.01	1.18
Total	14.93	3.61	23.70	4.77	38.63	6.00	8.92	2.73	11.62	3.32	20.55	4.35	59.17	7.22
State and local government:														
Local	0.30	0.26	1.84	1.28	2.15	1.30	--	--	1.03	0.99	1.03	0.99	3.17	1.64
State	1.01	0.79	2.91	1.98	3.92	2.13	0.39	0.29	3.14	1.78	3.53	1.84	7.44	2.82
Other public	--	--	0.15	0.13	0.15	0.13	--	--	--	--	--	--	0.15	0.13
Total	1.31	0.83	4.90	2.36	6.21	2.50	0.39	0.29	4.17	2.03	4.55	2.09	10.76	3.25
Private:														
Corporate	114.27	10.03	45.97	6.55	160.24	11.91	--	--	--	--	--	--	160.24	11.91
Noncorporate private:														
Total, noncorporate private	97.91	9.11	164.03	12.06	261.94	14.94	--	--	--	--	--	--	261.94	14.94
All private	212.18	13.12	210.00	13.53	422.17	18.53	--	--	--	--	--	--	422.17	18.53
All owners	484.10	18.42	304.53	16.56	788.62	24.27	150.57	10.00	59.04	7.57	209.61	12.27	998.23	26.72

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C33: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	2.62	1.39	1.11	1.06	3.73	1.75	1.36	1.04	--	--	1.36	1.04	5.09	2.04
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2.62	1.39	1.11	1.06	3.73	1.75	1.36	1.04	--	--	1.36	1.04	5.09	2.04
Other federal government:														
Bureau of Land Management	4.39	1.92	--	--	4.39	1.92	8.88	2.89	--	--	8.88	2.89	13.27	3.51
Department of Defense and Energy	2.86	1.77	0.02	0.02	2.88	1.77	--	--	--	--	--	--	2.88	1.77
National Park Service	--	--	--	--	--	--	5.43	2.13	1.12	1.08	6.55	2.34	6.55	2.34
U.S. Fish and Wildlife Service	--	--	--	--	--	--	0.50	0.51	--	--	0.50	0.51	0.50	0.51
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	7.25	2.61	0.02	0.02	7.27	2.61	14.81	3.58	1.12	1.08	15.93	3.65	23.20	4.48
State and local government:														
Local	2.02	1.00	1.19	0.86	3.21	1.53	--	--	7.34	3.02	7.34	3.02	10.55	3.39
State	5.80	1.93	0.30	0.28	6.10	1.95	22.14	4.25	1.47	1.18	23.61	4.41	29.72	4.39
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	7.82	2.15	1.49	0.90	9.32	2.46	22.14	4.25	8.82	3.25	30.96	5.35	40.27	5.49
Private:														
Corporate	160.53	10.81	4.95	2.03	165.47	10.98	--	--	--	--	--	--	165.47	10.98
Noncorporate private:														
Total, noncorporate private	114.45	9.76	25.29	4.56	139.73	10.71	--	--	--	--	--	--	139.73	10.71
All private	274.97	13.71	30.23	4.98	305.21	14.44	--	--	--	--	--	--	305.21	14.44
All owners	292.67	14.11	32.85	5.17	325.52	14.91	38.32	5.65	9.93	3.42	48.25	6.56	373.77	16.03

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C34: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	500.74	16.09	150.14	13.53	650.89	19.96	100.16	7.58	88.72	9.47	188.88	11.49	839.77	22.62
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	500.74	16.09	150.14	13.53	650.89	19.96	100.16	7.58	88.72	9.47	188.88	11.49	839.77	22.62
Other federal government:														
Bureau of Land Management	10.88	3.15	43.68	6.85	54.56	7.48	0.42	0.36	16.51	4.28	16.94	4.29	71.49	8.47
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	69.30	5.67	32.96	5.87	102.26	7.94	102.26	7.94
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	3.20	1.70	3.20	1.70	--	--	0.31	0.32	0.31	0.32	3.51	1.73
Total	10.88	3.15	46.88	7.04	57.75	7.66	69.72	5.68	49.78	7.15	119.50	8.85	177.26	11.07
State and local government:														
Local	3.30	1.64	11.32	3.52	14.62	3.88	--	--	0.98	0.83	0.98	0.83	15.60	3.97
State	1.31	0.67	4.59	2.28	5.90	2.37	5.30	1.74	10.07	3.19	15.37	3.62	21.27	4.26
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	4.61	1.77	15.91	4.19	20.51	4.54	5.30	1.74	11.05	3.30	16.35	3.71	36.87	5.81
Private:														
Corporate	222.89	14.00	54.92	7.25	277.81	15.65	--	--	--	--	--	--	277.81	15.65
Noncorporate private:														
Total, noncorporate private	90.05	8.11	339.28	17.70	429.33	19.20	--	--	--	--	--	--	429.33	19.20
All private	312.94	15.55	394.20	18.63	707.14	23.38	--	--	--	--	--	--	707.14	23.38
All owners	829.17	22.52	607.12	24.33	1,436.29	31.69	175.19	9.61	149.56	12.31	324.74	14.92	1,761.03	34.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C35: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ¹		Total		Productive ¹		Other forest ¹		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	17.03	3.85	59.61	7.45	76.64	8.40	13.43	3.52	24.12	5.05	38.67	6.15	115.31	10.36
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	17.03	3.85	59.61	7.45	76.64	8.40	13.43	3.52	24.12	5.05	38.67	6.15	115.31	10.36
Other federal government:														
Bureau of Land Management	--	--	4.59	2.05	4.59	2.05	--	--	4.08	2.06	4.08	2.06	8.67	2.90
Department of Defense and Energy	0.41	0.42	0.50	0.51	0.91	0.66	--	--	--	--	--	--	0.91	0.66
National Park Service	--	--	--	--	--	--	--	--	16.70	4.18	16.70	4.18	16.70	4.18
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	3.78	2.02	3.78	2.02	--	--	0.24	0.24	0.24	0.24	4.02	2.04
Total	0.41	0.42	8.88	2.92	9.29	2.95	--	--	21.01	4.64	21.01	4.64	30.30	5.49
State and local government:														
Local	--	--	3.21	1.63	3.21	1.63	--	--	0.51	0.50	0.51	0.50	3.72	1.69
State	--	--	--	--	--	--	1.15	0.96	8.11	2.95	9.26	3.09	9.26	3.09
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	3.21	1.63	3.21	1.63	1.15	0.96	8.62	2.99	9.77	3.13	12.98	3.52
Private:														
Corporate	0.26	0.25	9.46	3.31	9.72	3.32	--	--	--	--	--	--	9.72	3.32
Noncorporate private:														
Total, noncorporate private	2.52	1.54	35.93	5.71	38.45	5.97	--	--	--	--	--	--	38.45	5.97
All private	2.78	1.57	45.39	6.60	48.17	6.82	--	--	--	--	--	--	48.17	6.82
All owners	20.22	4.18	117.09	10.46	137.31	11.30	14.58	3.64	53.74	7.48	69.45	8.32	206.76	13.98

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C36: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: All California

**information combined with information from Table C45 in Table C44.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	72,716	1,573	5,023	411	77,739	1,543	24,157	1,115	3,373	332	27,530	1,112	105,268	1,718
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	72,716	1,573	5,023	411	77,739	1,543	24,157	1,115	3,373	332	27,530	1,112	105,268	1,718
Other federal government:														
Bureau of Land Management	1,851	426	1,340	195	3,191	465	683	227	268	66	951	236	4,142	515
Department of Defense and Energy	52	38	179	59	231	70	--	--	24	25	24	25	255	74
National Park Service	--	--	--	--	--	--	10,621	1,006	1,361	242	11,982	1,023	11,982	1,023
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5	5	2	3	8	6	8	6
Other federal	--	--	54	22	54	22	--	--	13	10	13	10	67	25
Total	1,903	427	1,573	204	3,476	469	11,310	1,020	1,668	249	12,978	1,035	16,453	1,067
State and local government:														
Local	621	226	361	90	982	243	739	292	618	140	1,357	316	2,338	397
State	1,525	397	148	84	1,672	399	5,584	1,198	854	224	6,438	1,213	8,110	1,145
Other public	--	--	--	--	--	--	69	77	8	9	77	77	77	77
Total	2,146	448	508	123	2,654	458	6,391	1,230	1,480	261	7,871	1,247	10,525	1,183
Private:														
Corporate	32,630	1,248	2,694	293	35,324	1,267	--	--	--	--	--	--	35,324	1,267
Noncorporate private:														
Total, noncorporate private	25,554	1,310	10,568	457	36,122	1,338	--	--	--	--	--	--	36,122	1,338
All private	58,184	1,470	13,262	525	71,446	1,450	--	--	--	--	--	--	71,446	1,450
All owners	134,949	2,194	20,365	706	155,314	2,159	41,858	1,946	6,521	490	48,379	1,962	203,693	2,618

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C37: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	1	1	126	62	127	62	490	308	292	106	783	331	910	337
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1	1	126	62	127	62	490	308	292	106	783	331	910	337
Other federal government:														
Bureau of Land Management	--	--	30	12	30	12	--	--	3	2	3	2	32	12
Department of Defense and Energy	--	--	144	56	144	56	--	--	--	--	--	--	144	56
National Park Service	--	--	--	--	--	--	--	--	37	41	37	41	37	41
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	8	9	8	9	--	--	--	--	--	--	8	9
Total	--	--	181	58	181	58	--	--	40	41	40	41	221	71
State and local government:														
Local	--	--	127	61	127	61	739	292	391	103	1,130	302	1,257	307
State	278	184	18	11	297	187	983	441	359	93	1,342	451	1,639	483
Other public	--	--	--	--	--	--	69	77	8	9	77	77	77	77
Total	278	184	146	62	424	197	1,790	531	759	136	2,549	541	2,973	565
Private:														
Corporate	518	223	618	150	1,137	268	--	--	--	--	--	--	1,137	268
Noncorporate private:														
Total, noncorporate private	2,726	570	2,061	208	4,787	604	--	--	--	--	--	--	4,787	604
All private	3,244	610	2,679	254	5,923	657	--	--	--	--	--	--	5,923	657
All owners	3,524	641	3,132	275	6,656	694	2,281	614	1,091	176	3,371	635	10,027	943

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C38: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	2	3	2	3	2	3
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	2	3	2	3	2	3
State and local government:														
Local	--	--	16	14	16	14	--	--	--	--	--	--	16	14
State	--	--	--	--	--	--	--	--	27	27	27	27	27	27
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	16	14	16	14	--	--	27	27	27	27	42	31
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	197	71	197	71	--	--	--	--	--	--	197	71
All private	--	--	197	71	197	71	--	--	--	--	--	--	197	71
All owners	--	--	213	72	213	72	--	--	29	27	29	27	242	77

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C39: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	2,498	277	844	114	3,342	299	327	148	300	101	627	178	3,969	348
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,498	277	844	114	3,342	299	327	148	300	101	627	178	3,969	348
Other federal government:														
Bureau of Land Management	50	24	324	49	374	55	--	--	68	28	68	28	442	60
Department of Defense and Energy	--	--	23	13	23	13	--	--	--	--	--	--	23	13
National Park Service	--	--	--	--	--	--	--	--	75	28	75	28	75	28
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50	24	347	51	397	56	--	--	144	39	144	39	541	66
State and local government:														
Local	--	--	12	12	12	12	--	--	--	--	--	--	12	12
State	--	--	--	--	--	--	28	31	8	7	37	32	37	32
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	12	12	12	12	28	31	8	7	37	32	49	34
Private:														
Corporate	578	121	48	18	626	122	--	--	--	--	--	--	626	122
Noncorporate private:														
Total, noncorporate private	238	79	99	28	337	84	--	--	--	--	--	--	337	84
All private	816	144	148	33	963	148	--	--	--	--	--	--	963	148
All owners	3,363	316	1,351	130	4,714	341	355	151	452	108	807	185	5,521	388

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C40: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	27,195	1,410	1,729	293	28,923	1,425	12,506	852	857	185	13,362	865	42,286	1,623
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	27,195	1,410	1,729	293	28,923	1,425	12,506	852	857	185	13,362	865	42,286	1,623
Other federal government:														
Bureau of Land Management	850	250	570	149	1,420	291	97	96	77	48	173	107	1,593	309
Department of Defense and Energy	--	--	--	--	--	--	--	--	24	25	24	25	24	25
National Park Service	--	--	--	--	--	--	1,614	696	140	69	1,754	700	1,754	700
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	7	4	7	4	--	--	3	3	3	3	9	5
Total	850	250	576	149	1,426	291	1,710	701	243	88	1,954	707	3,380	757
State and local government:														
Local	94	81	28	19	122	83	--	--	21	21	21	21	143	86
State	103	62	16	12	119	64	111	100	88	57	199	127	318	142
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	197	102	44	23	241	105	111	100	109	61	220	128	461	166
Private:														
Corporate	5,977	566	823	145	6,799	587	--	--	--	--	--	--	6,799	587
Noncorporate private:														
Total, noncorporate private	7,271	770	2,937	264	10,208	810	--	--	--	--	--	--	10,208	810
All private	13,247	928	3,760	299	17,007	970	--	--	--	--	--	--	17,007	970
All owners	41,489	1,713	6,109	446	47,598	1,755	14,327	1,107	1,209	214	15,536	1,123	63,134	2,043

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C41: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	300	197	9	8	309	197	455	353	--	--	455	353	764	403
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	300	197	9	8	309	197	455	353	--	--	455	353	764	403
Other federal government:														
Bureau of Land Management	540	312	--	--	540	312	525	198	--	--	525	198	1,066	370
Department of Defense and Energy	51	38	--	--	51	38	--	--	--	--	--	--	51	38
National Park Service	--	--	--	--	--	--	1,098	482	25	19	1,123	482	1,123	482
U.S. Fish and Wildlife Service	--	--	--	--	--	--	5	5	--	--	5	5	5	5
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	592	314	--	--	592	314	1,629	517	25	19	1,654	517	2,246	601
State and local government:														
Local	330	187	4	4	334	187	--	--	127	61	127	61	461	197
State	910	327	1	1	911	327	3,760	1,195	203	189	3,963	1,209	4,874	1,192
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,240	369	5	4	1,245	369	3,760	1,195	330	198	4,090	1,211	5,335	1,199
Private:														
Corporate	13,842	1,079	161	67	14,003	1,081	--	--	--	--	--	--	14,003	1,081
Noncorporate private:														
Total, noncorporate private	9,749	898	831	182	10,580	913	--	--	--	--	--	--	10,580	913
All private	23,591	1,327	992	194	24,583	1,336	--	--	--	--	--	--	24,583	1,336
All owners	25,723	1,419	1,006	194	26,729	1,427	5,843	1,349	355	199	6,198	1,363	32,927	1,923

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C42: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	42,252	1,441	1,849	257	44,101	1,438	10,026	829	1,626	233	11,652	839	55,753	1,616
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	42,252	1,441	1,849	257	44,101	1,438	10,026	829	1,626	233	11,652	839	55,753	1,616
Other federal government:														
Bureau of Land Management	411	158	409	119	820	198	61	55	113	35	175	65	994	207
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	7,909	681	1,053	226	8,963	706	8,963	706
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	35	20	35	20	--	--	9	10	9	10	45	22
Total	411	158	444	121	855	199	7,970	683	1,176	228	9,147	707	10,002	719
State and local government:														
Local	197	98	145	59	342	114	--	--	79	70	79	70	420	134
State	233	147	112	82	346	166	679	285	141	52	819	289	1,165	320
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	430	176	257	101	687	201	679	285	219	87	898	297	1,585	347
Private:														
Corporate	11,684	740	1,018	195	12,702	759	--	--	--	--	--	--	12,702	759
Noncorporate private:														
Total, noncorporate private	5,521	515	4,013	275	9,534	572	--	--	--	--	--	--	9,534	572
All private	17,205	853	5,031	331	22,236	883	--	--	--	--	--	--	22,236	883
All owners	60,298	1,677	7,581	446	67,879	1,691	18,675	1,112	3,022	338	21,697	1,136	89,576	1,948

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C43: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	471	137	465	89	936	164	354	112	297	92	651	145	1,587	219
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	471	137	465	89	936	164	354	112	297	92	651	145	1,587	219
Other federal government:														
Bureau of Land Management	--	--	7	5	7	5	--	--	7	4	7	4	14	7
Department of Defense and Energy		1	12	12	12	12	--	--	--	--	--	--	12	12
National Park Service	--	--	--	--	--	--	--	--	30	12	30	12	30	12
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	4	3	4	3	--	--	--	--	--	--	5	3
Total		1	24	14	24	14	--	--	38	13	38	13	62	18
State and local government:														
Local	--	--	29	18	29	18	--	--	1	1	1	1	30	18
State	--	--	--	--	--	--	23	30	28	15	51	33	51	33
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	29	18	29	18	23	30	28	15	51	33	80	38
Private:														
Corporate	32	32	26	14	58	35	--	--	--	--	--	--	58	35
Noncorporate private:														
Total, noncorporate private	49	38	430	125	479	132	--	--	--	--	--	--	479	132
All private	81	50	456	126	537	137	--	--	--	--	--	--	537	137
All owners	552	146	974	155	1,526	215	377	116	363	94	740	149	2,266	261

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.1: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	79,305	1,859	6,619	459	85,924	1,851	26,253	1,437	3,861	364	30,114	1,465	116,038	1,805
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	79,305	1,859	6,619	459	85,924	1,851	26,253	1,437	3,861	364	30,114	1,465	116,038	1,805
Other federal government:														
Bureau of Land Management	2,199	386	1,309	177	3,508	420	244	123	315	58	559	136	4,067	436
Department of Defense and Energy	26	28	158	53	184	60	--	--	--	--	--	--	184	60
National Park Service	--	--	--	--	--	--	11,895	1,186	1,423	237	13,318	1,170	13,318	1,170
U.S. Fish and Wildlife Service	--	--	--	--	--	--	13	16	--	--	13	16	13	16
Other federal	--	--	118	57	118	57	274	197	76	62	350	206	469	214
Total	2,225	387	1,585	192	3,810	425	12,426	1,203	1,814	249	14,240	1,185	18,050	1,231
State and local government:														
Local	329	158	410	119	739	199	539	249	741	162	1,280	296	2,019	356
State	1,334	399	118	60	1,453	403	6,315	1,415	1,078	255	7,393	1,436	8,846	1,450
Other public	--	--	5	4	5	4	95	85	9	9	104	86	109	86
Total	1,663	428	533	133	2,196	449	6,950	1,438	1,828	300	8,778	1,466	10,974	1,491
Private:														
Corporate	28,810	1,174	1,381	183	30,191	1,183	--	--	--	--	--	--	30,191	1,183
Noncorporate private:														
Total, noncorporate private	28,341	1,358	12,639	512	40,981	1,402	--	--	--	--	--	--	40,981	1,402
All private	57,151	1,472	14,020	532	71,172	1,474	--	--	--	--	--	--	71,172	1,474
All owners	140,344	2,409	22,758	735	163,102	2,405	45,628	2,267	7,503	533	53,132	2,291	216,234	2,775

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.2: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	80,880	1,892	6,536	463	87,417	1,885	26,669	1,461	3,964	374	30,633	1,490	118,049	1,842
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	80,880	1,892	6,536	463	87,417	1,885	26,669	1,461	3,964	374	30,633	1,490	118,049	1,842
Other federal government:														
Bureau of Land Management	2,203	388	1,279	175	3,482	422	252	130	312	57	564	142	4,046	441
Department of Defense and Energy	28	30	166	53	194	61	--	--	--	--	--	--	194	61
National Park Service	--	--	--	--	--	--	12,119	1,199	1,442	239	13,561	1,182	13,561	1,182
U.S. Fish and Wildlife Service	--	--	--	--	--	--	13	16			13	16	13	16
Other federal	--	--	117	57	117	57	273	197	76	63	349	206	467	214
Total	2,231	389	1,563	190	3,794	428	12,657	1,216	1,831	251	14,488	1,198	18,282	1,244
State and local government:														
Local	300	152	419	121	719	196	549	254	750	164	1,298	302	2,017	359
State	1,332	397	139	79	1,470	405	6,416	1,421	1,130	260	7,545	1,442	9,016	1,457
Other public	--	--	5	4	5	4	98	87	7	8	106	87	110	87
Total	1,632	425	562	144	2,194	449	7,063	1,445	1,887	306	8,949	1,473	11,143	1,499
Private:														
Corporate	28,371	1,177	1,737	219	30,108	1,190	--	--	--	--	--	--	30,108	1,190
Noncorporate private:														
Total, noncorporate private	28,668	1,378	12,207	498	40,875	1,420	--	--	--	--	--	--	40,875	1,420
All private	57,039	1,505	13,944	530	70,983	1,505	--	--	--	--	--	--	70,983	1,505
All owners	141,782	2,437	22,606	738	164,387	2,432	46,389	2,296	7,682	544	54,070	2,321	218,458	2,798

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.3: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	80,445	1,679	6,000	437	86,445	1,640	27,445	1,231	4,236	387	31,681	1,218	118,125	1,814
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	80,445	1,679	6,000	437	86,445	1,640	27,445	1,231	4,236	387	31,681	1,218	118,125	1,814
Other federal government:														
Bureau of Land Management	2,378	404	1,346	188	3,725	442	311	147	260	60	571	159	4,295	465
Department of Defense and Energy	48	38	150	51	198	63	--	--	23	24	23	24	221	68
National Park Service	--	--	--	--	--	--	12,095	1,096	1,472	259	13,567	1,110	13,567	1,110
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	136	58	136	58	122	128	80	65	202	144	338	154
Total	2,427	404	1,632	203	4,059	448	12,527	1,097	1,835	270	14,363	1,111	18,421	1,127
State and local government:														
Local	342	164	364	108	706	198	657	280	669	150	1,326	309	2,031	364
State	1,368	392	148	87	1,516	393	5,837	1,233	971	235	6,808	1,248	8,324	1,163
Other public	--	--	5	4	5	4	66	76	9	9	74	76	79	77
Total	1,710	424	516	138	2,226	439	6,560	1,263	1,649	273	8,209	1,279	10,434	1,206
Private:														
Corporate	28,711	1,150	1,773	221	30,484	1,163	--	--	--	--	--	--	30,484	1,163
Noncorporate private:														
Total, noncorporate private	29,105	1,397	11,849	488	40,954	1,427	--	--	--	--	--	--	40,954	1,427
All private	57,816	1,469	13,622	524	71,438	1,456	--	--	--	--	--	--	71,438	1,456
All owners	142,397	2,250	21,771	723	164,167	2,211	46,532	2,074	7,720	544	54,252	2,082	218,419	2,695

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.4: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	81,090	1,690	5,870	437	86,960	1,650	27,624	1,243	4,258	393	31,881	1,226	118,841	1,831
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	81,090	1,690	5,870	437	86,960	1,650	27,624	1,243	4,258	393	31,881	1,226	118,841	1,831
Other federal government:														
Bureau of Land Management	2,383	410	1,347	189	3,729	447	386	161	282	61	668	172	4,397	474
Department of Defense and Energy	48	38	153	52	202	64	--	--	23	24	23	24	225	68
National Park Service	--	--	--	--	--	--	12,376	1,115	1,524	267	13,901	1,131	13,901	1,131
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	8	3	3	10	8	10	8
Other federal	--	--	102	31	102	31	--	--	15	10	15	10	118	33
Total	2,431	410	1,602	198	4,033	451	12,770	1,117	1,848	272	14,617	1,132	18,651	1,147
State and local government:														
Local	353	168	392	110	745	203	692	278	663	147	1,355	307	2,101	366
State	1,394	400	148	87	1,542	400	5,773	1,232	959	235	6,732	1,246	8,274	1,161
Other public	--	--	5	4	5	4	71	79	9	9	80	80	84	80
Total	1,748	432	544	140	2,292	447	6,537	1,261	1,631	272	8,167	1,277	10,459	1,204
Private:														
Corporate	29,541	1,178	1,959	239	31,500	1,193	--	--	--	--	--	--	31,500	1,193
Noncorporate private:														
Total, noncorporate private	29,157	1,411	11,737	480	40,894	1,437	--	--	--	--	--	--	40,894	1,437
All private	58,697	1,488	13,696	523	72,394	1,471	--	--	--	--	--	--	72,394	1,471
All owners	143,966	2,274	21,712	721	165,679	2,232	46,930	2,091	7,736	549	54,666	2,098	220,345	2,720

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.5: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	81,745	1,689	5,768	436	87,513	1,646	28,293	1,258	4,214	392	32,507	1,236	120,020	1,841
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	81,745	1,689	5,768	436	87,513	1,646	28,293	1,258	4,214	392	32,507	1,236	120,020	1,841
Other federal government:														
Bureau of Land Management	2,531	485	1,351	190	3,882	517	496	182	264	60	760	192	4,642	544
Department of Defense and Energy	48	38	162	58	210	69	--	--	23	24	23	24	234	73
National Park Service	--	--	--	--	--	--	12,522	1,113	1,509	267	14,031	1,130	14,031	1,130
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	8	3	3	10	8	10	8
Other federal	--	--	102	31	102	31	--	--	15	10	15	10	117	32
Total	2,579	486	1,615	200	4,194	521	13,026	1,117	1,814	272	14,840	1,132	19,034	1,161
State and local government:														
Local	498	192	420	112	918	224	693	278	659	144	1,352	304	2,271	376
State	1,476	405	158	87	1,634	406	5,797	1,223	964	234	6,761	1,237	8,395	1,151
Other public	--	--	5	4	5	4	71	79	9	9	80	80	84	80
Total	1,974	446	583	142	2,557	462	6,561	1,251	1,632	270	8,193	1,267	10,750	1,197
Private:														
Corporate	29,947	1,176	2,127	248	32,073	1,193	--	--	--	--	--	--	32,073	1,193
Noncorporate private:														
Total, noncorporate private	28,676	1,391	11,817	483	40,493	1,419	--	--	--	--	--	--	40,493	1,419
All private	58,623	1,464	13,943	528	72,566	1,446	--	--	--	--	--	--	72,566	1,446
All owners	144,922	2,276	21,908	725	166,830	2,232	47,879	2,094	7,661	548	55,540	2,097	222,370	2,723

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.6: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	82,029	1,690	5,675	434	87,704	1,647	28,520	1,251	4,027	374	32,547	1,233	120,251	1,840
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	82,029	1,690	5,675	434	87,704	1,647	28,520	1,251	4,027	374	32,547	1,233	120,251	1,840
Other federal government:														
Bureau of Land Management	2,516	475	1,311	187	3,827	506	629	229	294	69	923	239	4,751	553
Department of Defense and Energy	48	38	168	58	216	70	--	--	24	25	24	25	240	74
National Park Service	--	--	--	--	--	--	12,645	1,117	1,503	268	14,148	1,135	14,148	1,135
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	8	3	3	10	8	10	8
Other federal	--	--	105	31	105	31	--	--	16	10	16	10	121	33
Total	2,564	475	1,584	198	4,149	510	13,281	1,128	1,839	275	15,121	1,144	19,269	1,167
State and local government:														
Local	486	190	432	114	919	223	730	295	637	142	1,366	319	2,285	388
State	1,589	420	130	83	1,719	421	5,892	1,230	966	236	6,858	1,244	8,577	1,161
Other public	--	--	5	4	5	4	70	77	9	9	78	78	83	78
Total	2,076	459	566	141	2,642	474	6,692	1,262	1,611	271	8,303	1,278	10,945	1,209
Private:														
Corporate	31,460	1,233	2,404	265	33,865	1,252	--	--	--	--	--	--	33,865	1,252
Noncorporate private:														
Total, noncorporate private	28,120	1,381	11,456	478	39,576	1,409	--	--	--	--	--	--	39,576	1,409
All private	59,581	1,493	13,860	529	73,441	1,474	--	--	--	--	--	--	73,441	1,474
All owners	146,250	2,292	21,686	723	167,935	2,247	48,493	2,102	7,478	537	55,970	2,108	223,906	2,739

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.7: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	82,171	1,697	5,487	431	87,658	1,653	28,783	1,245	4,024	371	32,807	1,228	120,465	1,850
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	82,171	1,697	5,487	431	87,658	1,653	28,783	1,245	4,024	371	32,807	1,228	120,465	1,850
Other federal government:														
Bureau of Land Management	2,281	462	1,307	188	3,588	496	792	249	293	69	1,085	259	4,673	552
Department of Defense and Energy	56	40	171	58	228	71	--	--	26	26	26	26	253	75
National Park Service	--	--	--	--	--	--	12,761	1,123	1,509	266	14,270	1,140	14,270	1,140
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	8	3	3	10	8	10	8
Other federal	--	--	97	30	97	30	--	--	16	11	16	11	113	32
Total	2,337	463	1,575	198	3,912	500	13,560	1,135	1,847	273	15,407	1,150	19,319	1,175
State and local government:														
Local	649	233	442	114	1,091	260	742	302	643	144	1,385	326	2,477	416
State	1,520	404	152	85	1,672	405	5,911	1,241	968	235	6,879	1,255	8,551	1,168
Other public	--	--	5	4	5	4	70	77	9	9	78	78	83	78
Total	2,169	464	599	142	2,768	479	6,722	1,274	1,620	271	8,342	1,289	11,110	1,224
Private:														
Corporate	32,635	1,263	2,516	270	35,151	1,281	--	--	--	--	--	--	35,151	1,281
Noncorporate private:														
Total, noncorporate private	27,384	1,381	11,347	481	38,730	1,411	--	--	--	--	--	--	38,730	1,411
All private	60,019	1,513	13,863	534	73,882	1,494	--	--	--	--	--	--	73,882	1,494
All owners	146,696	2,311	21,523	725	168,219	2,265	49,066	2,110	7,491	533	56,556	2,116	224,775	2,761

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.8: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	82,332	1,700	5,582	442	87,915	1,655	28,794	1,242	3,971	367	32,765	1,228	120,679	1,849
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	82,332	1,700	5,582	442	87,915	1,655	28,794	1,242	3,971	367	32,765	1,228	120,679	1,849
Other federal government:														
Bureau of Land Management	2,273	463	1,289	185	3,561	496	786	249	293	69	1,079	258	4,640	552
Department of Defense and Energy	56	40	170	58	226	70	--	--	24	25	24	25	250	75
National Park Service	--	--	--	--	--	--	12,722	1,122	1,516	269	14,238	1,139	14,238	1,139
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	8	3	3	10	8	10	8
Other federal	--	--	84	29	84	29	--	--	13	10	13	10	97	31
Total	2,329	464	1,543	196	3,872	501	13,516	1,134	1,847	275	15,363	1,149	19,235	1,175
State and local government:														
Local	657	234	435	113	1,092	261	765	311	614	143	1,379	335	2,471	423
State	1,518	403	153	85	1,671	405	5,923	1,242	910	230	6,833	1,257	8,504	1,170
Other public	--	--	5	4	5	4	70	77	8	9	78	78	82	78
Total	2,175	464	593	142	2,768	479	6,757	1,277	1,533	267	8,290	1,293	11,057	1,229
Private:														
Corporate	33,525	1,274	2,670	281	36,195	1,293	--	--	--	--	--	--	36,195	1,293
Noncorporate private:														
Total, noncorporate private	27,098	1,386	11,312	482	38,410	1,418	--	--	--	--	--	--	38,410	1,418
All private	60,623	1,523	13,983	540	74,606	1,504	--	--	--	--	--	--	74,606	1,504
All owners	147,459	2,319	21,701	735	169,160	2,272	49,067	2,109	7,351	530	56,418	2,117	225,577	2,768

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C44.9: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) and Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, All California (10 year averages): 2009 - 2018

**information combined from Table C36 and Table C45*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	82,502	2,012	5,704	507	88,205	1,986	28,571	1,425	3,931	408	32,501	1,425	120,705	2,249
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	82,502	2,012	5,704	507	88,205	1,986	28,571	1,425	3,931	408	32,501	1,425	120,705	2,249
Other federal government:														
Bureau of Land Management	1,937	452	1,418	212	3,355	496	778	271	289	73	1,067	281	4,422	569
Department of Defense and Energy	--	--	184	62	236	73	--	--	--	--	--	--	260	77
National Park Service	--	--	--	--	--	--	12,522	1,240	1,506	277	14,028	1,259	14,028	1,259
U.S. Fish and Wildlife Service	--	--	--	--	--	--	7	7	--	--	10	8	10	8
Other federal	--	--	69	33	71	33	--	--	13	10	13	10	84	36
Total	1,991	453	1,671	225	3,662	502	13,308	1,256	1,834	285	15,143	1,273	18,804	1,304
State and local government:														
Local	666	247	380	98	1,046	265	787	317	652	156	1,439	345	2,485	434
State	1,602	428	155	88	1,756	430	5,862	1,255	905	242	6,767	1,272	8,523	1,205
Other public	--	--	--	--	--	--	70	78	--	--	78	78	78	78
Total	2,269	484	534	132	2,802	495	6,718	1,292	1,565	285	8,283	1,313	11,086	1,250
Private:														
Corporate	34,909	1,430	2,823	314	37,732	1,450	--	--	--	--	--	--	37,732	1,450
Noncorporate private:														
Total, noncorporate private	26,802	1,423	11,216	528	38,018	1,470	--	--	--	--	--	--	38,018	1,470
All private	61,711	1,675	14,038	599	75,749	1,665	--	--	--	--	--	--	75,749	1,665
All owners	148,472	2,679	21,946	829	170,418	2,653	48,597	2,341	7,330	577	55,927	2,361	226,345	3,237

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C45: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: All California

**information combined with information from Table C36 in Table C44.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	9,786	439	681	96	10,466	443	4,414	310	558	76	4,971	313	15,437	531
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	9,786	439	681	96	10,466	443	4,414	310	558	76	4,971	313	15,437	531
Other federal government:														
Bureau of Land Management	86	26	78	17	164	31	95	44	21	7	116	45	280	54
Department of Defense and Energy	--	--	5	3	5	3	--	--	--	--	--	--	5	3
National Park Service	--	--	--	--	--	--	1,901	234	145	35	2,046	236	2,046	236
U.S. Fish and Wildlife Service	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Other federal	2	3	15	11	17	11	--	--	--	--	--	--	17	11
Total	88	26	98	21	186	33	1,998	236	166	36	2,165	238	2,351	237
State and local government:														
Local	45	21	19	8	64	22	48	25	34	16	82	29	147	37
State	77	31	7	4	84	31	278	57	51	18	329	59	413	60
Other public	--	--	--	--	--	--	1	1	--	--	1	1	1	1
Total	123	36	26	9	148	37	327	62	85	24	412	66	561	67
Private:														
Corporate	2,279	182	129	21	2,408	183	--	--	--	--	--	--	2,408	183
Noncorporate private:														
Total, noncorporate private	1,248	113	648	71	1,896	132	--	--	--	--	--	--	1,896	132
All private	3,527	205	776	74	4,303	215	--	--	--	--	--	--	4,303	215
All owners	13,523	485	1,581	123	15,104	494	6,739	395	809	87	7,548	399	22,652	619

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C46: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	1	1	17	8	19	8	4	3	91	50	95	50	114	51
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1	1	17	8	19	8	4	3	91	50	95	50	114	51
Other federal government:														
Bureau of Land Management	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Department of Defense and Energy	--	--	4	3	4	3	--	--	--	--	--	--	4	3
National Park Service	--	--	--	--	--	--	--	--	7	8	7	8	7	8
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	5	3	5	3	--	--	7	8	7	8	12	9
State and local government:														
Local	--	--	11	7	11	7	48	25	23	15	71	29	82	30
State	3	2			3	2	26	16	16	10	42	19	45	19
Other public	--	--	--	--	--	--	1	1	--	--	1	1	1	1
Total	3	2	11	7	14	8	75	29	39	18	114	34	128	35
Private:														
Corporate	10	5	22	9	31	10	--	--	--	--	--	--	31	10
Noncorporate private:														
Total, noncorporate private	131	33	128	27	259	43	--	--	--	--	--	--	259	43
All private	141	34	150	28	291	44	--	--	--	--	--	--	291	44
All owners	145	34	183	31	328	45	79	29	138	54	217	61	545	76

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C47: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Central Valley

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
State and local government:														
Local	--	--	2	2	2	2	--	--	--	--	--	--	2	2
State	--	--	--	--	--	--	--	--	3	3	3	3	3	3
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	2	2	2	2	--	--	3	3	3	3	5	4
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	9	5	9	5	--	--	--	--	--	--	9	5
All private	--	--	9	5	9	5	--	--	--	--	--	--	9	5
All owners	--	--	11	6	11	6	--	--	3	3	3	3	14	6

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C48: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Eastside

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	209	40	79	31	288	50	26	11	28	11	54	16	342	53
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	209	40	79	31	288	50	26	11	28	11	54	16	342	53
Other federal government:														
Bureau of Land Management	1	1	17	6	18	6	--	--	3	2	3	2	21	6
Department of Defense and Energy	--	--	2	1	2	1	--	--	--	--	--	--	2	1
National Park Service	--	--	--	--	--	--	--	--	1	1	1	1	1	1
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1	1	19	6	20	6	--	--	5	2	5	2	24	6
State and local government:														
Local	--	--	--	--	--	--	--	--	--	--	--	--	--	--
State	--	--	--	--	--	--	8	9	--	--	8	9	8	9
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	8	9	--	--	8	9	8	9
Private:														
Corporate	50	21			50	21	--	--	--	--	--	--	50	21
Noncorporate private:														
Total, noncorporate private	9	4	3	2	12	4	--	--	--	--	--	--	12	4
All private	59	21	3	2	62	21	--	--	--	--	--	--	62	21
All owners	269	45	100	31	369	55	35	15	32	11	67	18	437	58

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C49: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	3,730	338	178	53	3,908	341	2,620	274	106	28	2,727	274	6,635	435
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	3,730	338	178	53	3,908	341	2,620	274	106	28	2,727	274	6,635	435
Other federal government:														
Bureau of Land Management	65	25	29	14	94	28	4	4	--	--	4	4	99	28
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	72	28	4	3	76	28	76	28
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	2	3	--	--	2	3	--	--	--	--	--	--	2	3
Total	67	25	29	14	97	28	76	28	4	3	81	28	177	40
State and local government:														
Local	1	1	--	--	1	1	--	--	4	4	4	4	5	4
State	6	7	2	2	8	7	1	1	6	5	7	5	15	8
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	7	7	2	2	8	7	1	1	9	6	11	6	19	9
Private:														
Corporate	450	86	38	12	488	87	--	--	--	--	--	--	488	87
Noncorporate private:														
Total, noncorporate private	338	57	110	17	449	60	--	--	--	--	--	--	449	60
All private	789	103	148	21	936	105	--	--	--	--	--	--	936	105
All owners	4,593	355	357	59	4,950	359	2,698	275	120	29	2,818	276	7,768	450

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C50: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: North Coast

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	28	18	2	2	30	18	24	21	--	--	24	21	54	28
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	28	18	2	2	30	18	24	21	--	--	24	21	54	28
Other federal government:														
Bureau of Land Management	7	6	--	--	7	6	85	44	--	--	85	44	92	44
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	128	74	--	--	128	74	128	74
U.S. Fish and Wildlife Service	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	7	6	--	--	7	6	215	85	--	--	215	85	222	86
State and local government:														
Local	30	20	1	1	31	20	--	--	3	1	3	1	33	20
State	45	23	--	--	45	23	195	56	3	3	199	56	244	57
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	75	29	1	1	76	29	195	56	6	4	201	56	277	58
Private:														
Corporate	1,103	150	11	5	1,113	150	--	--	--	--	--	--	1,113	150
Noncorporate private:														
Total, noncorporate private	381	57	16	6	398	58	--	--	--	--	--	--	398	58
All private	1,484	158	27	8	1,511	159	--	--	--	--	--	--	1,511	159
All owners	1,594	162	30	9	1,624	162	434	104	6	4	440	104	2,064	191

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C51: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	5,685	327	324	72	6,009	332	1,618	181	265	45	1,883	185	7,892	374
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	5,685	327	324	72	6,009	332	1,618	181	265	45	1,883	185	7,892	374
Other federal government:														
Bureau of Land Management	13	7	29	9	42	11	6	6	16	6	22	9	63	14
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	1,701	226	125	34	1,826	229	1,826	229
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	3	2	3	2	--	--	--	--	--	--	3	2
Total	13	7	33	9	45	12	1,707	227	141	34	1,848	229	1,893	228
State and local government:														
Local	15	8	4	2	19	8	--	--	2	2	2	2	21	8
State	24	21	5	4	28	22	41	17	9	6	50	18	79	27
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	38	23	9	4	48	23	41	17	11	6	52	18	100	29
Private:														
Corporate	667	73	53	12	720	73	--	--	--	--	--	--	720	73
Noncorporate private:														
Total, noncorporate private	371	76	341	62	712	98	--	--	--	--	--	--	712	98
All private	1,038	103	394	63	1,432	120	--	--	--	--	--	--	1,432	120
All owners	6,773	343	760	96	7,533	353	3,367	291	416	57	3,783	295	11,316	452

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C52: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

*information combined with information from Table C36 in Table C44.9

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	132	52	80	19	212	56	120	47	68	24	188	53	400	77
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	132	52	80	19	212	56	120	47	68	24	188	53	400	77
Other federal government:														
Bureau of Land Management	--	--	1	1	1	1	--	--	2	1	2	1	3	1
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	8	3	8	3	8	3
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	12	11	12	11	--	--	--	--	--	--	12	11
Total	--	--	13	11	13	11	--	--	9	3	9	3	22	11
State and local government:														
Local	--	--	1	1	1	1	--	--	3	3	3	3	4	3
State	--	--	--	--	--	--	6	5	14	12	20	13	20	13
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	1	1	1	1	6	5	17	13	22	14	24	14
Private:														
Corporate	--	--	5	5	5	5	--	--	--	--	--	--	5	5
Noncorporate private:														
Total, noncorporate private	17	10	40	14	57	17	--	--	--	--	--	--	57	17
All private	17	10	46	14	62	18	--	--	--	--	--	--	62	18
All owners	149	53	140	26	289	59	126	47	94	27	220	55	509	81

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C53: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: All California

**information duplicated in Table C61.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	413,405.31	5,864.30	98,297.53	4,180.05	511,702.84	5,734.71	134,103.84	4,388.48	55,434.71	3,416.65	189,812.31	4,561.12	701,515.15	5,858.26
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	413,405.31	5,864.30	98,297.53	4,180.05	511,702.84	5,734.71	134,103.84	4,388.48	55,434.71	3,416.65	189,812.31	4,561.12	701,515.15	5,858.26
Other federal government:														
Bureau of Land Management	10,707.47	1,658.17	37,181.32	2,866.42	47,888.79	3,255.43	3,504.77	1,046.46	7,030.58	1,233.96	10,535.35	1,617.65	58,424.14	3,516.14
Department of Defense and Energy	675.05	378.11	2,977.42	785.09	3,652.47	871.39	--	--	219.17	226.64	219.17	226.64	3,871.64	900.38
National Park Service	--	--	--	--	--	--	45,465.62	2,804.85	18,799.66	2,104.71	64,265.28	3,340.63	64,265.28	3,340.63
U.S. Fish and Wildlife Service	--	--	--	--	--	--	156.16	159.68	16.29	16.80	172.44	160.56	172.44	160.56
Other federal	128.20	159.50	1,943.58	612.32	2,071.77	632.76	--	--	157.93	96.62	157.93	96.62	2,229.71	640.09
Total	11,510.72	1,702.51	42,102.32	2,989.22	53,613.03	3,371.94	49,126.54	2,887.91	26,223.64	2,383.55	75,350.18	3,510.23	128,963.21	4,156.68
State and local government:														
Local	2,764.99	880.06	5,444.78	1,079.65	8,209.77	1,407.07	2,062.58	728.48	6,328.02	1,172.18	8,390.60	1,315.16	16,600.37	1,915.17
State	4,480.90	1,037.92	2,093.64	696.57	6,574.54	1,235.05	12,282.88	1,464.75	9,746.43	1,373.16	22,029.30	1,923.97	28,603.84	1,928.42
Other public	--	--	41.78	37.90	41.78	37.90	237.56	264.40	232.28	251.23	469.84	364.73	511.62	366.69
Total	7,245.89	1,339.74	7,580.20	1,283.95	14,826.09	1,853.44	14,583.02	1,618.67	16,306.72	1,736.98	30,889.74	2,216.74	45,715.83	2,532.07
Private:														
Corporate	203,405.75	5,577.12	36,473.16	2,868.68	239,878.91	6,096.26	--	--	--	--	--	--	239,878.91	6,096.26
Noncorporate private:														
Total, noncorporate private	117,505.53	4,944.13	166,371.39	5,241.01	283,876.93	6,733.21	--	--	--	--	--	--	283,876.93	6,733.21
All private	320,911.28	5,438.53	202,844.55	5,653.53	523,755.84	6,542.56	--	--	--	--	--	--	523,755.84	6,542.56
All owners	753,073.20	7,940.23	350,824.60	7,653.88	1,103,897.80	8,954.73	197,813.40	5,483.49	97,965.06	4,506.98	296,052.22	6,130.71	1,399,950.03	8,855.48

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C54: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	71.43	65.43	2,894.82	758.47	2,966.25	761.01	1,193.27	556.05	5,340.55	1,164.45	6,533.83	1,285.05	9,500.07	1,493.49
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	71.43	65.43	2,894.82	758.47	2,966.25	761.01	1,193.27	556.05	5,340.55	1,164.45	6,533.83	1,285.05	9,500.07	1,493.49
Other federal government:														
Bureau of Land Management	--	--	1,877.81	648.04	1,877.81	648.04	--	--	396.60	290.25	396.60	290.25	2,274.41	709.98
Department of Defense and Energy	--	--	1,938.39	634.49	1,938.39	634.49	--	--	--	--	--	--	1,938.39	634.49
National Park Service	--	--	--	--	--	--	--	--	244.56	272.19	244.56	272.19	244.56	272.19
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	380.90	296.43	380.90	296.43	--	--	6.52	7.22	6.52	7.22	387.42	296.52
Total	--	--	4,197.09	948.09	4,197.09	948.09	--	--	647.68	397.98	647.68	397.98	4,844.77	1,028.13
State and local government:														
Local	--	--	1,123.91	453.48	1,123.91	453.48	2,062.58	728.48	3,999.50	913.10	6,062.08	1,090.63	7,185.99	1,173.70
State	673.52	401.81	443.19	294.50	1,116.71	517.77	1,871.39	775.26	4,206.62	881.20	6,078.01	1,165.23	7,194.72	1,270.22
Other public	--	--	--	--	--	--	237.56	264.40	232.28	251.23	469.84	364.73	469.84	364.73
Total	673.52	401.81	1,567.10	540.70	2,240.62	688.26	4,171.53	1,091.81	8,438.40	1,224.70	12,609.93	1,542.12	14,850.55	1,656.93
Private:														
Corporate	1,785.84	696.78	5,739.24	1,114.53	7,525.08	1,312.78	--	--	--	--	--	--	7,525.08	1,312.78
Noncorporate private:														
Total, noncorporate private	7,505.53	1,433.12	29,184.77	2,458.77	36,690.30	2,821.76	--	--	--	--	--	--	36,690.30	2,821.76
All private	9,291.37	1,587.09	34,924.00	2,672.91	44,215.38	3,086.78	--	--	--	--	--	--	44,215.38	3,086.78
All owners	10,036.32	1,639.84	43,583.01	2,986.04	53,619.33	3,387.38	5,364.80	1,225.25	14,426.63	1,728.82	19,791.44	2,037.27	73,410.77	3,916.87

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C55: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	16.29	16.80	16.29	16.80	16.29	16.80
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	16.29	16.80	16.29	16.80	16.29	16.80
State and local government:														
Local	--	--	137.33	95.01	137.33	95.01	--	--	--	--	--	--	137.33	95.01
State	--	--	--	--	--	--	--	--	235.31	223.82	235.31	223.82	235.31	223.82
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	137.33	95.01	137.33	95.01	--	--	235.31	223.82	235.31	223.82	372.64	243.15
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	2,717.29	711.88	2,717.29	711.88	--	--	--	--	--	--	2,717.29	711.88
All private	--	--	2,717.29	711.88	2,717.29	711.88	--	--	--	--	--	--	2,717.29	711.88
All owners	--	--	2,854.62	718.03	2,854.62	718.03	--	--	251.59	224.45	251.59	224.45	3,106.22	752.30

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C56: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	29,530.45	2,619.78	30,992.50	2,499.56	60,522.95	3,568.79	2,613.32	896.75	4,362.66	1,058.55	6,975.98	1,374.38	67,498.93	3,817.42
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	29,530.45	2,619.78	30,992.50	2,499.56	60,522.95	3,568.79	2,613.32	896.75	4,362.66	1,058.55	6,975.98	1,374.38	67,498.93	3,817.42
Other federal government:														
Bureau of Land Management	1,121.01	538.73	18,961.01	2,141.40	20,082.03	2,201.76	--	--	1,791.94	623.44	1,791.94	623.44	21,873.97	2,260.32
Department of Defense and Energy	--	--	936.06	453.56	936.06	453.56	--	--	--	--	--	--	936.06	453.56
National Park Service	--	--	--	--	--	--	--	--	2,072.87	632.47	2,072.87	632.47	2,072.87	632.47
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,121.01	538.73	19,897.07	2,178.39	21,018.08	2,237.74	--	--	3,864.82	884.49	3,864.82	884.49	24,882.90	2,354.72
State and local government:														
Local	--	--	203.28	204.99	203.28	204.99	--	--	--	--	--	--	203.28	204.99
State	--	--	--	--	--	--	300.12	334.03	349.81	299.99	649.93	448.97	649.93	448.97
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	203.28	204.99	203.28	204.99	300.12	334.03	349.81	299.99	649.93	448.97	853.21	493.55
Private:														
Corporate	10,408.22	1,628.81	3,240.97	924.32	13,649.19	1,885.02	--	--	--	--	--	--	13,649.19	1,885.02
Noncorporate private:														
Total, noncorporate private	3,323.05	887.12	6,020.08	1,263.54	9,343.13	1,558.33	--	--	--	--	--	--	9,343.13	1,558.33
All private	13,731.27	1,837.76	9,261.05	1,557.12	22,992.32	2,425.54	--	--	--	--	--	--	22,992.32	2,425.54
All owners	44,382.74	3,263.02	60,353.90	3,673.72	104,736.64	4,878.38	2,913.44	956.94	8,577.28	1,411.68	11,490.72	1,694.94	116,227.36	5,134.12

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C57: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	127,660.98	5,319.83	18,222.54	2,181.33	145,883.52	5,620.52	69,541.59	3,805.28	13,236.09	1,983.12	82,777.68	4,171.93	228,661.20	6,733.48
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	127,660.98	5,319.83	18,222.54	2,181.33	145,883.52	5,620.52	69,541.59	3,805.28	13,236.09	1,983.12	82,777.68	4,171.93	228,661.20	6,733.48
Other federal government:														
Bureau of Land Management	4,918.10	1,162.39	5,986.08	1,274.18	10,904.18	1,722.67	254.90	252.50	997.56	527.81	1,252.46	585.10	12,156.64	1,816.66
Department of Defense and Energy	--	--	--	--	--	--	--	--	219.17	226.64	219.17	226.64	219.17	226.64
National Park Service	--	--	--	--	--	--	2,745.44	864.89	1,862.20	703.18	4,607.64	1,131.68	4,607.64	1,131.68
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	128.20	159.50	232.36	173.49	360.56	235.66	--	--	40.35	44.66	40.35	44.66	400.91	239.86
Total	5,046.29	1,173.28	6,218.45	1,285.91	11,264.74	1,738.58	3,000.34	896.50	3,119.28	905.73	6,119.62	1,289.28	17,384.36	2,109.24
State and local government:														
Local	344.14	296.03	510.43	373.20	854.57	476.36	--	--	238.07	224.05	238.07	224.05	1,092.65	526.37
State	441.60	290.07	569.29	374.65	1,010.89	473.82	267.01	219.59	781.44	450.73	1,048.46	529.69	2,059.34	710.69
Other public	--	--	41.78	37.90	41.78	37.90	--	--	--	--	--	--	41.78	37.90
Total	785.74	414.46	1,121.50	529.93	1,907.24	672.76	267.01	219.59	1,019.52	503.35	1,286.53	575.13	3,193.77	883.11
Private:														
Corporate	44,668.91	3,474.87	11,541.50	1,662.13	56,210.41	3,840.38	--	--	--	--	--	--	56,210.41	3,840.38
Noncorporate private:														
Total, noncorporate private	35,257.88	3,125.43	39,715.85	2,940.63	74,973.72	4,251.57	--	--	--	--	--	--	74,973.72	4,251.57
All private	79,926.79	4,493.84	51,257.35	3,334.93	131,184.14	5,513.19	--	--	--	--	--	--	131,184.14	5,513.19
All owners	213,419.80	7,078.50	76,819.84	4,226.54	290,239.64	8,084.47	72,808.94	3,915.72	17,374.89	2,237.38	90,183.83	4,404.35	380,423.47	8,976.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C58: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	1,136.89	587.83	338.42	324.78	1,475.31	671.58	561.65	421.93	--	--	561.65	421.93	2,036.96	792.68
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,136.89	587.83	338.42	324.78	1,475.31	671.58	561.65	421.93	--	--	561.65	421.93	2,036.96	792.68
Other federal government:														
Bureau of Land Management	1,285.90	573.95	--	--	1,285.90	573.95	2,913.97	972.15	--	--	2,913.97	972.15	4,199.88	1,133.14
Department of Defense and Energy	600.76	370.42	3.39	3.70	604.15	370.44	--	--	--	--	--	--	604.15	370.44
National Park Service	--	--	--	--	--	--	2,001.12	761.26	310.08	298.26	2,311.20	808.41	2,311.20	808.41
	--	--	--	--	--	--	156.16	159.68	--	--	156.16	159.68	156.16	159.68
U.S. Fish and Wildlife Service														
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,886.66	683.10	3.39	3.70	1,890.05	683.11	5,071.25	1,232.54	310.08	298.26	5,381.33	1,247.77	7,271.38	1,411.29
State and local government:														
Local	950.75	479.13	298.16	212.71	1,248.91	564.03	--	--	1,702.15	662.06	1,702.15	662.06	2,951.06	869.74
State	2,440.18	811.59	80.31	72.86	2,520.50	814.85	6,464.08	1,157.49	342.13	275.76	6,806.21	1,192.12	9,326.71	1,255.40
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	3,390.94	926.08	378.47	224.84	3,769.41	975.45	6,464.08	1,157.49	2,044.28	717.19	8,508.36	1,363.37	12,277.76	1,498.41
Private:														
Corporate	53,002.97	3,520.84	1,231.62	508.98	54,234.59	3,555.90	--	--	--	--	--	--	54,234.59	3,555.90
Noncorporate private:														
Total, noncorporate private	34,300.20	2,858.52	6,515.76	1,173.19	40,815.96	3,073.11	--	--	--	--	--	--	40,815.96	3,073.11
All private	87,303.17	4,260.93	7,747.38	1,276.56	95,050.55	4,413.36	--	--	--	--	--	--	95,050.55	4,413.36
All owners	93,717.65	4,427.68	8,467.67	1,335.95	102,185.32	4,595.30	12,096.98	1,742.12	2,354.36	776.74	14,451.34	1,895.07	116,636.66	4,878.68

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C59: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	249,465.65	6,343.52	33,259.23	2,730.76	282,724.88	6,552.45	55,458.05	3,518.13	26,493.50	2,426.48	81,951.55	3,919.87	364,676.42	7,355.33
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	249,465.65	6,343.52	33,259.23	2,730.76	282,724.88	6,552.45	55,458.05	3,518.13	26,493.50	2,426.48	81,951.55	3,919.87	364,676.42	7,355.33
Other federal government:														
Bureau of Land Management	3,382.45	920.21	9,543.64	1,480.99	12,926.09	1,733.73	335.89	293.65	2,988.70	782.70	3,324.59	835.97	16,250.68	1,893.66
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	40,719.07	2,730.09	11,315.40	1,728.59	52,034.47	3,118.67	52,034.47	3,118.67
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	697.17	376.99	697.17	376.99	--	--	74.24	76.77	74.24	76.77	771.41	384.73
Total	3,382.45	920.21	10,240.81	1,524.00	13,623.26	1,770.04	41,054.95	2,741.06	14,378.34	1,872.01	55,433.30	3,184.30	69,056.56	3,440.14
State and local government:														
Local	1,470.10	676.24	2,562.77	798.66	4,032.87	1,045.19	--	--	274.65	233.48	274.65	233.48	4,307.51	1,070.91
State	925.60	497.45	1,000.84	506.59	1,926.44	702.15	2,990.56	891.99	2,324.09	738.75	5,314.65	1,150.88	7,241.09	1,317.26
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,395.69	839.50	3,563.62	944.74	5,959.31	1,256.96	2,990.56	891.99	2,598.74	774.77	5,589.29	1,174.33	11,548.60	1,695.15
Private:														
Corporate	93,393.23	4,591.49	12,822.78	1,707.16	106,216.00	4,858.39	--	--	--	--	--	--	106,216.00	4,858.39
Noncorporate private:														
Total, noncorporate private	36,549.58	2,946.88	74,372.64	3,796.37	110,922.22	4,711.48	--	--	--	--	--	--	110,922.22	4,711.48
All private	129,942.80	5,099.34	87,195.42	4,047.89	217,138.22	6,193.55	--	--	--	--	--	--	217,138.22	6,193.55
All owners	385,186.60	8,140.17	134,259.07	5,173.39	519,445.67	9,120.28	99,503.56	4,540.45	43,470.57	3,158.26	142,974.14	5,162.52	662,419.81	9,963.37

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C60: Soil Organic Carbon by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	5,539.91	1,193.08	12,590.03	1,586.22	18,129.94	1,984.99	4,735.95	1,151.71	6,001.91	1,226.19	11,011.62	1,680.06	29,141.56	2,587.34
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	5,539.91	1,193.08	12,590.03	1,586.22	18,129.94	1,984.99	4,735.95	1,151.71	6,001.91	1,226.19	11,011.62	1,680.06	29,141.56	2,587.34
Other federal government:														
Bureau of Land Management	--	--	812.78	373.51	812.78	373.51	--	--	855.78	443.92	855.78	443.92	1,668.56	579.01
Department of Defense and Energy	74.30	75.91	99.58	101.83	173.87	127.01	--	--	--	--	--	--	173.87	127.01
National Park Service	--	--	--	--	--	--	--	--	2,994.54	755.21	2,994.54	755.21	2,994.54	755.21
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	633.15	339.24	633.15	339.24	--	--	36.83	37.63	36.83	37.63	669.97	341.32
Total	74.30	75.91	1,545.51	514.68	1,619.80	520.23	--	--	3,887.15	873.35	3,887.15	873.35	5,506.95	1,014.52
State and local government:														
Local	--	--	608.90	302.80	608.90	302.80	--	--	113.65	110.13	113.65	110.13	722.55	320.14
State	--	--	--	--	--	--	389.72	304.74	1,507.02	554.13	1,896.74	627.73	1,896.74	627.73
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	608.90	302.80	608.90	302.80	389.72	304.74	1,620.67	564.96	2,010.39	637.32	2,619.29	703.81
Private:														
Corporate	146.57	144.77	1,897.05	674.35	2,043.62	689.72	--	--	--	--	--	--	2,043.62	689.72
Noncorporate private:														
Total, noncorporate private	569.30	342.70	7,845.01	1,263.01	8,414.31	1,324.35	--	--	--	--	--	--	8,414.31	1,324.35
All private	715.88	372.02	9,742.06	1,430.81	10,457.94	1,492.27	--	--	--	--	--	--	10,457.94	1,492.27
All owners	6,330.08	1,252.04	24,486.50	2,210.33	30,816.58	2,547.96	5,125.68	1,191.35	11,509.72	1,607.92	16,909.16	1,997.86	47,725.75	3,225.16

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.1: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	465,218.34	7,227.47	138,491.38	5,226.96	603,709.72	7,512.16	138,859.43	5,919.40	60,737.42	3,959.75	199,596.85	6,805.96	803,306.57	5,476.23
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	465,218.34	7,227.47	138,491.38	5,226.96	603,709.72	7,512.16	138,859.43	5,919.40	60,737.42	3,959.75	199,596.85	6,805.96	803,306.57	5,476.23
Other federal government:														
Bureau of Land Management	14,720.59	2,079.36	49,000.48	3,370.46	63,721.08	3,810.47	1,244.16	592.33	10,936.81	1,456.42	12,180.96	1,570.25	75,902.04	4,015.84
Department of Defense and Energy	234.71	257.80	3,167.75	882.00	3,402.46	918.90	--	--	--	--	--	--	3,402.46	918.90
National Park Service	--	--	--	--	--	--	47,767.55	3,042.15	22,783.24	2,341.29	70,550.79	3,266.55	70,550.79	3,266.55
U.S. Fish and Wildlife Service	--	--	--	--	--	--	210.90	259.36	145.68	148.15	356.58	298.69	356.58	298.69
Other federal	--	--	3,820.89	953.17	3,820.89	953.17	688.50	494.36	754.89	419.32	1,443.39	646.97	5,264.28	1,151.51
Total	14,955.30	2,095.28	55,989.13	3,568.66	70,944.43	3,976.31	49,911.10	3,109.81	34,620.62	2,730.97	84,531.72	3,547.80	155,476.15	4,939.15
State and local government:														
Local	1,805.31	683.64	4,646.75	1,036.22	6,452.06	1,248.80	1,793.01	787.97	9,058.03	1,541.51	10,851.04	1,721.50	17,303.10	2,114.95
State	4,673.17	1,195.70	1,870.47	689.17	6,543.64	1,375.78	14,882.39	1,995.55	12,359.68	1,733.57	27,242.07	2,591.05	33,785.71	2,831.87
Other public	--	--	359.93	316.48	359.93	316.48	358.33	320.99	461.06	341.89	819.39	468.96	1,179.31	565.76
Total	6,478.47	1,371.71	6,877.15	1,282.94	13,355.63	1,878.16	17,033.73	2,165.83	21,878.77	2,316.28	38,912.49	3,104.83	52,268.12	3,521.46
Private:														
Corporate	209,528.33	6,280.51	22,239.00	2,390.05	231,767.33	6,604.92	--	--	--	--	--	--	231,767.33	6,604.92
Noncorporate private:														
Total, noncorporate private	162,890.64	6,016.26	217,851.15	6,181.15	380,741.79	7,997.93	--	--	--	--	--	--	380,741.79	7,997.93
All private	372,418.97	6,286.28	240,090.15	6,358.63	612,509.12	7,461.53	--	--	--	--	--	--	612,509.12	7,461.53
All owners	859,071.09	9,691.36	441,447.81	8,938.42	1,300,518.90	11,006.49	205,804.26	6,967.75	117,236.81	5,299.76	323,041.07	8,174.62	1,623,559.96	9,865.35

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.2: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	468,684.38	7,418.28	133,214.32	5,187.24	601,898.71	7,729.48	139,598.77	5,966.06	60,756.52	3,971.27	200,355.29	6,846.56	802,254.00	5,842.70
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	468,684.38	7,418.28	133,214.32	5,187.24	601,898.71	7,729.48	139,598.77	5,966.06	60,756.52	3,971.27	200,355.29	6,846.56	802,254.00	5,842.70
Other federal government:														
Bureau of Land Management	14,621.67	2,075.03	48,182.16	3,336.40	62,803.83	3,787.46	1,232.68	589.62	10,878.43	1,467.02	12,111.11	1,579.11	74,914.94	4,000.74
Department of Defense and Energy	329.72	280.55	3,663.85	942.01	3,993.57	982.38	--	--	--	--	--	--	3,993.57	982.38
National Park Service	--	--	--	--	--	--	48,288.30	3,065.75	22,755.29	2,325.36	71,043.59	3,261.04	71,043.59	3,261.04
U.S. Fish and Wildlife Service	--	--	--	--	--	--	210.90	259.36	144.32	147.45	355.22	298.35	355.22	298.35
Other federal	--	--	3,809.41	952.04	3,809.41	952.04	686.37	493.83	751.10	419.14	1,437.48	646.43	5,246.88	1,150.28
Total	14,951.39	2,093.91	55,655.42	3,551.50	70,606.80	3,969.67	50,418.25	3,132.22	34,529.14	2,731.25	84,947.39	3,552.34	155,554.19	4,943.85
State and local government:														
Local	1,528.65	618.48	4,679.13	1,037.96	6,207.78	1,214.93	1,766.52	783.38	8,910.33	1,523.86	10,676.84	1,703.97	16,884.62	2,081.31
State	4,700.05	1,193.02	1,855.92	686.41	6,555.97	1,371.97	15,049.04	1,999.46	12,948.61	1,768.33	27,997.65	2,620.35	34,553.62	2,859.41
Other public	--	--	368.63	322.42	368.63	322.42	369.14	325.80	217.98	249.40	587.11	410.30	955.75	521.83
Total	6,228.69	1,338.04	6,903.69	1,284.78	13,132.38	1,855.32	17,184.70	2,168.55	22,076.91	2,320.15	39,261.60	3,110.33	52,393.98	3,519.47
Private:														
Corporate	205,863.30	6,289.77	26,359.68	2,596.25	232,222.98	6,676.80	--	--	--	--	--	--	232,222.98	6,676.80
Noncorporate private:														
Total, noncorporate private	160,614.18	5,999.66	211,544.12	6,117.23	372,158.30	7,974.81	--	--	--	--	--	--	372,158.30	7,974.81
All private	366,477.47	6,446.89	237,903.80	6,338.98	604,381.27	7,611.49	--	--	--	--	--	--	604,381.27	7,611.49
All owners	856,341.94	9,752.24	433,677.23	8,877.24	1,290,019.16	11,041.10	207,201.71	7,018.83	117,362.57	5,310.36	324,564.29	8,211.68	1,614,583.45	9,874.65

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.3: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	472,160.29	6,641.32	124,869.63	4,952.33	597,029.92	6,508.19	145,059.19	4,891.45	63,673.82	3,800.87	208,733.01	5,018.09	805,762.93	6,434.54
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	472,160.29	6,641.32	124,869.63	4,952.33	597,029.92	6,508.19	145,059.19	4,891.45	63,673.82	3,800.87	208,733.01	5,018.09	805,762.93	6,434.54
Other federal government:														
Bureau of Land Management	15,886.75	2,192.56	46,635.58	3,472.43	62,522.33	4,044.74	1,476.17	665.03	9,165.42	1,514.34	10,641.59	1,653.58	73,163.92	4,238.27
Department of Defense and Energy	521.64	355.73	3,280.76	907.44	3,802.40	974.66	--	--	233.58	241.86	233.58	241.86	4,035.98	1,004.22
National Park Service	--	--	--	--	--	--	50,335.15	3,174.08	22,028.90	2,440.53	72,364.04	3,804.10	72,364.04	3,804.10
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	4,450.96	1,040.23	4,450.96	1,040.23	332.87	351.47	859.74	462.05	1,192.60	580.54	5,643.56	1,189.83
Total	16,408.39	2,203.87	54,367.30	3,672.66	70,775.69	4,212.99	52,144.18	3,196.49	32,287.63	2,808.14	84,431.82	3,978.89	155,207.51	4,978.16
State and local government:														
Local	1,795.53	698.61	4,347.82	1,005.70	6,143.35	1,231.95	1,910.11	807.78	8,455.71	1,460.92	10,365.81	1,621.45	16,509.16	2,016.56
State	4,467.51	1,138.42	2,021.72	738.06	6,489.23	1,329.06	13,878.34	1,627.27	11,889.17	1,612.37	25,767.51	2,179.19	32,256.74	2,154.32
Other public	--	--	372.44	322.26	372.44	322.26	246.65	285.26	255.71	276.94	502.36	397.58	874.80	511.78
Total	6,263.03	1,329.02	6,741.99	1,287.94	13,005.02	1,835.10	16,035.10	1,775.98	20,600.59	2,074.09	36,635.69	2,552.85	49,640.71	2,748.64
Private:														
Corporate	209,644.04	6,331.48	26,523.71	2,593.53	236,167.75	6,713.34	--	--	--	--	--	--	236,167.75	6,713.34
Noncorporate private:														
Total, noncorporate private	161,449.39	5,986.09	206,717.77	6,074.63	368,167.16	7,899.65	--	--	--	--	--	--	368,167.16	7,899.65
All private	371,093.43	6,219.51	233,241.48	6,355.38	604,334.91	7,436.67	--	--	--	--	--	--	604,334.91	7,436.67
All owners	865,925.14	9,034.69	419,220.41	8,830.54	1,285,145.55	10,255.17	213,238.46	6,095.80	116,562.05	5,147.82	329,800.51	6,846.88	1,614,946.06	10,002.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.4: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	470,336.57	6,616.84	122,024.13	4,919.17	592,360.70	6,481.95	144,704.57	4,853.78	63,206.91	3,859.41	207,911.47	4,998.97	800,272.18	6,467.28
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	470,336.57	6,616.84	122,024.13	4,919.17	592,360.70	6,481.95	144,704.57	4,853.78	63,206.91	3,859.41	207,911.47	4,998.97	800,272.18	6,467.28
Other federal government:														
Bureau of Land Management	15,723.34	2,192.86	45,382.33	3,415.37	61,105.67	3,996.25	1,750.91	708.07	9,657.38	1,548.04	11,408.30	1,701.94	72,513.96	4,204.67
Department of Defense and Energy	521.64	355.73	3,319.70	915.83	3,841.33	982.47	--	--	233.58	241.86	233.58	241.86	4,074.92	1,011.80
National Park Service	--	--	--	--	--	--	50,353.88	3,171.30	21,697.76	2,438.05	72,051.63	3,803.79	72,051.63	3,803.79
U.S. Fish and Wildlife Service	--	--	--	--	--	--	167.44	171.38	19.98	20.13	187.42	172.56	187.42	172.56
Other federal	--	--	4,261.17	1,007.87	4,261.17	1,007.87	--	--	517.74	315.34	517.74	315.34	4,778.91	1,056.05
Total	16,244.97	2,204.18	52,963.20	3,610.95	69,208.18	4,161.37	52,272.23	3,198.54	32,126.44	2,808.51	84,398.67	3,986.49	153,606.85	4,928.95
State and local government:														
Local	1,839.06	708.86	4,542.21	1,015.27	6,381.27	1,245.58	2,008.87	757.90	8,459.83	1,459.14	10,468.70	1,573.82	16,849.97	1,991.82
State	4,484.14	1,141.11	2,020.65	737.86	6,504.79	1,331.28	13,826.81	1,625.78	11,796.49	1,623.64	25,623.30	2,178.59	32,128.09	2,150.54
Other public	--	--	415.85	324.39	415.85	324.39	266.78	297.32	255.71	276.94	522.50	406.32	938.35	519.93
Total	6,323.20	1,335.93	6,978.71	1,295.81	13,301.92	1,845.64	16,102.47	1,777.53	20,512.03	2,084.65	36,614.49	2,544.69	49,916.41	2,745.84
Private:														
Corporate	211,001.96	6,335.10	27,943.19	2,665.12	238,945.14	6,739.80	--	--	--	--	--	--	238,945.14	6,739.80
Noncorporate private:														
Total, noncorporate private	157,324.93	5,924.48	201,624.50	6,020.35	358,949.43	7,837.04	--	--	--	--	--	--	358,949.43	7,837.04
All private	368,326.88	6,197.98	229,567.69	6,323.57	597,894.57	7,410.64	--	--	--	--	--	--	597,894.57	7,410.64
All owners	861,231.64	9,013.33	411,533.73	8,768.35	1,272,765.37	10,217.74	213,079.26	6,068.40	115,845.38	5,197.85	328,924.64	6,839.95	1,601,690.01	9,994.37

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.5: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	471,419.62	6,602.68	119,095.47	4,867.57	590,515.09	6,444.38	147,102.56	4,871.64	61,775.37	3,845.27	208,877.93	4,957.58	799,393.02	6,505.48
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	471,419.62	6,602.68	119,095.47	4,867.57	590,515.09	6,444.38	147,102.56	4,871.64	61,775.37	3,845.27	208,877.93	4,957.58	799,393.02	6,505.48
Other federal government:														
Bureau of Land Management	15,249.45	2,160.70	44,566.86	3,359.92	59,816.31	3,933.87	2,486.48	908.47	8,750.20	1,477.34	11,236.67	1,733.97	71,052.99	4,156.37
Department of Defense and Energy	521.91	355.54	3,197.14	901.38	3,719.05	968.95	--	--	233.58	241.71	233.58	241.71	3,952.63	998.64
National Park Service	--	--	--	--	--	--	50,946.24	3,171.47	21,414.18	2,414.70	72,360.42	3,790.79	72,360.42	3,790.79
U.S. Fish and Wildlife Service	--	--	--	--	--	--	167.38	171.24	19.98	20.11	187.36	172.42	187.36	172.42
Other federal	--	--	4,249.69	1,006.05	4,249.69	1,006.05	--	--	517.88	315.15	517.88	315.15	4,767.57	1,054.26
Total	15,771.36	2,179.59	52,013.69	3,556.69	67,785.05	4,104.57	53,600.09	3,237.47	30,935.82	2,758.51	84,535.91	3,969.89	152,320.97	4,871.65
State and local government:														
Local	2,646.20	890.65	4,769.84	1,031.89	7,416.04	1,369.77	2,010.71	758.24	8,214.89	1,438.98	10,225.60	1,555.39	17,641.63	2,058.77
State	4,679.41	1,153.28	2,084.19	739.93	6,763.60	1,351.67	13,810.57	1,622.82	11,737.46	1,615.16	25,548.03	2,171.27	32,311.62	2,157.67
Other public	--	--	397.47	322.88	397.47	322.88	266.78	297.13	255.71	276.77	522.50	406.06	919.96	518.79
Total	7,325.60	1,450.49	7,251.50	1,309.59	14,577.10	1,945.54	16,088.06	1,774.81	20,208.06	2,069.55	36,296.12	2,531.76	50,873.22	2,804.35
Private:														
Corporate	212,457.02	6,340.92	30,713.17	2,780.93	243,170.19	6,787.26	--	--	--	--	--	--	243,170.19	6,787.26
Noncorporate private:														
Total, noncorporate private	152,064.14	5,810.08	197,757.99	5,985.63	349,822.13	7,758.04	--	--	--	--	--	--	349,822.13	7,758.04
All private	364,521.16	6,164.63	228,471.16	6,304.77	592,992.32	7,371.79	--	--	--	--	--	--	592,992.32	7,371.79
All owners	859,037.74	8,999.48	406,831.82	8,712.89	1,265,869.56	10,163.19	216,790.71	6,102.48	112,919.25	5,154.67	329,709.96	6,795.95	1,595,579.52	9,997.05

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.6: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	471,721.67	6,606.80	114,185.21	4,773.29	585,906.88	6,408.17	148,340.17	4,852.38	61,846.67	3,821.97	210,186.84	4,956.06	796,093.72	6,520.03
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	471,721.67	6,606.80	114,185.21	4,773.29	585,906.88	6,408.17	148,340.17	4,852.38	61,846.67	3,821.97	210,186.84	4,956.06	796,093.72	6,520.03
Other federal government:														
Bureau of Land Management	14,982.02	2,116.48	43,239.91	3,290.52	58,221.93	3,853.30	2,856.65	979.82	8,628.61	1,477.20	11,485.25	1,772.26	69,707.18	4,101.54
Department of Defense and Energy	521.91	355.56	3,207.57	902.93	3,729.48	970.40	--	--	237.93	246.23	237.93	246.23	3,967.41	1,001.15
National Park Service	--	--	--	--	--	--	50,883.34	3,158.35	21,619.07	2,434.65	72,502.41	3,804.00	72,502.41	3,804.00
U.S. Fish and Wildlife Service	--	--	--	--	--	--	167.38	171.25	19.98	20.12	187.36	172.43	187.36	172.43
Other federal	--	--	4,328.82	1,010.60	4,328.82	1,010.60	--	--	519.28	315.54	519.28	315.54	4,848.10	1,058.72
Total	15,503.93	2,135.75	50,776.30	3,496.53	66,280.23	4,032.08	53,907.36	3,241.20	31,024.87	2,773.63	84,932.23	3,988.41	151,212.46	4,837.19
State and local government:														
Local	2,517.26	880.36	5,165.34	1,088.20	7,682.59	1,405.05	1,997.12	752.05	7,960.11	1,421.22	9,957.22	1,535.95	17,639.82	2,067.50
State	4,927.02	1,176.96	1,993.94	734.89	6,920.96	1,369.02	13,790.08	1,619.57	11,508.68	1,596.90	25,298.76	2,156.77	32,219.72	2,142.73
Other public	--	--	396.17	322.63	396.17	322.63	261.45	291.21	255.71	276.79	517.16	401.77	913.33	515.27
Total	7,444.28	1,461.69	7,555.44	1,351.50	14,999.72	1,981.33	16,048.64	1,769.05	19,724.50	2,043.87	35,773.14	2,508.33	50,772.86	2,798.96
Private:														
Corporate	216,782.29	6,300.00	35,202.95	2,989.26	251,985.24	6,820.17	--	--	--	--	--	--	251,985.24	6,820.17
Noncorporate private:														
Total, noncorporate private	147,141.73	5,756.33	190,458.58	5,887.41	337,600.31	7,676.33	--	--	--	--	--	--	337,600.31	7,676.33
All private	363,924.01	6,156.72	225,661.54	6,264.66	589,585.55	7,347.64	--	--	--	--	--	--	589,585.55	7,347.64
All owners	858,593.89	8,962.78	398,178.49	8,619.36	1,256,772.38	10,075.25	218,296.18	6,083.93	112,596.05	5,138.20	330,892.22	6,798.40	1,587,664.60	9,950.63

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.7: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	470,656.86	6,609.83	111,072.97	4,715.97	581,729.83	6,423.93	149,469.09	4,841.45	62,743.87	3,842.81	212,212.95	4,971.64	793,942.79	6,564.05
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	470,656.86	6,609.83	111,072.97	4,715.97	581,729.83	6,423.93	149,469.09	4,841.45	62,743.87	3,842.81	212,212.95	4,971.64	793,942.79	6,564.05
Other federal government:														
Bureau of Land Management	13,943.67	2,036.20	42,706.04	3,271.34	56,649.71	3,797.50	3,946.81	1,171.50	8,724.92	1,486.14	12,671.73	1,892.04	69,321.44	4,096.33
Department of Defense and Energy	813.79	446.38	3,493.23	943.08	4,307.02	1,043.37	--	--	257.07	256.40	257.07	256.40	4,564.09	1,074.42
National Park Service	--	--	--	--	--	--	51,300.24	3,164.14	21,909.00	2,447.69	73,209.24	3,809.64	73,209.24	3,809.64
U.S. Fish and Wildlife Service	--	--	--	--	--	--	167.33	171.26	19.98	20.12	187.31	172.44	187.31	172.44
Other federal	--	--	3,627.39	887.34	3,627.39	887.34	--	--	525.46	316.44	525.46	316.44	4,152.85	942.08
Total	14,757.46	2,071.67	49,826.67	3,459.61	64,584.13	3,970.55	55,414.38	3,252.33	31,436.43	2,792.36	86,850.80	3,998.25	151,434.93	4,835.41
State and local government:														
Local	3,004.65	956.21	5,811.31	1,150.52	8,815.96	1,512.77	2,002.46	753.42	7,912.73	1,418.76	9,915.19	1,534.29	18,731.14	2,140.73
State	4,764.39	1,127.82	2,174.03	762.28	6,938.41	1,342.58	13,739.57	1,617.91	11,615.46	1,602.42	25,355.04	2,161.65	32,293.45	2,128.00
Other public	--	--	395.74	322.60	395.74	322.60	261.45	291.27	251.72	272.52	513.16	398.88	908.90	513.00
Total	7,769.04	1,470.88	8,381.07	1,415.46	16,150.11	2,040.27	16,003.48	1,768.09	19,779.90	2,047.15	35,783.39	2,512.52	51,933.49	2,842.31
Private:														
Corporate	221,690.24	6,333.78	36,950.22	3,046.67	258,640.47	6,856.55	--	--	--	--	--	--	258,640.47	6,856.55
Noncorporate private:														
Total, noncorporate private	139,816.70	5,623.52	187,521.36	5,838.24	327,338.07	7,572.48	--	--	--	--	--	--	327,338.07	7,572.48
All private	361,506.95	6,140.34	224,471.59	6,241.00	585,978.54	7,322.59	--	--	--	--	--	--	585,978.54	7,322.59
All owners	854,690.30	8,943.39	393,752.30	8,556.92	1,248,442.60	10,040.58	220,886.95	6,078.43	113,960.20	5,165.11	334,847.14	6,815.36	1,583,289.75	9,934.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.8: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	468,814.77	6,602.69	111,521.22	4,721.87	580,335.99	6,416.94	149,669.10	4,837.32	62,387.36	3,817.62	212,056.47	4,983.09	792,392.46	6,542.17
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	468,814.77	6,602.69	111,521.22	4,721.87	580,335.99	6,416.94	149,669.10	4,837.32	62,387.36	3,817.62	212,056.47	4,983.09	792,392.46	6,542.17
Other federal government:														
Bureau of Land Management	14,120.88	2,050.82	42,496.56	3,264.16	56,617.44	3,798.72	3,916.58	1,167.41	8,585.64	1,478.56	12,502.23	1,883.57	69,119.67	4,100.10
Department of Defense and Energy	810.67	445.19	3,491.97	941.86	4,302.65	1,041.76	--	--	237.93	246.15	237.93	246.15	4,540.58	1,070.44
National Park Service	--	--	--	--	--	--	51,631.00	3,181.14	21,986.32	2,430.78	73,617.31	3,804.58	73,617.31	3,804.58
U.S. Fish and Wildlife Service	--	--	--	--	--	--	167.33	171.18	19.48	19.85	186.80	172.32	186.80	172.32
Other federal	--	--	2,285.67	696.52	2,285.67	696.52	--	--	169.51	103.17	169.51	103.17	2,455.19	704.12
Total	14,931.55	2,085.80	48,274.21	3,411.66	63,205.76	3,936.01	55,714.91	3,268.93	30,998.88	2,766.54	86,713.79	3,995.14	149,919.55	4,807.58
State and local government:														
Local	3,038.45	962.88	5,784.10	1,144.20	8,822.56	1,511.96	2,034.12	763.61	7,525.22	1,370.78	9,559.34	1,498.77	18,381.89	2,116.36
State	4,757.39	1,126.24	2,164.65	760.31	6,922.03	1,340.15	13,872.57	1,616.40	11,144.25	1,551.99	25,016.82	2,144.56	31,938.85	2,109.51
Other public	--	--	395.16	322.48	395.16	322.48	261.45	291.11	252.25	272.96	513.70	399.06	908.86	513.08
Total	7,795.84	1,474.02	8,343.91	1,409.28	16,139.75	2,038.11	16,168.14	1,768.15	18,921.72	1,986.66	35,089.85	2,482.68	51,229.60	2,818.12
Private:														
Corporate	226,147.25	6,325.40	38,817.38	3,120.10	264,964.62	6,868.21	--	--	--	--	--	--	264,964.62	6,868.21
Noncorporate private:														
Total, noncorporate private	134,333.85	5,546.42	185,789.01	5,810.79	320,122.87	7,510.76	--	--	--	--	--	--	320,122.87	7,510.76
All private	360,481.10	6,134.46	224,606.39	6,242.65	585,087.49	7,322.44	--	--	--	--	--	--	585,087.49	7,322.44
All owners	852,023.26	8,935.50	392,745.73	8,542.72	1,244,768.99	10,023.97	221,552.15	6,084.04	112,307.96	5,108.75	333,860.11	6,811.11	1,578,629.09	9,908.18

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C61.9: Soil Organic Carbon by Owner Group and Forest Land Status, All California (10 year averages): 2009 - 2018

*information duplicated in Table C53

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	413,405.31	5,864.30	98,297.53	4,180.05	511,702.84	5,734.71	134,103.84	4,388.48	55,434.71	3,416.65	189,812.31	4,561.12	701,515.15	5,858.26
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	413,405.31	5,864.30	98,297.53	4,180.05	511,702.84	5,734.71	134,103.84	4,388.48	55,434.71	3,416.65	189,812.31	4,561.12	701,515.15	5,858.26
Other federal government:														
Bureau of Land Management	10,707.47	1,658.17	37,181.32	2,866.42	47,888.79	3,255.43	3,504.77	1,046.46	7,030.58	1,233.96	10,535.35	1,617.65	58,424.14	3,516.14
Department of Defense and Energy	675.05	378.11	2,977.42	785.09	3,652.47	871.39	--	--	219.17	226.64	219.17	226.64	3,871.64	900.38
National Park Service	--	--	--	--	--	--	45,465.62	2,804.85	18,799.66	2,104.71	64,265.28	3,340.63	64,265.28	3,340.63
U.S. Fish and Wildlife Service	--	--	--	--	--	--	156.16	159.68	16.29	16.80	172.44	160.56	172.44	160.56
Other federal	128.20	159.50	1,943.58	612.32	2,071.77	632.76	--	--	157.93	96.62	157.93	96.62	2,229.71	640.09
Total	11,510.72	1,702.51	42,102.32	2,989.22	53,613.03	3,371.94	49,126.54	2,887.91	26,223.64	2,383.55	75,350.18	3,510.23	128,963.21	4,156.68
State and local government:														
Local	2,764.99	880.06	5,444.78	1,079.65	8,209.77	1,407.07	2,062.58	728.48	6,328.02	1,172.18	8,390.60	1,315.16	16,600.37	1,915.17
State	4,480.90	1,037.92	2,093.64	696.57	6,574.54	1,235.05	12,282.88	1,464.75	9,746.43	1,373.16	22,029.30	1,923.97	28,603.84	1,928.42
Other public	--	--	41.78	37.90	41.78	37.90	237.56	264.40	232.28	251.23	469.84	364.73	511.62	366.69
Total	7,245.89	1,339.74	7,580.20	1,283.95	14,826.09	1,853.44	14,583.02	1,618.67	16,306.72	1,736.98	30,889.74	2,216.74	45,715.83	2,532.07
Private:														
Corporate	203,405.75	5,577.12	36,473.16	2,868.68	239,878.91	6,096.26	--	--	--	--	--	--	239,878.91	6,096.26
Noncorporate private:														
Total, noncorporate private	117,505.53	4,944.13	166,371.39	5,241.01	283,876.93	6,733.21	--	--	--	--	--	--	283,876.93	6,733.21
All private	320,911.28	5,438.53	202,844.55	5,653.53	523,755.84	6,542.56	--	--	--	--	--	--	523,755.84	6,542.56
All owners	753,073.20	7,940.23	350,824.60	7,653.88	1,103,897.80	8,954.73	197,813.40	5,483.49	97,965.06	4,506.98	296,052.22	6,130.71	1,399,950.03	8,855.48

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C62: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: All California

**information duplicated in Table C70.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,443.96	1,176.49	3,917.45	342.35	43,361.42	1,190.06	13,181.24	885.04	2,914.04	320.65	16,119.04	910.85	59,480.45	1,456.11
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,443.96	1,176.49	3,917.45	342.35	43,361.42	1,190.06	13,181.24	885.04	2,914.04	320.65	16,119.04	910.85	59,480.45	1,456.11
Other federal government:														
Bureau of Land Management	668.09	140.90	1,064.88	148.33	1,732.97	202.91	270.71	106.43	424.26	140.65	694.97	176.38	2,427.94	264.97
Department of Defense and Energy	25.40	16.06	75.54	39.25	100.94	42.41	--	--	4.10	4.24	4.10	4.24	105.04	42.62
National Park Service	--	--	--	--	--	--	6,849.64	750.30	1,289.41	291.05	8,139.04	795.37	8,139.04	795.37
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.60	--	--	1.57	1.60	1.57	1.60
Other federal	0.80	1.00	35.85	18.67	36.65	18.70	--	--	1.39	1.05	1.39	1.05	38.03	18.73
Total	694.29	141.66	1,176.26	153.97	1,870.56	206.56	7,121.92	752.12	1,719.15	321.01	8,841.07	807.24	10,711.62	809.06
State and local government:														
Local	351.28	224.08	263.07	96.36	614.35	243.92	119.97	46.87	276.09	117.59	396.06	126.14	1,010.41	274.31
State	449.82	135.82	37.65	18.89	487.47	135.81	2,018.01	344.52	545.55	137.47	2,563.56	365.63	3,051.03	346.33
Other public	--	--	--	--	--	--	16.64	18.52	2.19	2.37	18.84	18.67	18.84	18.67
Total	801.10	258.66	300.73	98.19	1,101.83	275.90	2,154.62	346.05	823.83	180.45	2,978.45	384.57	4,080.28	425.03
Private:														
Corporate	24,097.77	1,124.91	1,204.58	159.45	25,302.35	1,131.29	--	--	--	--	--	--	25,302.35	1,131.29
Noncorporate private:														
Total, noncorporate private	11,220.64	789.94	5,140.63	342.56	16,361.27	854.10	--	--	--	--	--	--	16,361.27	854.10
All private	35,318.41	1,235.36	6,345.21	372.69	41,663.62	1,263.20	--	--	--	--	--	--	41,663.62	1,263.20
All owners	76,257.77	1,717.93	11,739.65	535.74	87,997.42	1,751.91	22,457.78	1,210.95	5,457.02	487.61	27,938.55	1,273.96	115,935.97	2,087.57

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C63: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	0.01	0.01	71.50	32.88	71.50	32.88	356.69	244.95	223.49	91.98	580.18	275.89	651.68	277.85
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	0.01	0.01	71.50	32.88	71.50	32.88	356.69	244.95	223.49	91.98	580.18	275.89	651.68	277.85
Other federal government:														
Bureau of Land Management	--	--	38.03	22.55	38.03	22.55	--	--	0.33	0.33	0.33	0.33	38.36	22.56
Department of Defense and Energy	--	--	56.97	37.92	56.97	37.92	--	--	--	--	--	--	56.97	37.92
National Park Service	--	--	--	--	--	--	--	--	105.10	116.98	105.10	116.98	105.10	116.98
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	12.04	11.93	12.04	11.93	--	--	--	--	--	--	12.04	11.93
Total	--	--	107.04	45.68	107.04	45.68	--	--	105.43	116.98	105.43	116.98	212.47	125.58
State and local government:														
Local	--	--	132.51	86.35	132.51	86.35	119.97	46.87	219.26	116.08	339.23	124.74	471.74	151.64
State	47.84	50.08	3.84	3.34	51.68	50.20	299.64	148.37	221.63	92.72	521.27	174.82	572.95	181.72
Other public	--	--	--	--	--	--	16.64	18.52	2.19	2.37	18.84	18.67	18.84	18.67
Total	47.84	50.08	136.34	86.41	184.19	99.88	436.25	156.60	443.08	148.45	879.33	214.90	1,063.52	235.61
Private:														
Corporate	305.98	169.97	237.37	68.52	543.35	183.25	--	--	--	--	--	--	543.35	183.25
Noncorporate private:														
Total, noncorporate private	927.97	253.82	1,100.34	165.84	2,028.31	302.02	--	--	--	--	--	--	2,028.31	302.02
All private	1,233.95	304.39	1,337.71	178.50	2,571.66	351.96	--	--	--	--	--	--	2,571.66	351.96
All owners	1,281.80	308.40	1,652.60	206.08	2,934.40	370.03	792.94	290.73	772.00	209.07	1,564.95	367.63	4,499.34	520.29

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C64: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
State and local government:														
Local	--	--	6.75	6.91	6.75	6.91	--	--	--	--	--	--	6.75	6.91
State	--	--	--	--	--	--	--	--	10.47	10.67	10.47	10.67	10.47	10.67
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	6.75	6.91	6.75	6.91	--	--	10.47	10.67	10.47	10.67	17.21	12.71
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	117.21	53.06	117.21	53.06	--	--	--	--	--	--	117.21	53.06
All private	--	--	117.21	53.06	117.21	53.06	--	--	--	--	--	--	117.21	53.06
All owners	--	--	123.96	53.51	123.96	53.51	--	--	10.47	10.67	10.47	10.67	134.42	54.56

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C65: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	1,815.93	240.36	983.78	148.83	2,799.71	281.27	256.20	115.70	229.64	74.59	485.85	137.06	3,285.56	312.52
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,815.93	240.36	983.78	148.83	2,799.71	281.27	256.20	115.70	229.64	74.59	485.85	137.06	3,285.56	312.52
Other federal government:														
Bureau of Land Management	86.83	83.44	363.84	71.80	450.67	109.74	--	--	48.13	24.41	48.13	24.41	498.80	111.82
Department of Defense and Energy	--	--	16.53	9.94	16.53	9.94	--	--	--	--	--	--	16.53	9.94
National Park Service	--	--	--	--	--	--	--	--	71.49	38.82	71.49	38.82	71.49	38.82
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	86.83	83.44	380.37	72.29	467.20	110.07	--	--	119.62	45.78	119.62	45.78	586.82	118.18
State and local government:														
Local	--	--	12.30	12.40	12.30	12.40	--	--	--	--	--	--	12.30	12.40
State	--	--	--	--	--	--	19.72	21.95	0.39	0.34	20.12	21.95	20.12	21.95
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	12.30	12.40	12.30	12.40	19.72	21.95	0.39	0.34	20.12	21.95	32.42	25.21
Private:														
Corporate	718.68	145.35	58.06	28.79	776.74	148.18	--	--	--	--	--	--	776.74	148.18
Noncorporate private:														
Total, noncorporate private	223.50	84.35	32.44	10.85	255.94	85.12	--	--	--	--	--	--	255.94	85.12
All private	942.18	167.04	90.50	30.53	1,032.68	169.84	--	--	--	--	--	--	1,032.68	169.84
All owners	2,844.94	305.64	1,466.95	168.71	4,311.90	347.79	275.93	117.76	349.66	87.52	625.58	146.16	4,937.48	376.61

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C66: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	12,655.23	774.83	1,055.84	237.19	13,711.07	803.20	6,500.98	557.53	638.05	173.72	7,139.03	579.20	20,850.10	978.71
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	12,655.23	774.83	1,055.84	237.19	13,711.07	803.20	6,500.98	557.53	638.05	173.72	7,139.03	579.20	20,850.10	978.71
Other federal government:														
Bureau of Land Management	360.66	97.77	253.59	86.40	614.25	130.80	16.06	15.91	33.80	22.72	49.86	27.74	664.11	133.65
Department of Defense and Energy	--	--	--	--	--	--	--	--	4.10	4.24	4.10	4.24	4.10	4.24
National Park Service	--	--	--	--	--	--	728.31	320.69	172.77	84.58	901.08	331.89	901.08	331.89
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	0.80	1.00	0.03	0.02	0.83	1.00	--	--	0.68	0.75	0.68	0.75	1.51	1.25
Total	361.46	97.78	253.62	86.40	615.08	130.80	744.38	320.93	211.34	87.66	955.72	332.92	1,570.80	355.28
State and local government:														
Local	0.88	0.75	3.33	2.27	4.21	2.39	--	--	6.33	7.01	6.33	7.01	10.54	7.40
State	24.13	18.01	11.72	8.86	35.85	20.07	29.54	28.99	71.59	52.34	101.13	59.95	136.98	63.22
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	25.01	18.03	15.05	9.14	40.06	20.21	29.54	28.99	77.92	52.81	107.46	60.35	147.52	63.62
Private:														
Corporate	5,069.10	577.21	305.95	86.25	5,375.05	583.11	--	--	--	--	--	--	5,375.05	583.11
Noncorporate private:														
Total, noncorporate private	3,041.71	432.06	1,374.59	203.18	4,416.30	475.86	--	--	--	--	--	--	4,416.30	475.86
All private	8,110.81	707.93	1,680.54	220.09	9,791.35	738.89	--	--	--	--	--	--	9,791.35	738.89
All owners	21,152.52	1,052.77	3,005.05	334.75	24,157.57	1,097.41	7,274.90	643.55	927.31	201.62	8,202.21	670.39	32,359.78	1,275.22

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C67: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	63.12	36.00	1.83	1.76	64.95	36.04	80.88	72.75	--	--	80.88	72.75	145.83	81.08
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	63.12	36.00	1.83	1.76	64.95	36.04	80.88	72.75	--	--	80.88	72.75	145.83	81.08
Other federal government:														
Bureau of Land Management	83.05	42.08	--	--	83.05	42.08	248.54	105.13	--	--	248.54	105.13	331.59	113.25
Department of Defense and Energy	19.07	14.70	--	--	19.07	14.70	--	--	--	--	--	--	19.07	14.70
National Park Service	--	--	--	--	--	--	673.88	385.36	3.50	3.00	677.38	385.36	677.38	385.36
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.60	--	--	1.57	1.60	1.57	1.60
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	102.13	44.58	--	--	102.13	44.58	923.99	399.22	3.50	3.00	927.49	399.16	1,029.62	401.05
State and local government:														
Local	285.82	221.69	2.66	2.03	288.48	221.70	--	--	41.53	15.92	41.53	15.92	330.01	222.27
State	296.27	118.21	--	--	296.27	118.21	1,257.42	319.45	37.65	35.60	1,295.07	321.43	1,591.34	322.02
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	582.09	249.61	2.66	2.03	584.75	249.62	1,257.42	319.45	79.17	39.00	1,336.59	321.82	1,921.35	387.19
Private:														
Corporate	9,487.02	921.64	47.01	22.18	9,534.03	921.78	--	--	--	--	--	--	9,534.03	921.78
Noncorporate private:														
Total, noncorporate private	3,885.78	513.18	228.40	58.13	4,114.18	516.08	--	--	--	--	--	--	4,114.18	516.08
All private	13,372.80	1,025.68	275.40	62.15	13,648.21	1,026.53	--	--	--	--	--	--	13,648.21	1,026.53
All owners	14,120.15	1,055.62	279.89	62.20	14,400.04	1,056.44	2,262.29	516.44	82.68	39.12	2,344.97	517.87	16,745.01	1,167.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C68: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	24,446.61	1,069.78	1,266.83	186.91	25,713.43	1,077.67	5,682.44	722.78	1,387.02	223.23	7,069.46	747.58	32,782.90	1,299.71
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	24,446.61	1,069.78	1,266.83	186.91	25,713.43	1,077.67	5,682.44	722.78	1,387.02	223.23	7,069.46	747.58	32,782.90	1,299.71
Other federal government:														
Bureau of Land Management	137.54	42.64	376.90	94.26	514.45	102.59	6.11	4.67	290.01	127.12	296.12	127.20	810.56	162.81
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	5,447.44	605.19	864.03	247.49	6,311.47	645.71	6,311.47	645.71
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	9.85	8.68	9.85	8.68	--	--	0.71	0.73	0.71	0.73	10.56	8.71
Total	137.54	42.64	386.76	94.47	524.30	102.73	5,453.55	605.17	1,154.74	276.68	6,608.29	657.09	7,132.59	657.54
State and local government:														
Local	64.58	32.68	83.34	37.10	147.92	49.42	--	--	7.51	7.52	7.51	7.52	155.43	49.99
State	81.58	53.07	22.10	16.36	103.67	54.91	310.97	124.16	143.85	73.27	454.82	142.90	558.49	149.73
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	146.16	62.32	105.44	40.54	251.59	73.87	310.97	124.16	151.36	73.65	462.34	143.10	713.93	157.82
Private:														
Corporate	8,507.61	567.00	517.22	108.98	9,024.83	575.38	--	--	--	--	--	--	9,024.83	575.38
Noncorporate private:														
Total, noncorporate private	2,999.25	388.86	1,908.87	195.68	4,908.12	432.72	--	--	--	--	--	--	4,908.12	432.72
All private	11,506.86	662.47	2,426.09	221.18	13,932.95	688.26	--	--	--	--	--	--	13,932.95	688.26
All owners	36,237.17	1,257.16	4,185.10	306.53	40,422.27	1,279.59	11,446.97	950.54	2,693.12	362.82	14,140.09	1,004.92	54,562.36	1,599.62

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C69: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	463.07	138.32	537.68	99.76	1,000.75	170.29	304.04	102.93	435.84	128.73	763.63	165.23	1,764.38	236.48
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	463.07	138.32	537.68	99.76	1,000.75	170.29	304.04	102.93	435.84	128.73	763.63	165.23	1,764.38	236.48
Other federal government:														
Bureau of Land Management	--	--	32.52	22.47	32.52	22.47	--	--	52.00	50.58	52.00	50.58	84.51	55.35
Department of Defense and Energy	6.33	6.47	2.03	2.08	8.36	6.79	--	--	--	--	--	--	8.36	6.79
National Park Service	--	--	--	--	--	--	--	--	72.52	41.34	72.52	41.34	72.52	41.34
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	13.93	11.44	13.93	11.44	--	--	0.00	0.00	0.00	0.00	13.93	11.44
Total	6.33	6.47	48.47	25.30	54.80	26.11	--	--	124.52	63.83	124.52	63.83	179.32	68.95
State and local government:														
Local	--	--	22.19	16.51	22.19	16.51	--	--	1.46	1.42	1.46	1.42	23.65	16.53
State	--	--	--	--	--	--	100.71	88.46	59.97	34.08	160.68	94.67	160.68	94.67
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	22.19	16.51	22.19	16.51	100.71	88.46	61.43	34.11	162.14	94.68	184.33	96.10
Private:														
Corporate	9.38	9.26	38.98	19.50	48.35	21.59	--	--	--	--	--	--	48.35	21.59
Noncorporate private:														
Total, noncorporate private	142.42	90.37	378.78	103.83	521.20	174.90	--	--	--	--	--	--	521.20	174.90
All private	151.80	90.84	417.75	105.64	569.55	176.23	--	--	--	--	--	--	569.55	176.23
All owners	621.19	165.61	1,026.10	148.20	1,647.29	246.84	404.75	135.72	621.78	147.68	1,050.29	200.85	2,697.58	317.64

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.1: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	40,004.09	1,147.85	4,943.43	371.42	44,947.52	1,170.85	11,508.35	746.01	2,561.38	258.37	14,069.73	784.83	59,017.25	1,224.01
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	40,004.09	1,147.85	4,943.43	371.42	44,947.52	1,170.85	11,508.35	746.01	2,561.38	258.37	14,069.73	784.83	59,017.25	1,224.01
Other federal government:														
Bureau of Land Management	729.78	124.86	997.50	121.77	1,727.29	172.36	50.02	24.16	378.44	95.79	428.46	98.69	2,155.75	195.57
Department of Defense and Energy	10.05	11.04	49.20	21.12	59.25	23.83	--	--	--	--	--	--	59.25	23.83
National Park Service	--	--	--	--	--	--	6,344.55	734.86	932.87	167.47	7,277.41	732.51	7,277.41	732.51
U.S. Fish and Wildlife Service	--	--	--	--	--	--	10.55	12.97	--	--	10.55	12.97	10.55	12.97
Other federal	--	--	57.25	24.60	57.25	24.60	125.37	110.65	28.62	24.06	153.99	113.08	211.24	115.72
Total	739.83	125.34	1,103.96	125.33	1,843.79	174.77	6,530.48	739.92	1,339.92	193.55	7,870.41	741.87	9,714.20	755.01
State and local government:														
Local	167.86	71.33	190.93	71.79	358.79	101.22	106.33	53.94	276.35	71.43	382.68	89.32	741.46	134.53
State	552.68	164.50	43.85	19.97	596.53	165.59	2,427.59	433.98	410.73	95.88	2,838.32	442.55	3,434.86	457.38
Other public	--	--	0.24	0.22	0.24	0.22	22.80	20.43	10.89	8.73	33.70	22.22	33.94	22.22
Total	720.53	179.05	235.02	74.50	955.56	193.78	2,556.73	437.70	697.98	119.50	3,254.70	451.47	4,210.26	476.07
Private:														
Corporate	25,599.19	1,213.00	540.60	79.08	26,139.80	1,215.58	--	--	--	--	--	--	26,139.80	1,215.58
Noncorporate private:														
Total, noncorporate private	13,647.87	799.64	5,546.89	296.58	19,194.76	839.30	--	--	--	--	--	--	19,194.76	839.30
All private	39,247.06	1,283.15	6,087.49	303.49	45,334.56	1,292.81	--	--	--	--	--	--	45,334.56	1,292.81
All owners	80,711.52	1,725.96	12,369.89	499.29	93,081.42	1,750.70	20,595.56	1,116.40	4,599.28	343.83	25,194.84	1,148.24	118,276.26	1,922.70

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.2: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	40,415.29	1,167.25	4,769.25	373.08	45,184.55	1,190.42	11,545.90	751.13	2,514.34	258.54	14,060.24	789.61	59,244.79	1,248.66
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	40,415.29	1,167.25	4,769.25	373.08	45,184.55	1,190.42	11,545.90	751.13	2,514.34	258.54	14,060.24	789.61	59,244.79	1,248.66
Other federal government:														
Bureau of Land Management	728.71	124.29	981.68	123.69	1,710.39	173.87	47.49	22.58	426.74	110.85	474.22	113.04	2,184.61	204.68
Department of Defense and Energy	16.54	13.03	49.50	20.78	66.04	24.52	--	--	--	--	--	--	66.04	24.52
National Park Service	--	--	--	--	--	--	6,613.91	759.34	944.59	170.11	7,558.49	756.24	7,558.49	756.24
U.S. Fish and Wildlife Service	--	--	--	--	--	--	10.55	12.97	--	--	10.55	12.97	10.55	12.97
Other federal	--	--	56.78	24.50	56.78	24.50	125.96	111.10	28.73	24.16	154.70	113.53	211.48	116.15
Total	745.25	124.97	1,087.96	127.10	1,833.21	176.38	6,797.91	764.15	1,400.05	202.52	8,197.96	765.24	10,031.18	778.26
State and local government:														
Local	292.74	203.06	224.13	93.47	516.87	223.55	109.56	54.31	262.55	71.08	372.11	89.26	888.98	240.45
State	551.45	163.88	41.60	18.51	593.05	164.80	2,411.66	433.92	432.27	97.62	2,843.93	442.94	3,436.98	459.07
Other public	--	--	0.25	0.22	0.25	0.22	23.49	20.73	6.78	7.75	30.27	22.14	30.52	22.14
Total	844.19	260.77	265.98	95.28	1,110.17	277.56	2,544.72	437.71	701.60	120.58	3,246.32	451.82	4,356.48	517.67
Private:														
Corporate	24,519.39	1,231.46	699.50	109.75	25,218.90	1,233.13	--	--	--	--	--	--	25,218.90	1,233.13
Noncorporate private:														
Total, noncorporate private	13,677.71	805.25	5,565.38	317.25	19,243.10	851.78	--	--	--	--	--	--	19,243.10	851.78
All private	38,197.11	1,313.57	6,264.89	331.26	44,461.99	1,325.50	--	--	--	--	--	--	44,461.99	1,325.50
All owners	80,201.84	1,766.96	12,388.09	521.37	92,589.93	1,794.05	20,888.53	1,137.61	4,615.99	349.47	25,504.52	1,168.38	118,094.44	1,973.84

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.3: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,821.12	1,081.19	4,524.87	362.29	44,346.00	1,097.44	12,196.51	702.01	2,673.65	267.30	14,870.16	721.18	59,216.16	1,256.25
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,821.12	1,081.19	4,524.87	362.29	44,346.00	1,097.44	12,196.51	702.01	2,673.65	267.30	14,870.16	721.18	59,216.16	1,256.25
Other federal government:														
Bureau of Land Management	797.55	130.27	1,024.13	133.55	1,821.68	184.63	73.40	36.78	350.11	103.31	423.51	109.65	2,245.19	211.80
Department of Defense and Energy	24.93	16.07	45.61	20.29	70.54	25.88	--	--	3.95	4.09	3.95	4.09	74.48	26.20
National Park Service	--	--	--	--	--	--	6,582.13	729.20	1,048.87	218.01	7,631.00	752.04	7,631.00	752.04
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	68.11	27.57	68.11	27.57	100.56	106.18	31.29	25.08	131.85	109.11	199.96	112.32
Total	822.48	130.73	1,137.85	137.17	1,960.33	187.00	6,756.09	732.17	1,434.22	239.57	8,190.31	759.86	10,150.64	757.61
State and local government:														
Local	272.76	213.53	210.59	92.35	483.35	232.66	108.91	53.44	242.34	66.31	351.25	83.90	834.59	244.83
State	517.57	157.75	44.31	19.76	561.88	157.65	2,145.11	383.00	426.74	100.86	2,571.85	389.74	3,133.73	371.78
Other public	--	--	0.25	0.22	0.25	0.22	15.70	18.16	7.95	8.61	23.65	20.10	23.90	20.10
Total	790.33	264.22	255.14	94.44	1,045.47	279.84	2,269.72	384.70	677.03	119.63	2,946.76	395.52	3,992.23	432.18
Private:														
Corporate	24,119.88	1,184.35	635.40	97.87	24,755.28	1,186.54	--	--	--	--	--	--	24,755.28	1,186.54
Noncorporate private:														
Total, noncorporate private	13,637.90	815.75	5,550.92	332.31	19,188.82	863.65	--	--	--	--	--	--	19,188.82	863.65
All private	37,757.78	1,278.74	6,186.32	343.44	43,944.10	1,292.04	--	--	--	--	--	--	43,944.10	1,292.04
All owners	79,191.71	1,684.95	12,104.18	524.50	91,295.89	1,709.22	21,222.33	1,084.08	4,784.90	378.17	26,007.23	1,118.69	117,303.13	1,953.38

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.4: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,836.41	1,094.66	4,466.97	361.37	44,303.38	1,110.43	12,454.59	757.75	2,724.51	274.63	15,179.10	774.58	59,482.48	1,301.64
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,836.41	1,094.66	4,466.97	361.37	44,303.38	1,110.43	12,454.59	757.75	2,724.51	274.63	15,179.10	774.58	59,482.48	1,301.64
Other federal government:														
Bureau of Land Management	773.05	126.64	985.54	132.33	1,758.59	181.23	79.05	37.35	372.75	106.11	451.80	112.48	2,210.39	210.34
Department of Defense and Energy	24.93	16.07	38.87	15.55	63.80	22.36	--	--	3.95	4.09	3.95	4.09	67.75	22.73
National Park Service	--	--	--	--	--	--	6,350.17	648.03	1,051.13	220.35	7,401.30	675.36	7,401.30	675.36
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.61	--	--	1.57	1.61	1.57	1.61
Other federal	--	--	64.50	26.10	64.50	26.10	--	--	6.27	4.31	6.27	4.31	70.77	26.46
Total	797.97	127.12	1,088.92	135.14	1,886.89	183.05	6,430.78	647.04	1,434.10	241.68	7,864.88	680.06	9,751.77	678.59
State and local government:														
Local	288.98	222.27	207.39	91.87	496.37	240.52	105.39	46.00	229.95	64.96	335.34	77.53	831.72	252.38
State	513.80	150.23	44.29	19.76	558.10	150.15	2,091.79	380.26	420.17	101.38	2,511.95	386.95	3,070.05	367.28
Other public	--	--	0.25	0.22	0.25	0.22	16.98	18.93	7.95	8.61	24.94	20.80	25.19	20.80
Total	802.78	266.88	251.93	93.97	1,054.72	282.21	2,214.16	381.91	658.07	119.43	2,872.23	392.67	3,926.95	431.90
Private:														
Corporate	23,733.94	1,164.29	709.88	108.34	24,443.82	1,166.61	--	--	--	--	--	--	24,443.82	1,166.61
Noncorporate private:														
Total, noncorporate private	13,229.55	797.35	5,349.94	328.45	18,579.49	845.41	--	--	--	--	--	--	18,579.49	845.41
All private	36,963.49	1,254.07	6,059.82	342.45	43,023.31	1,267.92	--	--	--	--	--	--	43,023.31	1,267.92
All owners	78,400.66	1,676.17	11,867.63	522.59	90,268.29	1,700.57	21,099.54	1,066.44	4,816.68	384.63	25,916.21	1,102.05	116,184.50	1,942.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.5: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,424.59	1,104.32	4,226.41	347.05	43,650.99	1,116.98	13,024.41	779.10	2,814.28	295.68	15,838.68	796.78	59,489.67	1,325.62
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,424.59	1,104.32	4,226.41	347.05	43,650.99	1,116.98	13,024.41	779.10	2,814.28	295.68	15,838.68	796.78	59,489.67	1,325.62
Other federal government:														
Bureau of Land Management	770.63	127.99	956.79	129.68	1,727.41	180.36	118.34	48.23	414.73	125.31	533.07	134.26	2,260.48	221.40
Department of Defense and Energy	24.94	16.06	36.29	15.65	61.23	22.42	--	--	3.95	4.08	3.95	4.08	65.18	22.79
National Park Service	--	--	--	--	--	--	6,363.26	645.01	1,013.69	213.00	7,376.95	670.37	7,376.95	670.37
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.61	--	--	1.57	1.61	1.57	1.61
Other federal	--	--	64.50	26.09	64.50	26.09	--	--	6.27	4.31	6.27	4.31	70.76	26.44
Total	795.57	128.56	1,057.57	132.53	1,853.15	182.29	6,483.17	644.17	1,438.63	244.06	7,921.80	678.38	9,774.94	676.38
State and local government:														
Local	321.64	223.59	215.48	92.43	537.12	241.95	105.57	46.10	198.03	59.72	303.61	74.62	840.73	252.96
State	491.47	147.29	44.55	19.74	536.03	147.21	2,147.95	388.27	427.40	101.16	2,575.35	394.52	3,111.37	375.48
Other public	--	--	0.25	0.22	0.25	0.22	16.98	18.92	7.95	8.61	24.94	20.78	25.18	20.78
Total	813.12	266.35	260.28	94.51	1,073.40	281.89	2,270.50	389.85	633.39	116.97	2,903.89	399.66	3,977.28	439.23
Private:														
Corporate	23,299.71	1,144.92	771.45	109.90	24,071.16	1,147.46	--	--	--	--	--	--	24,071.16	1,147.46
Noncorporate private:														
Total, noncorporate private	13,003.92	813.30	5,257.28	329.44	18,261.20	860.98	--	--	--	--	--	--	18,261.20	860.98
All private	36,303.63	1,254.36	6,028.73	343.40	42,332.36	1,268.44	--	--	--	--	--	--	42,332.36	1,268.44
All owners	77,336.90	1,683.62	11,572.99	512.68	88,909.89	1,705.65	21,778.08	1,082.83	4,886.29	400.66	26,664.37	1,119.20	115,574.26	1,960.63

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.6: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,086.97	1,111.16	4,015.23	343.19	43,102.19	1,124.47	13,138.60	806.97	2,748.71	291.54	15,887.32	825.22	58,989.51	1,348.83
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,086.97	1,111.16	4,015.23	343.19	43,102.19	1,124.47	13,138.60	806.97	2,748.71	291.54	15,887.32	825.22	58,989.51	1,348.83
Other federal government:														
Bureau of Land Management	851.66	157.69	966.15	132.28	1,817.80	203.94	179.87	81.05	411.43	125.32	591.30	149.24	2,409.10	249.53
Department of Defense and Energy	24.94	16.06	37.01	15.69	61.95	22.45	--	--	4.02	4.16	4.02	4.16	65.97	22.83
National Park Service	--	--	--	--	--	--	6,459.69	671.97	1,143.43	245.77	7,603.12	706.95	7,603.12	706.95
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.61	--	--	1.57	1.61	1.57	1.61
Other federal	--	--	65.92	26.52	65.92	26.52	--	--	6.28	4.31	6.28	4.31	72.20	26.87
Total	876.60	158.15	1,069.08	135.26	1,945.68	205.68	6,641.13	674.17	1,565.16	272.93	8,206.29	717.41	10,151.97	720.55
State and local government:														
Local	317.61	219.33	239.46	94.75	557.06	238.92	87.62	35.01	192.17	59.78	279.78	68.51	836.85	248.32
State	432.77	131.79	39.86	19.08	472.63	131.88	2,150.17	391.16	510.40	131.12	2,660.57	406.01	3,133.20	387.29
Other public	--	--	0.25	0.22	0.25	0.22	16.64	18.53	7.95	8.61	24.59	20.44	24.84	20.44
Total	750.38	254.39	279.57	96.65	1,029.94	271.51	2,254.43	391.60	710.51	143.72	2,964.94	409.89	3,994.88	447.01
Private:														
Corporate	24,262.83	1,177.74	979.31	137.34	25,242.15	1,182.75	--	--	--	--	--	--	25,242.15	1,182.75
Noncorporate private:														
Total, noncorporate private	12,257.77	770.44	5,168.57	330.26	17,426.35	828.57	--	--	--	--	--	--	17,426.35	828.57
All private	36,520.61	1,264.47	6,147.89	352.61	42,668.50	1,284.55	--	--	--	--	--	--	42,668.50	1,284.55
All owners	77,234.55	1,694.58	11,511.76	517.14	88,746.31	1,721.36	22,034.17	1,121.46	5,024.38	423.73	27,058.55	1,165.09	115,804.86	1,998.35

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.7: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	38,804.74	1,117.87	3,988.58	347.63	42,793.31	1,132.99	13,098.66	837.51	2,898.64	307.15	15,997.30	859.78	58,790.61	1,378.09
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	38,804.74	1,117.87	3,988.58	347.63	42,793.31	1,132.99	13,098.66	837.51	2,898.64	307.15	15,997.30	859.78	58,790.61	1,378.09
Other federal government:														
Bureau of Land Management	757.46	147.48	973.00	132.35	1,730.46	196.78	276.23	106.96	407.47	134.94	683.70	172.19	2,414.16	257.58
Department of Defense and Energy	26.56	16.66	77.47	40.25	104.03	43.56	--	--	4.34	4.33	4.34	4.33	108.38	43.77
National Park Service	--	--	--	--	--	--	6,398.88	666.68	1,327.42	292.49	7,726.30	717.41	7,726.30	717.41
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.61	--	--	1.57	1.61	1.57	1.61
Other federal	--	--	47.03	19.55	47.03	19.55	--	--	6.33	4.31	6.33	4.31	53.36	20.02
Total	784.02	148.19	1,097.50	139.05	1,881.52	200.89	6,676.68	669.48	1,745.57	319.87	8,422.25	730.00	10,303.77	733.40
State and local government:														
Local	327.49	220.91	270.25	98.43	597.74	241.79	93.02	39.84	181.86	58.59	274.87	70.09	872.61	251.45
State	429.80	133.54	35.70	18.24	465.49	133.32	2,189.90	392.95	525.12	132.16	2,715.02	408.19	3,180.52	384.85
Other public	--	--	0.25	0.22	0.25	0.22	16.64	18.54	7.82	8.47	24.46	20.38	24.71	20.38
Total	757.29	256.67	306.20	100.10	1,063.48	274.75	2,299.56	393.49	714.81	144.18	3,014.36	411.97	4,077.84	446.26
Private:														
Corporate	24,041.50	1,156.87	1,021.07	138.69	25,062.57	1,161.97	--	--	--	--	--	--	25,062.57	1,161.97
Noncorporate private:														
Total, noncorporate private	11,682.31	748.22	5,211.99	339.04	16,894.31	812.45	--	--	--	--	--	--	16,894.31	812.45
All private	35,723.82	1,235.50	6,233.06	361.24	41,956.88	1,259.82	--	--	--	--	--	--	41,956.88	1,259.82
All owners	76,069.86	1,678.40	11,625.33	527.49	87,695.19	1,709.96	22,074.90	1,141.57	5,359.01	465.55	27,433.91	1,198.12	115,129.10	2,009.30

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.8: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,409.55	1,167.10	4,018.57	349.40	43,428.12	1,180.65	13,272.15	873.62	2,872.54	306.69	16,144.69	895.67	59,572.81	1,439.96
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,409.55	1,167.10	4,018.57	349.40	43,428.12	1,180.65	13,272.15	873.62	2,872.54	306.69	16,144.69	895.67	59,572.81	1,439.96
Other federal government:														
Bureau of Land Management	765.99	147.02	1,007.70	139.38	1,773.69	201.03	275.70	106.90	444.12	143.53	719.83	178.95	2,493.51	265.23
Department of Defense and Energy	26.57	16.66	77.17	40.22	103.73	43.53	--	--	4.02	4.16	4.02	4.16	107.75	43.73
National Park Service	--	--	--	--	--	--	6,651.86	695.81	1,312.66	291.27	7,964.51	743.85	7,964.51	743.85
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.60	--	--	1.57	1.60	1.57	1.60
Other federal	--	--	36.42	18.69	36.42	18.69	--	--	1.37	1.04	1.37	1.04	37.80	18.71
Total	792.56	147.73	1,121.28	145.62	1,913.84	204.97	6,929.13	697.55	1,762.17	322.19	8,691.30	756.57	10,605.15	759.12
State and local government:														
Local	326.16	220.67	264.30	96.87	590.46	240.94	92.20	39.96	207.78	68.96	299.98	79.13	890.44	253.32
State	429.54	133.46	36.49	18.44	466.04	133.27	2,183.70	398.02	498.96	127.88	2,682.65	412.10	3,148.69	389.09
Other public	--	--	0.25	0.22	0.25	0.22	16.64	18.53	2.19	2.37	18.83	18.68	19.08	18.68
Total	755.70	256.43	301.04	98.61	1,056.74	273.98	2,292.54	398.35	708.93	144.77	3,001.47	417.40	4,058.21	450.86
Private:														
Corporate	23,746.38	1,102.51	1,115.63	148.32	24,862.01	1,108.69	--	--	--	--	--	--	24,862.01	1,108.69
Noncorporate private:														
Total, noncorporate private	11,077.34	736.87	5,069.19	333.68	16,146.53	800.61	--	--	--	--	--	--	16,146.53	800.61
All private	34,823.72	1,187.71	6,184.82	359.79	41,008.54	1,213.55	--	--	--	--	--	--	41,008.54	1,213.55
All owners	75,781.53	1,677.78	11,625.72	529.16	87,407.24	1,709.51	22,493.82	1,185.88	5,343.64	467.08	27,837.46	1,241.66	115,244.70	2,034.31

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C70.9: Aboveground Carbon Mass of Down Dead Wood, by Owner Group and Forest Land Status, All California (10 year averages): 2009 - 2018

**information duplicated in Table C62*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	39,443.96	1,176.49	3,917.45	342.35	43,361.42	1,190.06	13,181.24	885.04	2,914.04	320.65	16,119.04	910.85	59,480.45	1,456.11
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	39,443.96	1,176.49	3,917.45	342.35	43,361.42	1,190.06	13,181.24	885.04	2,914.04	320.65	16,119.04	910.85	59,480.45	1,456.11
Other federal government:														
Bureau of Land Management	668.09	140.90	1,064.88	148.33	1,732.97	202.91	270.71	106.43	424.26	140.65	694.97	176.38	2,427.94	264.97
Department of Defense and Energy	25.40	16.06	75.54	39.25	100.94	42.41	--	--	4.10	4.24	4.10	4.24	105.04	42.62
National Park Service	--	--	--	--	--	--	6,849.64	750.30	1,289.41	291.05	8,139.04	795.37	8,139.04	795.37
U.S. Fish and Wildlife Service	--	--	--	--	--	--	1.57	1.60	--	--	1.57	1.60	1.57	1.60
Other federal	0.80	1.00	35.85	18.67	36.65	18.70	--	--	1.39	1.05	1.39	1.05	38.03	18.73
Total	694.29	141.66	1,176.26	153.97	1,870.56	206.56	7,121.92	752.12	1,719.15	321.01	8,841.07	807.24	10,711.62	809.06
State and local government:														
Local	351.28	224.08	263.07	96.36	614.35	243.92	119.97	46.87	276.09	117.59	396.06	126.14	1,010.41	274.31
State	449.82	135.82	37.65	18.89	487.47	135.81	2,018.01	344.52	545.55	137.47	2,563.56	365.63	3,051.03	346.33
Other public	--	--	--	--	--	--	16.64	18.52	2.19	2.37	18.84	18.67	18.84	18.67
Total	801.10	258.66	300.73	98.19	1,101.83	275.90	2,154.62	346.05	823.83	180.45	2,978.45	384.57	4,080.28	425.03
Private:														
Corporate	24,097.77	1,124.91	1,204.58	159.45	25,302.35	1,131.29	--	--	--	--	--	--	25,302.35	1,131.29
Noncorporate private:														
Total, noncorporate private	11,220.64	789.94	5,140.63	342.56	16,361.27	854.10	--	--	--	--	--	--	16,361.27	854.10
All private	35,318.41	1,235.36	6,345.21	372.69	41,663.62	1,263.20	--	--	--	--	--	--	41,663.62	1,263.20
All owners	76,257.77	1,717.93	11,739.65	535.74	87,997.42	1,751.91	22,457.78	1,210.95	5,457.02	487.61	27,938.55	1,273.96	115,935.97	2,087.57

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C71: Forest Floor by Owner Group and Forest Land Status, 2009-2018: All California

**information duplicated in Table C79.9*

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	50,131.54	778.91	5,915.84	282.96	56,047.39	737.18	14,850.71	523.74	4,148.51	281.74	19,008.14	511.58	75,055.53	757.88
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,131.54	778.91	5,915.84	282.96	56,047.39	737.18	14,850.71	523.74	4,148.51	281.74	19,008.14	511.58	75,055.53	757.88
Other federal government:														
Bureau of Land Management	1,050.65	181.68	1,888.87	157.46	2,939.51	237.62	348.89	107.14	443.20	90.22	792.08	140.05	3,731.60	267.93
Department of Defense and Energy	41.21	23.31	159.66	43.64	200.88	49.47	--	--	17.12	17.70	17.12	17.70	217.99	52.54
National Park Service	--	--	--	--	--	--	6,436.91	429.16	1,548.56	203.12	7,985.46	458.50	7,985.46	458.50
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.83	17.21	1.07	1.11	17.91	17.25	17.91	17.25
Other federal	7.97	9.91	81.14	25.71	89.11	27.56	--	--	8.62	6.43	8.62	6.43	97.73	28.30
Total	1,099.83	183.17	2,129.67	163.40	3,229.50	241.89	6,802.63	433.47	2,018.56	217.10	8,821.19	462.68	12,050.69	468.04
State and local government:														
Local	291.06	99.08	272.16	58.17	563.22	115.56	171.74	62.60	387.63	78.13	559.37	96.86	1,122.59	150.08
State	502.21	121.06	125.54	43.94	627.75	127.46	1,318.65	164.44	553.23	86.26	1,871.87	179.07	2,499.63	178.87
Other public	--	--	1.46	1.32	1.46	1.32	23.10	25.71	16.30	17.63	39.40	31.17	40.85	31.20
Total	793.28	154.91	399.15	72.86	1,192.43	170.47	1,513.49	173.99	957.15	113.11	2,470.64	196.51	3,663.07	219.33
Private:														
Corporate	23,387.73	698.39	1,906.21	160.78	25,293.94	705.25	--	--	--	--	--	--	25,293.94	705.25
Noncorporate private:														
Total, noncorporate private	12,004.53	542.21	8,390.32	283.72	20,394.85	580.87	--	--	--	--	--	--	20,394.85	580.87
All private	35,392.26	678.68	10,296.53	311.53	45,688.79	662.38	--	--	--	--	--	--	45,688.79	662.38
All owners	87,416.91	1,025.12	18,741.19	453.38	106,158.10	985.40	23,166.83	700.31	7,124.23	372.88	30,299.97	714.25	136,458.07	1,018.15

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C72: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	4.93	4.52	138.77	39.10	143.70	39.34	96.15	47.17	333.82	73.77	429.98	88.61	573.68	96.95
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	4.93	4.52	138.77	39.10	143.70	39.34	96.15	47.17	333.82	73.77	429.98	88.61	573.68	96.95
Other federal government:														
Bureau of Land Management	--	--	77.16	27.86	77.16	27.86	--	--	9.00	6.52	9.00	6.52	86.15	28.61
Department of Defense and Energy	--	--	99.35	32.44	99.35	32.44	--	--	--	--	--	--	99.35	32.44
National Park Service	--	--	--	--	--	--	--	--	18.90	21.04	18.90	21.04	18.90	21.04
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	15.83	12.83	15.83	12.83	--	--	0.17	0.19	0.17	0.19	16.00	12.83
Total	--	--	192.33	44.36	192.33	44.36	--	--	28.07	22.03	28.07	22.03	220.41	49.53
State and local government:														
Local	--	--	85.21	37.90	85.21	37.90	171.74	62.60	244.78	60.98	416.52	83.65	501.73	91.29
State	70.18	42.54	22.62	15.57	92.80	46.40	165.66	69.15	283.46	64.10	449.12	93.71	541.93	103.85
Other public	--	--	--	--	--	--	23.10	25.71	16.30	17.63	39.40	31.17	39.40	31.17
Total	70.18	42.54	107.83	40.97	178.01	59.91	360.50	96.32	544.54	86.69	905.04	124.23	1,083.05	135.01
Private:														
Corporate	162.68	65.97	348.33	69.51	511.01	95.75	--	--	--	--	--	--	511.01	95.75
Noncorporate private:														
Total, noncorporate private	672.58	129.75	1,617.07	143.17	2,289.65	190.93	--	--	--	--	--	--	2,289.65	190.93
All private	835.26	144.91	1,965.40	157.79	2,800.66	212.38	--	--	--	--	--	--	2,800.66	212.38
All owners	910.38	151.35	2,404.33	173.45	3,314.71	228.47	456.66	107.25	906.44	115.29	1,363.10	153.39	4,677.80	272.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C73: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Central Valley

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		All forest land	
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal government:														
Bureau of Land Management	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	1.07	1.11	1.07	1.11	1.07	1.11
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	1.07	1.11	1.07	1.11	1.07	1.11
State and local government:														
Local	--	--	8.68	6.35	8.68	6.35	--	--	--	--	--	--	8.68	6.35
State	--	--	--	--	--	--	--	--	10.11	9.27	10.11	9.27	10.11	9.27
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	8.68	6.35	8.68	6.35	--	--	10.11	9.27	10.11	9.27	18.79	11.23
Private:														
Corporate	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Noncorporate private:														
Total, noncorporate private	--	--	141.34	38.67	141.34	38.67	--	--	--	--	--	--	141.34	38.67
All private	--	--	141.34	38.67	141.34	38.67	--	--	--	--	--	--	141.34	38.67
All owners	--	--	150.01	39.18	150.01	39.18	--	--	11.19	9.33	11.19	9.33	161.20	40.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C74: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Eastside

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	2,980.58	281.31	1,813.36	163.76	4,793.94	323.45	273.95	101.84	399.38	106.37	673.33	146.18	5,467.27	354.43
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	2,980.58	281.31	1,813.36	163.76	4,793.94	323.45	273.95	101.84	399.38	106.37	673.33	146.18	5,467.27	354.43
Other federal government:														
Bureau of Land Management	68.88	32.64	963.59	117.63	1,032.47	121.72	--	--	134.72	52.13	134.72	52.13	1,167.19	130.04
Department of Defense and Energy	--	--	52.42	28.18	52.42	28.18	--	--	--	--	--	--	52.42	28.18
National Park Service	--	--	--	--	--	--	--	--	136.50	48.32	136.50	48.32	136.50	48.32
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	68.88	32.64	1,016.02	120.32	1,084.90	124.32	--	--	271.22	70.87	271.22	70.87	1,356.11	139.29
State and local government:														
Local	--	--	12.21	12.31	12.21	12.31	--	--	--	--	--	--	12.21	12.31
State	--	--	--	--	--	--	32.25	35.90	19.11	16.39	51.36	39.46	51.36	39.46
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	12.21	12.31	12.21	12.31	32.25	35.90	19.11	16.39	51.36	39.46	63.57	41.34
Private:														
Corporate	1,047.02	176.39	171.94	49.91	1,218.96	183.97	--	--	--	--	--	--	1,218.96	183.97
Noncorporate private:														
Total, noncorporate private	334.98	96.60	294.17	62.52	629.15	116.00	--	--	--	--	--	--	629.15	116.00
All private	1,382.00	199.53	466.10	79.60	1,848.10	215.75	--	--	--	--	--	--	1,848.10	215.75
All owners	4,431.46	348.17	3,307.69	218.95	7,739.15	409.90	306.20	107.98	689.71	128.87	995.91	167.18	8,735.06	440.99

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C75: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	13,871.75	608.41	1,136.08	138.99	15,007.83	615.46	6,670.23	375.57	818.31	124.66	7,488.54	387.47	22,496.36	704.78
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	13,871.75	608.41	1,136.08	138.99	15,007.83	615.46	6,670.23	375.57	818.31	124.66	7,488.54	387.47	22,496.36	704.78
Other federal government:														
Bureau of Land Management	528.50	138.74	368.28	79.84	896.78	160.83	41.37	40.98	59.11	32.01	100.48	51.99	997.26	168.79
Department of Defense and Energy	--	--	--	--	--	--	--	--	17.12	17.70	17.12	17.70	17.12	17.70
National Park Service	--	--	--	--	--	--	247.29	78.84	108.93	41.26	356.22	89.63	356.22	89.63
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	7.97	9.91	8.23	6.23	16.20	11.71	--	--	1.74	1.93	1.74	1.93	17.94	11.87
Total	536.47	139.09	376.51	80.08	912.98	161.25	288.65	88.14	186.90	54.94	475.55	104.41	1,388.53	188.78
State and local government:														
Local	69.21	59.53	20.88	16.08	90.09	61.67	--	--	10.11	9.82	10.11	9.82	100.20	62.44
State	47.47	28.97	36.27	23.93	83.74	37.57	54.90	44.14	38.42	26.23	93.32	56.26	177.05	67.65
Other public	--	--	1.46	1.32	1.46	1.32	--	--	--	--	--	--	1.46	1.32
Total	116.67	66.21	58.61	28.85	175.29	72.22	54.90	44.14	48.52	28.01	103.42	57.11	278.71	92.01
Private:														
Corporate	4,891.17	397.66	565.83	86.58	5,457.00	406.40	--	--	--	--	--	--	5,457.00	406.40
Noncorporate private:														
Total, noncorporate private	3,336.62	312.36	1,913.46	152.46	5,250.09	345.45	--	--	--	--	--	--	5,250.09	345.45
All private	8,227.79	488.17	2,479.29	173.59	10,707.09	513.34	--	--	--	--	--	--	10,707.09	513.34
All owners	22,752.68	797.17	4,050.49	238.67	26,803.18	821.94	7,013.79	388.75	1,053.73	139.07	8,067.51	405.77	34,870.69	896.58

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C76: Forest Floor by Owner Group and Forest Land Status, 2009-2018: North Coast

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	93.07	49.33	20.10	19.29	113.17	52.97	51.69	39.53	--	--	51.69	39.53	164.86	66.05
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	93.07	49.33	20.10	19.29	113.17	52.97	51.69	39.53	--	--	51.69	39.53	164.86	66.05
Other federal government:														
Bureau of Land Management	120.85	53.47	--	--	120.85	53.47	238.49	78.31	--	--	238.49	78.31	359.34	95.18
Department of Defense and Energy	37.23	22.95	0.17	0.19	37.40	22.95	--	--	--	--	--	--	37.40	22.95
National Park Service	--	--	--	--	--	--	179.90	68.78	25.96	24.66	205.85	72.31	205.85	72.31
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.83	17.21	--	--	16.83	17.21	16.83	17.21
Other federal	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	158.08	58.19	0.17	0.19	158.25	58.19	435.22	104.69	25.96	24.66	461.18	106.02	619.43	120.12
State and local government:														
Local	75.53	38.12	13.82	9.94	89.35	41.41	--	--	111.62	46.45	111.62	46.45	200.97	62.22
State	230.44	74.51	2.20	2.00	232.64	74.53	594.70	106.06	36.90	30.60	631.60	110.51	864.24	115.60
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	305.97	82.37	16.02	10.13	321.99	83.97	594.70	106.06	148.52	55.62	743.22	119.86	1,065.21	128.64
Private:														
Corporate	4,737.02	318.80	73.68	30.87	4,810.69	320.16	--	--	--	--	--	--	4,810.69	320.16
Noncorporate private:														
Total, noncorporate private	3,186.71	266.04	399.69	76.95	3,586.41	275.70	--	--	--	--	--	--	3,586.41	275.70
All private	7,923.73	389.80	473.37	82.78	8,397.10	395.88	--	--	--	--	--	--	8,397.10	395.88
All owners	8,480.85	403.47	509.66	85.59	8,990.51	410.06	1,081.61	154.11	174.48	60.84	1,256.09	164.76	10,246.60	432.83

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C77: Forest Floor by Owner Group and Forest Land Status, 2009-2018: Sierra Cascades

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	32,674.60	876.38	2,164.64	196.67	34,839.23	874.86	7,357.21	492.06	2,252.73	228.68	9,609.93	509.01	44,449.17	976.06
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	32,674.60	876.38	2,164.64	196.67	34,839.23	874.86	7,357.21	492.06	2,252.73	228.68	9,609.93	509.01	44,449.17	976.06
Other federal government:														
Bureau of Land Management	332.42	104.69	450.28	74.20	782.70	128.18	69.03	60.56	217.16	66.21	286.19	89.73	1,068.89	154.37
Department of Defense and Energy	--	--	--	--	--	--	--	--	--	--	--	--	--	--
National Park Service	--	--	--	--	--	--	6,009.73	432.39	1,168.37	190.32	7,178.10	460.30	7,178.10	460.30
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	30.23	15.34	30.23	15.34	--	--	5.87	6.07	5.87	6.07	36.10	16.49
Total	332.42	104.69	480.51	75.60	812.93	128.90	6,078.75	435.74	1,391.40	199.68	7,470.15	465.37	8,283.08	469.60
State and local government:														
Local	146.32	69.42	98.22	33.14	244.55	76.89	--	--	16.87	12.60	16.87	12.60	261.42	77.91
State	154.13	87.75	64.44	33.57	218.57	93.17	434.91	133.49	99.15	33.45	534.05	137.04	752.63	161.12
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	300.45	111.89	162.67	47.14	463.12	120.71	434.91	133.49	116.02	35.74	550.93	137.62	1,014.04	178.90
Private:														
Corporate	12,526.07	649.83	689.84	101.15	13,215.91	654.65	--	--	--	--	--	--	13,215.91	654.65
Noncorporate private:														
Total, noncorporate private	4,436.19	390.46	3,634.28	194.70	8,070.47	429.75	--	--	--	--	--	--	8,070.47	429.75
All private	16,962.26	712.56	4,324.12	213.77	21,286.38	723.13	--	--	--	--	--	--	21,286.38	723.13
All owners	50,269.72	1,129.06	7,131.93	302.76	57,401.66	1,134.83	13,870.87	670.06	3,760.15	305.56	17,631.01	701.86	75,032.67	1,272.05

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C78: Forest Floor by Owner Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	506.62	127.22	642.90	86.03	1,149.52	153.74	401.48	112.11	344.27	77.49	754.67	135.60	1,904.19	204.41
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	506.62	127.22	642.90	86.03	1,149.52	153.74	401.48	112.11	344.27	77.49	754.67	135.60	1,904.19	204.41
Other federal government:														
Bureau of Land Management	--	--	29.56	13.20	29.56	13.20	--	--	23.21	12.08	23.21	12.08	52.77	17.87
Department of Defense and Energy	3.99	4.07	7.72	7.89	11.70	8.88	--	--	--	--	--	--	11.70	8.88
National Park Service	--	--	--	--	--	--	--	--	89.89	26.41	89.89	26.41	89.89	26.41
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	26.85	14.93	26.85	14.93	--	--	0.84	0.86	0.84	0.86	27.69	14.95
Total	3.99	4.07	64.13	21.43	68.11	21.81	--	--	113.94	28.86	113.94	28.86	182.05	36.13
State and local government:														
Local	--	--	33.14	17.68	33.14	17.68	--	--	4.25	4.12	4.25	4.12	37.39	18.07
State	--	--	--	--	--	--	36.22	36.55	66.08	28.58	102.30	46.11	102.30	46.11
Other public	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	33.14	17.68	33.14	17.68	36.22	36.55	70.33	28.87	106.56	46.29	139.69	49.44
Private:														
Corporate	23.77	23.47	56.60	21.62	80.36	31.91	--	--	--	--	--	--	80.36	31.91
Noncorporate private:														
Total, noncorporate private	37.45	24.78	390.31	71.46	427.76	77.23	--	--	--	--	--	--	427.76	77.23
All private	61.21	34.13	446.91	74.65	508.12	83.55	--	--	--	--	--	--	508.12	83.55
All owners	571.82	131.78	1,187.07	116.86	1,758.89	176.92	437.70	117.92	528.54	87.58	975.16	146.16	2,734.05	228.91

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.1: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2001 - 2010

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	49,168.62	841.97	7,388.03	320.62	56,556.65	827.07	13,760.28	622.30	3,953.72	279.61	17,714.01	659.05	74,270.66	669.20
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	49,168.62	841.97	7,388.03	320.62	56,556.65	827.07	13,760.28	622.30	3,953.72	279.61	17,714.01	659.05	74,270.66	669.20
Other federal government:														
Bureau of Land Management	1,290.62	199.53	2,163.87	162.89	3,454.49	250.44	143.82	67.24	542.20	90.03	686.01	112.24	4,140.50	268.44
Department of Defense and Energy	12.37	13.59	149.50	42.74	161.87	44.85	--	--	--	--	--	--	161.87	44.85
National Park Service	--	--	--	--	--	--	6,117.15	414.52	1,555.51	188.32	7,672.66	393.32	7,672.66	393.32
U.S. Fish and Wildlife Service	--	--	--	--	--	--	17.51	21.53	3.18	3.24	20.69	21.77	20.69	21.77
Other federal	--	--	164.37	43.34	164.37	43.34	81.82	60.35	45.25	31.79	127.07	68.05	291.45	80.66
Total	1,302.98	200.00	2,477.74	172.14	3,780.73	255.71	6,360.30	420.09	2,146.14	208.99	8,506.44	404.28	12,287.17	458.52
State and local government:														
Local	168.68	67.55	243.03	57.24	411.71	89.50	152.59	66.40	498.24	92.61	650.83	113.17	1,062.54	143.55
State	463.85	125.08	94.39	35.76	558.24	129.85	1,414.91	197.32	655.43	100.46	2,070.33	218.23	2,628.57	244.89
Other public	--	--	7.55	6.42	7.55	6.42	33.07	29.63	20.22	17.56	53.29	34.44	60.84	35.03
Total	632.53	140.94	344.97	67.76	977.50	156.63	1,600.57	209.96	1,173.89	136.22	2,774.46	245.58	3,751.96	281.69
Private:														
Corporate	20,543.77	655.36	1,045.65	119.21	21,589.42	659.28	--	--	--	--	--	--	21,589.42	659.28
Noncorporate private:														
Total, noncorporate private	15,010.49	602.25	9,798.51	303.38	24,809.00	638.26	--	--	--	--	--	--	24,809.00	638.26
All private	35,554.25	655.03	10,844.16	314.49	46,398.41	639.68	--	--	--	--	--	--	46,398.41	639.68
All owners	86,658.39	1,075.90	21,054.90	481.12	107,713.29	1,058.19	21,721.15	774.21	7,273.75	373.77	28,994.91	803.79	136,708.20	997.19

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.2: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2002 - 2011

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	49,647.73	864.58	7,129.29	317.81	56,777.03	851.23	13,738.36	620.28	3,980.66	283.11	17,719.02	658.00	74,496.05	698.53
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	49,647.73	864.58	7,129.29	317.81	56,777.03	851.23	13,738.36	620.28	3,980.66	283.11	17,719.02	658.00	74,496.05	698.53
Other federal government:														
Bureau of Land Management	1,282.83	199.33	2,110.05	159.69	3,392.88	249.00	142.48	66.92	551.76	91.41	694.24	113.16	4,087.12	267.63
Department of Defense and Energy	17.24	14.74	165.58	43.95	182.81	46.33	--	--	--	--	--	--	182.81	46.33
National Park Service	--	--	--	--	--	--	6,209.08	420.18	1,561.98	188.32	7,771.05	397.77	7,771.05	397.77
U.S. Fish and Wildlife Service	--	--	--	--	--	--	17.51	21.53	3.15	3.22	20.66	21.77	20.66	21.77
Other federal	--	--	163.67	43.25	163.67	43.25	81.78	60.43	45.30	31.92	127.08	68.17	290.75	80.72
Total	1,300.07	199.88	2,439.30	169.44	3,739.37	254.64	6,450.83	425.62	2,162.20	209.67	8,613.03	408.85	12,352.40	462.52
State and local government:														
Local	148.04	63.79	243.36	57.25	391.41	86.59	150.36	66.02	497.26	92.95	647.61	113.25	1,039.02	141.85
State	465.17	124.77	95.38	36.79	560.56	129.82	1,442.82	198.43	698.54	105.71	2,141.36	221.83	2,701.92	248.29
Other public	--	--	7.64	6.54	7.64	6.54	34.07	30.07	14.48	16.56	48.55	34.33	56.19	34.95
Total	613.22	138.90	346.39	68.35	959.61	155.05	1,627.25	210.96	1,210.27	140.00	2,837.52	248.59	3,797.12	283.83
Private:														
Corporate	20,098.33	654.35	1,240.18	131.64	21,338.51	659.93	--	--	--	--	--	--	21,338.51	659.93
Noncorporate private:														
Total, noncorporate private	14,850.27	601.52	9,470.49	298.50	24,320.76	637.74	--	--	--	--	--	--	24,320.76	637.74
All private	34,948.60	669.95	10,710.67	313.34	45,659.27	657.43	--	--	--	--	--	--	45,659.27	657.43
All owners	86,509.62	1,081.50	20,625.65	476.93	107,135.27	1,063.89	21,816.44	776.19	7,353.13	378.15	29,169.57	806.40	136,304.84	998.59

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.3: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2003 - 2012

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	50,009.50	772.40	6,643.37	301.99	56,652.86	732.11	14,312.13	521.42	4,222.01	281.54	18,534.14	511.21	75,187.00	740.78
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,009.50	772.40	6,643.37	301.99	56,652.86	732.11	14,312.13	521.42	4,222.01	281.54	18,534.14	511.21	75,187.00	740.78
Other federal government:														
Bureau of Land Management	1,386.62	208.38	2,055.68	168.63	3,442.30	265.53	167.21	74.47	458.69	96.66	625.90	122.00	4,068.20	285.38
Department of Defense and Energy	27.34	18.71	148.14	42.33	175.47	46.28	--	--	15.73	16.29	15.73	16.29	191.20	49.06
National Park Service	--	--	--	--	--	--	6,487.69	440.52	1,552.71	202.23	8,040.39	467.15	8,040.39	467.15
U.S. Fish and Wildlife Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other federal	--	--	185.32	45.49	185.32	45.49	47.52	50.17	49.34	33.28	96.86	60.21	282.17	75.22
Total	1,413.95	208.59	2,389.14	177.39	3,803.09	270.67	6,702.42	442.28	2,076.46	219.79	8,778.88	471.11	12,581.97	488.61
State and local government:														
Local	169.67	69.45	228.93	56.55	398.60	90.48	169.00	70.71	467.22	89.65	636.22	111.37	1,034.82	142.11
State	449.75	121.29	104.45	39.96	554.20	125.58	1,339.72	164.22	616.35	93.27	1,956.06	181.00	2,510.26	179.06
Other public	--	--	7.77	6.54	7.77	6.54	22.76	26.33	16.98	18.39	39.75	32.12	47.51	32.77
Total	619.42	139.37	341.15	69.53	960.57	154.53	1,531.48	175.16	1,100.54	124.54	2,632.03	202.33	3,592.60	214.14
Private:														
Corporate	20,463.61	668.88	1,230.43	129.76	21,694.04	674.12	--	--	--	--	--	--	21,694.04	674.12
Noncorporate private:														
Total, noncorporate private	14,994.37	600.77	9,322.84	298.11	24,317.22	634.64	--	--	--	--	--	--	24,317.22	634.64
All private	35,457.99	669.27	10,553.27	315.31	46,011.26	654.71	--	--	--	--	--	--	46,011.26	654.71
All owners	87,500.86	1,010.95	19,926.93	472.10	107,427.79	976.20	22,546.03	705.06	7,399.02	377.67	29,945.05	721.27	137,372.83	1,004.35

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.4: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2004 - 2013

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	49,953.30	768.31	6,413.45	293.65	56,366.75	726.17	14,387.05	523.66	4,245.76	288.38	18,632.81	512.35	74,999.56	742.55
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	49,953.30	768.31	6,413.45	293.65	56,366.75	726.17	14,387.05	523.66	4,245.76	288.38	18,632.81	512.35	74,999.56	742.55
Other federal government:														
Bureau of Land Management	1,339.44	202.15	2,002.11	165.86	3,341.56	258.86	197.39	78.90	482.12	98.07	679.51	125.85	4,021.07	280.53
Department of Defense and Energy	27.34	18.71	144.05	40.89	171.38	44.96	--	--	15.73	16.29	15.73	16.29	187.11	47.82
National Park Service	--	--	--	--	--	--	6,501.09	440.33	1,565.92	204.87	8,067.01	468.48	8,067.01	468.48
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.91	17.31	1.07	1.08	17.98	17.34	17.98	17.34
Other federal	--	--	171.53	41.32	171.53	41.32	--	--	17.10	9.73	17.10	9.73	188.64	42.45
Total	1,366.78	202.37	2,317.69	173.36	3,684.47	263.48	6,715.39	441.72	2,081.95	221.08	8,797.34	471.76	12,481.81	484.63
State and local government:														
Local	174.50	70.74	242.92	57.67	417.42	92.18	164.28	63.81	455.21	85.62	619.49	103.56	1,036.91	137.64
State	460.48	125.07	104.39	39.95	564.88	129.21	1,342.50	165.33	602.94	91.18	1,945.44	180.23	2,510.31	179.24
Other public	--	--	9.22	6.66	9.22	6.66	24.62	27.44	16.98	18.39	41.60	33.03	50.83	33.70
Total	634.98	143.27	356.54	70.45	991.52	158.45	1,531.40	175.52	1,075.13	120.57	2,606.53	200.17	3,598.05	213.64
Private:														
Corporate	20,684.74	671.92	1,287.11	132.94	21,971.85	677.18	--	--	--	--	--	--	21,971.85	677.18
Noncorporate private:														
Total, noncorporate private	14,741.36	600.85	9,150.11	295.48	23,891.47	634.26	--	--	--	--	--	--	23,891.47	634.26
All private	35,426.10	673.33	10,437.23	313.96	45,863.32	657.79	--	--	--	--	--	--	45,863.32	657.79
All owners	87,381.15	1,011.36	19,524.91	464.68	106,906.06	974.48	22,633.84	706.49	7,402.85	382.27	30,036.68	722.04	136,942.75	1,007.30

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.5: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2005 - 2014

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	50,010.34	766.44	6,284.95	292.44	56,295.29	723.64	14,618.10	526.06	4,159.42	288.49	18,777.52	511.12	75,072.81	744.67
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,010.34	766.44	6,284.95	292.44	56,295.29	723.64	14,618.10	526.06	4,159.42	288.49	18,777.52	511.12	75,072.81	744.67
Other federal government:														
Bureau of Land Management	1,313.04	201.60	1,950.75	161.24	3,263.80	255.63	246.84	87.47	432.30	87.29	679.14	123.56	3,942.94	276.37
Department of Defense and Energy	27.35	18.70	141.05	40.84	168.40	44.91	--	--	15.73	16.28	15.73	16.28	184.13	47.77
National Park Service	--	--	--	--	--	--	6,634.63	444.35	1,549.93	203.95	8,184.56	471.28	8,184.56	471.28
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.90	17.29	1.07	1.08	17.98	17.33	17.98	17.33
Other federal	--	--	171.17	41.26	171.17	41.26	--	--	17.11	9.72	17.11	9.72	188.28	42.39
Total	1,340.39	202.10	2,262.97	169.04	3,603.37	260.61	6,898.37	446.46	2,016.14	216.13	8,914.51	472.67	12,517.88	482.21
State and local government:														
Local	263.53	92.44	253.10	58.26	516.63	110.02	164.47	63.87	448.27	85.03	612.74	102.98	1,129.37	149.82
State	479.24	126.22	107.53	40.03	586.78	130.74	1,340.51	164.94	605.98	91.68	1,946.49	180.18	2,533.27	180.21
Other public	--	--	8.60	6.62	8.60	6.62	24.62	27.42	16.98	18.38	41.60	33.01	50.21	33.67
Total	742.77	156.07	369.24	70.98	1,112.01	170.62	1,529.60	175.16	1,071.23	120.79	2,600.84	199.98	3,712.84	222.58
Private:														
Corporate	21,028.23	677.77	1,421.74	139.36	22,449.97	684.02	--	--	--	--	--	--	22,449.97	684.02
Noncorporate private:														
Total, noncorporate private	14,131.89	583.66	9,055.21	295.39	23,187.10	619.70	--	--	--	--	--	--	23,187.10	619.70
All private	35,160.12	670.46	10,476.95	315.06	45,637.07	655.59	--	--	--	--	--	--	45,637.07	655.59
All owners	87,253.62	1,011.18	19,394.12	463.38	106,647.73	973.23	23,046.08	711.15	7,246.79	379.60	30,292.87	721.71	136,940.60	1,010.46

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.6: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2006 - 2015

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
USDA Forest Service:														
National Forest	50,171.03	768.24	6,017.79	285.21	56,188.81	724.42	14,672.68	522.07	4,151.92	286.55	18,824.61	510.03	75,013.42	745.86
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,171.03	768.24	6,017.79	285.21	56,188.81	724.42	14,672.68	522.07	4,151.92	286.55	18,824.61	510.03	75,013.42	745.86
Other federal government:														
Bureau of Land Management	1,348.23	207.16	1,885.70	155.62	3,233.92	256.27	268.94	90.29	440.74	88.52	709.68	126.42	3,943.60	278.34
Department of Defense and Energy	27.35	18.70	142.26	41.10	169.61	45.15	--	--	16.02	16.58	16.02	16.58	185.63	48.10
National Park Service	--	--	--	--	--	--	6,652.50	444.59	1,557.10	204.59	8,209.60	472.92	8,209.60	472.92
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.90	17.29	1.07	1.08	17.98	17.33	17.98	17.33
Other federal	--	--	173.25	41.34	173.25	41.34	--	--	17.21	9.78	17.21	9.78	190.45	42.49
Total	1,375.58	207.64	2,201.20	163.89	3,576.78	261.36	6,938.34	447.00	2,032.14	217.19	8,970.48	474.63	12,547.26	484.76
State and local government:														
Local	252.09	91.68	264.52	59.20	516.61	109.86	159.56	61.24	434.49	83.98	594.05	100.50	1,110.66	148.03
State	502.24	128.40	102.57	39.91	604.81	132.89	1,339.07	164.57	595.20	91.06	1,934.27	179.66	2,539.08	180.89
Other public	--	--	8.58	6.61	8.58	6.61	24.13	26.88	16.98	18.38	41.11	32.56	49.69	33.23
Total	754.33	157.29	375.67	71.68	1,130.00	172.08	1,522.76	173.88	1,046.67	119.76	2,569.43	198.38	3,699.43	221.84
Private:														
Corporate	21,643.52	682.84	1,648.98	150.39	23,292.50	690.46	--	--	--	--	--	--	23,292.50	690.46
Noncorporate private:														
Total, noncorporate private	13,640.76	576.07	8,741.43	291.22	22,382.20	612.19	--	--	--	--	--	--	22,382.20	612.19
All private	35,284.29	674.93	10,390.41	314.47	45,674.70	659.94	--	--	--	--	--	--	45,674.70	659.94
All owners	87,585.22	1,013.80	18,985.07	456.91	106,570.29	973.63	23,133.78	707.75	7,230.73	378.59	30,364.52	721.68	136,934.81	1,011.66

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.7: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2007 - 2016

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	50,161.98	770.64	5,853.37	281.56	56,015.36	727.51	14,756.40	520.96	4,157.51	281.55	18,913.91	507.79	74,929.26	748.30
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,161.98	770.64	5,853.37	281.56	56,015.36	727.51	14,756.40	520.96	4,157.51	281.55	18,913.91	507.79	74,929.26	748.30
Other federal government:														
Bureau of Land Management	1,231.09	197.42	1,865.41	154.76	3,096.49	248.48	357.30	107.79	442.16	88.52	799.46	139.46	3,895.96	277.08
Department of Defense and Energy	45.01	24.81	149.09	41.58	194.09	48.42	--	--	17.31	17.27	17.31	17.27	211.40	51.41
National Park Service	--	--	--	--	--	--	6,652.41	437.10	1,572.67	205.44	8,225.09	465.71	8,225.09	465.71
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.90	17.29	1.07	1.08	17.97	17.33	17.97	17.33
Other federal	--	--	159.68	39.57	159.68	39.57	--	--	17.65	9.92	17.65	9.92	177.33	40.79
Total	1,276.09	198.52	2,174.18	162.88	3,450.27	254.08	7,026.61	440.74	2,050.86	217.96	9,077.48	468.15	12,527.75	478.28
State and local government:														
Local	292.46	99.61	288.79	60.91	581.25	118.11	160.18	61.45	437.13	84.53	597.31	101.06	1,178.56	154.60
State	485.57	120.55	114.45	42.10	600.02	126.06	1,341.06	165.38	597.03	91.10	1,938.09	180.49	2,538.11	176.24
Other public	--	--	8.57	6.61	8.57	6.61	24.13	26.88	16.72	18.10	40.85	32.41	49.41	33.07
Total	778.03	155.92	411.80	74.27	1,189.83	172.37	1,525.38	174.70	1,050.87	120.20	2,576.25	199.44	3,766.08	222.59
Private:														
Corporate	22,120.99	682.88	1,744.42	153.77	23,865.41	690.33	--	--	--	--	--	--	23,865.41	690.33
Noncorporate private:														
Total, noncorporate private	13,055.09	567.18	8,640.81	289.91	21,695.90	604.49	--	--	--	--	--	--	21,695.90	604.49
All private	35,176.08	671.97	10,385.23	314.36	45,561.31	656.37	--	--	--	--	--	--	45,561.31	656.37
All owners	87,392.19	1,012.36	18,824.58	454.20	106,216.77	971.68	23,308.39	702.85	7,259.24	375.40	30,567.63	715.82	136,784.40	1,005.00

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.8: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2008 - 2017

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	49,987.35	770.93	5,862.33	281.31	55,849.68	727.32	14,740.39	518.58	4,119.42	279.54	18,859.81	506.65	74,709.48	748.42
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	49,987.35	770.93	5,862.33	281.31	55,849.68	727.32	14,740.39	518.58	4,119.42	279.54	18,859.81	506.65	74,709.48	748.42
Other federal government:														
Bureau of Land Management	1,234.67	196.83	1,864.30	155.19	3,098.97	248.35	351.60	106.37	445.87	89.33	797.46	138.89	3,896.43	276.91
Department of Defense and Energy	44.81	24.73	148.96	41.52	193.77	48.33	--	--	16.02	16.58	16.02	16.58	209.79	51.09
National Park Service	--	--	--	--	--	--	6,582.52	434.60	1,560.11	204.54	8,142.63	462.85	8,142.63	462.85
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.90	17.29	1.05	1.07	17.94	17.32	17.94	17.32
Other federal	--	--	88.71	27.11	88.71	27.11	--	--	8.16	6.01	8.16	6.01	96.87	27.77
Total	1,279.49	197.92	2,101.96	160.90	3,381.45	252.42	6,951.01	438.29	2,031.20	217.61	8,982.21	465.91	12,363.66	475.57
State and local government:														
Local	296.61	100.50	286.34	60.35	582.95	118.56	163.25	62.38	398.53	79.25	561.79	97.73	1,144.74	152.90
State	484.87	120.40	114.67	42.33	599.54	125.98	1,351.12	165.01	560.00	87.37	1,911.11	179.91	2,510.65	175.61
Other public	--	--	8.55	6.61	8.55	6.61	24.13	26.87	17.05	18.45	41.19	32.60	49.74	33.26
Total	781.48	156.37	409.57	73.95	1,191.05	172.63	1,538.50	174.53	975.59	114.67	2,514.09	197.60	3,705.14	221.37
Private:														
Corporate	22,695.96	687.76	1,836.31	158.05	24,532.27	695.13	--	--	--	--	--	--	24,532.27	695.13
Noncorporate private:														
Total, noncorporate private	12,405.56	550.65	8,540.05	287.65	20,945.61	589.37	--	--	--	--	--	--	20,945.61	589.37
All private	35,101.52	671.75	10,376.36	314.13	45,477.89	656.87	--	--	--	--	--	--	45,477.89	656.87
All owners	87,149.84	1,012.72	18,750.22	453.21	105,900.06	972.03	23,229.90	699.56	7,126.21	371.98	30,356.10	713.10	136,256.17	1,005.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table C79.9: Forest Floor by Owner Group and Forest Land Status, All California (10 year averages): 2009 - 2018

*information duplicated in Table C71

Ownership group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
USDA Forest Service:														
National Forest	50,131.54	778.91	5,915.84	282.96	56,047.39	737.18	14,850.71	523.74	4,148.51	281.74	19,008.14	511.58	75,055.53	757.88
National Grasslands	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Forest Service	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	50,131.54	778.91	5,915.84	282.96	56,047.39	737.18	14,850.71	523.74	4,148.51	281.74	19,008.14	511.58	75,055.53	757.88
Other federal government:														
Bureau of Land Management	1,050.65	181.68	1,888.87	157.46	2,939.51	237.62	348.89	107.14	443.20	90.22	792.08	140.05	3,731.60	267.93
Department of Defense and Energy	41.21	23.31	159.66	43.64	200.88	49.47	--	--	17.12	17.70	17.12	17.70	217.99	52.54
National Park Service	--	--	--	--	--	--	6,436.91	429.16	1,548.56	203.12	7,985.46	458.50	7,985.46	458.50
U.S. Fish and Wildlife Service	--	--	--	--	--	--	16.83	17.21	1.07	1.11	17.91	17.25	17.91	17.25
Other federal	7.97	9.91	81.14	25.71	89.11	27.56	--	--	8.62	6.43	8.62	6.43	97.73	28.30
Total	1,099.83	183.17	2,129.67	163.40	3,229.50	241.89	6,802.63	433.47	2,018.56	217.10	8,821.19	462.68	12,050.69	468.04
State and local government:														
Local	291.06	99.08	272.16	58.17	563.22	115.56	171.74	62.60	387.63	78.13	559.37	96.86	1,122.59	150.08
State	502.21	121.06	125.54	43.94	627.75	127.46	1,318.65	164.44	553.23	86.26	1,871.87	179.07	2,499.63	178.87
Other public	--	--	1.46	1.32	1.46	1.32	23.10	25.71	16.30	17.63	39.40	31.17	40.85	31.20
Total	793.28	154.91	399.15	72.86	1,192.43	170.47	1,513.49	173.99	957.15	113.11	2,470.64	196.51	3,663.07	219.33
Private:														
Corporate	23,387.73	698.39	1,906.21	160.78	25,293.94	705.25	--	--	--	--	--	--	25,293.94	705.25
Noncorporate private:														
Total, noncorporate private	12,004.53	542.21	8,390.32	283.72	20,394.85	580.87	--	--	--	--	--	--	20,394.85	580.87
All private	35,392.26	678.68	10,296.53	311.53	45,688.79	662.38	--	--	--	--	--	--	45,688.79	662.38
All owners	87,416.91	1,025.12	18,741.19	453.38	106,158.10	985.40	23,166.83	700.31	7,124.23	372.88	30,299.97	714.25	136,458.07	1,018.15

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D1: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	301,079	8,884	471	246	301,550	8,885	78,733	5,402	616	497	79,349	5,416	380,899	10,066
Douglas-fir	55,855	5,014	--	--	55,855	5,014	18,018	3,416	295	170	18,314	3,420	74,168	6,031
Fir / spruce / mountain hemlock	76,491	5,599	794	506	77,285	5,622	38,801	4,756	1,470	647	40,270	4,797	117,555	7,364
Western Hemlock / Sitka spruce	2,319	1,054	--	--	2,319	1,054	121	120	--	--	121	120	2,440	1,061
Lodgepole pine	8,000	1,379	1,482	539	9,482	1,472	17,101	2,197	4,883	1,021	21,984	2,332	31,466	2,738
Pinyon / juniper	81	64	3,822	413	3,903	418	16	15	2,273	339	2,290	339	6,192	533
Ponderosa pine	42,804	2,707	461	216	43,265	2,713	5,922	1,173	448	206	6,369	1,190	49,634	2,950
Redwood	56,964	5,837	--	--	56,964	5,837	29,072	8,298	--	--	29,072	8,298	86,036	10,043
Western juniper	2,134	411	5,275	471	7,409	619	1,803	567	309	123	2,112	580	9,521	848
Western white pine	592	285	--	--	592	285	2,322	704	617	280	2,939	757	3,531	808
Other western softwoods	1,589	612	741	233	2,330	655	944	399	4,365	806	5,309	893	7,639	1,107
Total	547,907	11,207	13,046	1,021	560,953	11,204	192,853	10,610	15,276	1,565	208,130	10,633	769,083	14,529
Hardwoods:														
Alder / maple	6,092	1,301	508	259	6,600	1,326	2,456	1,057	16	18	2,472	1,057	9,072	1,694
Aspen / birch	303	204	95	41	398	208	41	28	273	184	313	186	711	279
Elm / ash / cottonwood	--	--	557	296	557	296	--	--	184	155	184	155	741	334
Tanoak / laurel	74,462	5,553	3,779	951	78,241	5,617	18,830	3,172	2,739	1,117	21,568	3,348	99,810	6,500
Western oak	62,501	4,130	85,131	3,334	147,632	5,141	7,451	1,332	14,091	1,568	21,542	2,045	169,174	5,475
Woodland hardwoods	99	74	445	143	544	161	--	--	211	102	211	102	755	191
Exotic hardwoods	3	3	--	--	3	3	--	--	--	--	--	--	3	3
Other hardwoods	10,320	1,970	1,045	254	11,365	1,986	2,269	1,112	222	162	2,491	1,123	13,856	2,267
Total	153,780	7,024	91,560	3,466	245,340	7,536	31,047	3,681	17,735	1,946	48,782	4,105	294,122	8,425
Nonstocked	1,045	213	56	44	1,102	218	457	242	14	13	471	242	1,573	326
All forest types	702,733	11,353	104,662	3,586	807,395	11,167	224,357	10,702	33,025	2,472	257,383	10,763	1,064,778	13,954

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D2: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	1,267	813	--	--	1,267	813	--	--	--	--	--	--	1,267	813
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	176	56	176	56	--	--	17	10	17	10	193	57
Ponderosa pine	--	--	42	30	42	30	--	--	53	51	53	51	95	59
Redwood	11,653	2,964	--	--	11,653	2,964	7,339	2,878	--	--	7,339	2,878	18,992	4,229
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	570	449	--	--	570	449	--	--	--	--	--	--	570	449
Total	13,490	3,100	218	64	13,708	3,101	7,339	2,878	70	52	7,409	2,878	21,117	4,326
Hardwoods:														
Alder / maple	--	--	84	63	84	63	326	363	--	--	326	363	410	368
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	54	39	54	39	--	--	5	6	5	6	59	40
Tanoak / laurel	2,923	1,192	1,714	567	4,637	1,317	2,990	1,641	1,188	533	4,178	1,725	8,815	2,170
Western oak	927	454	14,711	1,410	15,638	1,481	306	212	4,729	822	5,035	836	20,674	1,689
Woodland hardwoods	--	--	--	--	--	--	--	--	8	8	8	8	8	8
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	1,453	932	270	122	1,723	938	1,341	957	16	13	1,358	957	3,081	1,316
Total	5,304	1,578	16,833	1,522	22,137	2,178	4,964	1,899	5,946	986	10,910	2,101	33,047	2,982
Nonstocked	17	18	51	44	69	47	--	--	--	--	--	--	69	47
All forest types	18,811	3,465	17,103	1,524	35,914	3,768	12,303	3,366	6,016	987	18,319	3,490	54,233	5,153

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D3: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	252	258	252	258	--	--	145	148	145	148	397	298
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	846	282	846	282	--	--	13	14	13	14	859	282
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	1,098	382	1,098	382	--	--	158	149	158	149	1,256	410
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	1,098	382	1,098	382	--	--	158	149	158	149	1,256	410

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D4: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	6,201	963	199	167	6,400	977	--	--	--	--	--	--	6,400	977
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	3,569	1,079	--	--	3,569	1,079	1,587	882	--	--	1,587	882	5,155	1,393
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	476	248	644	390	1,120	462	--	--	--	--	--	--	1,120	462
Pinyon / juniper	22	21	1,986	282	2,007	283	--	--	915	213	915	213	2,922	351
Ponderosa pine	5,806	822	104	70	5,910	824	461	253	--	--	461	253	6,371	862
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	941	234	3,925	401	4,866	461	--	--	54	46	54	46	4,919	463
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	64	65	150	110	214	128	--	--	1,111	429	1,111	429	1,325	448
Total	17,078	1,688	7,009	654	24,087	1,810	2,047	917	2,079	481	4,126	1,033	28,213	2,082
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	125	114	59	35	183	119	28	25	--	--	28	25	211	121
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	65	55	92	78	157	95	--	--	--	--	--	--	157	95
Woodland hardwoods	99	74	100	60	198	95	--	--	--	--	--	--	198	95
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	82	54	1	1	83	54	--	--	--	--	--	--	83	54
Total	370	156	251	104	622	188	28	25	--	--	28	25	650	189
Nonstocked	86	40	3	3	89	40	--	--	--	--	--	--	89	40
All forest types	17,535	1,699	7,263	662	24,798	1,822	2,075	922	2,079	481	4,154	1,038	28,952	2,094

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D5: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	107,607	6,294	67	62	107,674	6,294	32,120	3,294	62	61	32,182	3,294	139,855	7,065
Douglas-fir	23,252	3,214	--	--	23,252	3,214	10,535	2,462	295	170	10,830	2,467	34,082	4,040
Fir / spruce / mountain hemlock	6,101	1,667	181	201	6,282	1,677	8,099	2,015	48	50	8,146	2,016	14,428	2,622
Western Hemlock / Sitka spruce	--	--	--	--	--	--	121	120	--	--	121	120	121	120
Lodgepole pine	135	129	--	--	135	129	45	46	69	71	115	85	249	155
Pinyon / juniper	--	--	6	6	6	6	--	--	--	--	--	--	6	6
Ponderosa pine	3,666	828	--	--	3,666	828	1,663	693	128	126	1,791	705	5,457	1,087
Redwood	755	706	--	--	755	706	6,310	3,823	--	--	6,310	3,823	7,064	3,888
Western juniper	--	--	22	17	22	17	--	--	--	--	--	--	22	17
Western white pine	273	225	--	--	273	225	357	174	26	27	382	176	655	285
Other western softwoods	217	150	377	182	594	235	62	55	27	27	89	61	683	242
Total	142,005	7,127	653	279	142,658	7,127	59,312	5,635	655	239	59,967	5,639	202,624	8,979
Hardwoods:														
Alder / maple	2,192	685	242	191	2,434	711	1,482	823	16	18	1,498	823	3,932	1,088
Aspen / birch	--	--	--	--	--	--	--	--	13	13	13	13	13	13
Elm / ash / cottonwood	--	--	116	82	116	82	--	--	--	--	--	--	116	82
Tanoak / laurel	26,422	3,723	662	351	27,084	3,739	9,628	2,189	341	281	9,969	2,207	37,054	4,330
Western oak	31,270	3,074	28,410	2,147	59,680	3,713	3,711	937	4,952	995	8,663	1,369	68,343	3,943
Woodland hardwoods	--	--	34	31	34	31	--	--	28	25	28	25	62	40
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	4,414	1,270	181	143	4,595	1,278	188	131	150	153	338	201	4,934	1,294
Total	64,298	4,967	29,646	2,186	93,944	5,372	15,009	2,497	5,500	1,046	20,509	2,703	114,453	5,977
Nonstocked	177	63	--	--	177	63	339	223	--	--	339	223	515	232
All forest types	206,479	8,436	30,299	2,202	236,778	8,641	74,660	5,914	6,155	1,074	80,815	5,990	317,593	10,307

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D6: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	31,336	3,840	--	--	31,336	3,840	7,483	2,425	--	--	7,483	2,425	38,819	4,512
Fir / spruce / mountain hemlock	431	292	--	--	431	292	--	--	--	--	--	--	431	292
Western Hemlock / Sitka spruce	2,319	1,054	--	--	2,319	1,054	--	--	--	--	--	--	2,319	1,054
Lodgepole pine	--	--	--	--	--	--	28	28	--	--	28	28	28	28
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	44,528	5,082	--	--	44,528	5,082	15,423	6,925	--	--	15,423	6,925	59,951	8,451
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	304	282	--	--	304	282	116	185	25	22	142	186	446	338
Total	78,918	6,311	--	--	78,918	6,311	23,050	7,238	25	22	23,076	7,238	101,994	9,389
Hardwoods:														
Alder / maple	3,293	1,005	--	--	3,293	1,005	648	554	--	--	648	554	3,942	1,147
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	41,741	3,933	1,392	681	43,132	3,983	6,211	1,665	1,160	939	7,371	1,908	50,503	4,393
Western oak	5,503	1,229	3,847	751	9,350	1,436	--	--	550	313	550	313	9,900	1,470
Woodland hardwoods	--	--	--	--	--	--	--	--	94	85	94	85	94	85
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	2,799	923	66	63	2,865	925	740	569	--	--	740	569	3,605	1,086
Total	53,337	4,280	5,305	1,015	58,641	4,380	7,598	1,819	1,804	994	9,402	2,068	68,044	4,813
Nonstocked	36	25	--	--	36	25	--	--	--	--	--	--	36	25
All forest types	132,291	7,332	5,305	1,015	137,596	7,376	30,649	7,344	1,829	994	32,478	7,410	170,074	10,198

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D7: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	186,375	7,648	205	169	186,579	7,650	45,453	4,482	554	493	46,007	4,501	232,586	8,652
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	65,867	5,282	613	465	66,480	5,303	29,116	4,294	1,422	645	30,538	4,340	97,018	6,828
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	7,390	1,351	838	376	8,227	1,398	17,028	2,196	4,562	1,008	21,589	2,327	29,817	2,695
Pinyon / juniper	59	60	986	247	1,046	254	16	15	995	249	1,011	249	2,057	356
Ponderosa pine	33,034	2,479	315	202	33,349	2,486	3,237	881	143	93	3,380	885	36,729	2,634
Redwood	28	26	--	--	28	26	--	--	--	--	--	--	28	26
Western juniper	970	297	1,244	237	2,214	379	1,803	567	255	114	2,058	578	4,272	692
Western white pine	319	175	--	--	319	175	1,966	682	591	279	2,557	736	2,876	757
Other western softwoods	435	258	213	98	648	276	686	342	3,202	684	3,888	758	4,536	807
Total	294,477	8,892	4,414	739	298,890	8,907	99,303	6,252	11,726	1,474	111,029	6,326	409,919	10,564
Hardwoods:														
Alder / maple	607	474	--	--	607	474	--	--	--	--	--	--	607	474
Aspen / birch	178	170	36	21	214	171	13	12	260	184	273	184	487	251
Elm / ash / cottonwood	--	--	136	112	136	112	--	--	--	--	--	--	136	112
Tanoak / laurel	3,376	1,254	11	8	3,387	1,254	--	--	--	--	--	--	3,387	1,254
Western oak	23,677	2,494	33,129	2,102	56,805	3,190	3,015	894	2,955	787	5,970	1,188	62,775	3,377
Woodland hardwoods	--	--	60	46	60	46	--	--	1	1	1	1	62	46
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	1,571	749	440	150	2,011	764	--	--	55	52	55	52	2,066	765
Total	29,409	2,922	33,812	2,109	63,221	3,524	3,028	894	3,272	809	6,300	1,203	69,521	3,697
Nonstocked	713	197	2	1	715	197	113	95	14	13	127	96	842	219
All forest types	324,599	9,048	38,228	2,229	362,827	9,103	102,444	6,284	15,011	1,678	117,455	6,381	480,282	10,629

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D8: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Live Trees Including Foliage (>= 1 inch) by Forest Type and Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	897	510	--	--	897	510	1,161	625	--	--	1,161	625	2,057	807
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	523	392	--	--	523	392	--	--	--	--	--	--	523	392
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	252	154	252	154	252	154
Pinyon / juniper	--	--	667	205	667	205	--	--	347	116	347	116	1,014	236
Ponderosa pine	298	214	--	--	298	214	561	274	123	124	684	301	982	369
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	223	163	85	86	308	184	--	--	--	--	--	--	308	184
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	80	73	--	--	80	73	80	73
Total	1,940	697	752	223	2,692	731	1,802	679	722	229	2,523	716	5,215	1,024
Hardwoods:														
Alder / maple	--	--	181	162	181	162	--	--	--	--	--	--	181	162
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	34	47	34	47	34	47
Tanoak / laurel	--	--	--	--	--	--	--	--	50	49	50	49	50	49
Western oak	1,059	432	4,096	788	5,155	911	419	258	891	400	1,311	476	6,466	1,027
Woodland hardwoods	--	--	251	118	251	118	--	--	79	50	79	50	330	128
Exotic hardwoods	3	3	--	--	3	3	--	--	--	--	--	--	3	3
Other hardwoods	--	--	88	55	88	55	--	--	--	--	--	--	88	55
Total	1,062	432	4,615	813	5,677	933	419	258	1,055	409	1,475	483	7,152	1,050
Nonstocked	15	12			15	12	5	5	--	--	5	5	21	13
All forest types	3,017	819	5,367	844	8,385	1,185	2,226	732	1,777	468	4,003	866	12,388	1,467

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D9: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	24,928	1,342	83	65	25,011	1,343	12,848	1,429	12	10	12,860	1,429	37,871	1,938
Douglas-fir	2,723	390	--	--	2,723	390	1,390	350	19	14	1,408	351	4,131	523
Fir / spruce / mountain hemlock	8,310	858	39	20	8,349	858	5,737	862	133	63	5,870	865	14,219	1,216
Western Hemlock / Sitka spruce	253	177	--	--	253	177	--	--	--	--	--	--	253	177
Lodgepole pine	887	200	204	125	1,090	236	1,898	329	515	121	2,413	346	3,503	417
Pinyon / juniper	12	12	291	58	302	59	4	6	175	40	179	41	481	71
Ponderosa pine	1,418	217	94	90	1,512	235	251	100	55	28	306	104	1,818	257
Redwood	2,580	453	--	--	2,580	453	853	306	--	--	853	306	3,433	544
Western juniper	87	38	141	32	228	49	148	61	--	--	148	61	375	78
Western white pine	163	87	--	--	163	87	272	91	93	62	365	110	527	140
Other western softwoods	88	44	169	93	258	103	112	66	511	124	623	140	881	174
Total	41,448	1,632	1,021	201	42,468	1,640	23,512	1,663	1,512	197	25,025	1,668	67,493	2,295
Hardwoods:														
Alder / maple	690	204	21	17	711	205	208	131	19	16	227	132	938	244
Aspen / birch	7	7	7	6	15	9	46	37	12	10	59	38	74	39
Elm / ash / cottonwood	--	--	18	15	18	15	--	--	13	12	13	12	31	19
Tanoak / laurel	3,048	434	246	103	3,294	446	1,135	275	348	184	1,483	330	4,777	554
Western oak	6,008	963	4,855	464	10,862	1,064	1,869	515	1,236	249	3,105	564	13,967	1,202
Woodland hardwoods	19	12	108	37	127	39	--	--	35	23	35	23	162	45
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	667	190	78	28	745	192	173	89	3	3	176	89	921	211
Total	10,439	1,087	5,332	477	15,771	1,179	3,431	602	1,666	310	5,098	669	20,869	1,351
Nonstocked	5,415	1,122	91	30	5,505	1,122	3,058	902	165	85	3,223	906	8,729	1,442
All forest types	57,302	2,131	6,443	517	63,745	2,166	30,002	1,903	3,344	376	33,346	1,918	97,091	2,828

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D10: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	18	15	--	--	18	15	--	--	--	--	--	--	18	15
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	10	4	10	4	--	--	--	--	--	--	10	4
Ponderosa pine	--	--	1	1	1	1	--	--	4	4	4	4	5	4
Redwood	377	130	--	--	377	130	104	68	--	--	104	68	481	147
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	50	38	--	--	50	38	--	--	--	--	--	--	50	38
Total	445	136	11	4	456	136	104	68	4	4	108	68	564	152
Hardwoods:														
Alder / maple	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	58	27	101	70	159	75	52	30	241	171	293	174	453	189
Western oak	17	12	620	106	637	107	11	11	332	183	343	183	980	212
Woodland hardwoods	--	--	--	--	--	--	--	--	21	21	21	21	21	21
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	90	60	5	3	95	60	48	39	3	3	51	39	146	71
Total	166	67	726	127	891	144	113	49	596	252	710	257	1,601	294
Nonstocked			--	--			9	9	--	--	9	9	10	9
All forest types	612	151	736	127	1,348	196	226	82	601	252	827	265	2,175	330

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D11: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	15	15	15	15	--	--	11	12	11	12	26	19
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	27	14	27	14	--	--	--	--	--	--	27	14
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	41	21	41	21	--	--	11	12	11	12	53	24
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	41	21	41	21	--	--	11	12	11	12	53	24

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D12: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	404	99	5	5	409	100	--	--	--	--	--	--	409	100
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	333	124	--	--	333	124	102	56	--	--	102	56	435	136
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	12	7	142	121	154	121	--	--	--	--	--	--	154	121
Pinyon / juniper	--	--	111	27	111	27	--	--	40	13	40	13	151	30
Ponderosa pine	127	44	1	1	128	44	17	11	--	--	17	11	145	45
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	22	12	107	29	129	31	--	--	--	--	--	--	129	31
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	19	19	19	19	--	--	94	42	94	42	113	46
Total	898	165	385	128	1,283	209	118	57	135	44	253	72	1,536	221
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	7	7	1	1	9	7	46	37	--	--	46	37	55	38
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	8	7	--	--	8	7	--	--	--	--	--	--	8	7
Woodland hardwoods	19	12	23	14	41	19	--	--	--	--	--	--	41	19
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	17	14	--	--	17	14	--	--	--	--	--	--	17	14
Total	52	21	24	14	76	26	46	37	--	--	46	37	122	45
Nonstocked	310	140	17	16	327	141	--	--	--	--	--	--	327	141
All forest types	1,260	218	425	130	1,685	254	165	70	135	44	299	82	1,985	267

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D13: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	9,014	821	8	8	9,022	822	5,201	849	--	--	5,201	849	14,223	1,181
Douglas-fir	1,529	327	--	--	1,529	327	1,007	312	19	14	1,026	313	2,555	452
Fir / spruce / mountain hemlock	670	199	14	12	685	200	1,656	510	1	1	1,657	510	2,341	548
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1	1	--	--	1	1	7	8	2	2	10	8	11	8
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	239	97	--	--	239	97	57	38	30	23	88	45	327	107
Redwood	27	28	--	--	27	28	122	78	--	--	122	78	149	83
Western juniper	--	--	5	5	5	5	--	--	--	--	--	--	5	5
Western white pine	52	46	--	--	52	46	56	28	4	4	60	28	111	54
Other western softwoods	33	21	70	56	103	60	1	1	--	--	1	1	105	60
Total	11,567	902	97	58	11,664	903	8,107	989	56	28	8,163	989	19,827	1,335
Hardwoods:														
Alder / maple	245	145	18	17	263	146	98	62	19	16	116	64	379	159
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	3	2	3	2	--	--	--	--	--	--	3	2
Tanoak / laurel	1,626	385	61	61	1,687	390	674	220	92	66	766	230	2,454	452
Western oak	2,877	838	1,167	211	4,044	863	853	411	327	96	1,180	421	5,224	960
Woodland hardwoods	--	--	--	--	--	--	--	--	4	4	4	4	4	4
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	421	170	4	4	425	170	122	80			122	80	547	188
Total	5,169	947	1,253	220	6,422	971	1,746	474	443	118	2,189	488	8,611	1,086
Nonstocked	1,725	721	15	11	1,740	721	1,703	607	26	23	1,729	607	3,469	942
All forest types	18,461	1,468	1,364	228	19,825	1,482	11,556	1,215	524	130	12,081	1,219	31,906	1,911

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D14: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	1,176	214	--	--	1,176	214	383	161	--	--	383	161	1,558	268
Fir / spruce / mountain hemlock	37	37	--	--	37	37	--	--	--	--	--	--	37	37
Western Hemlock / Sitka spruce	253	177	--	--	253	177	--	--	--	--	--	--	253	177
Lodgepole pine	--	--	--	--	--	--	8	8	--	--	8	8	8	8
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	2,175	435	--	--	2,175	435	628	289	--	--	628	289	2,803	520
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	5	5	--	--	5	5	12	19	2	2	15	19	19	20
Total	3,645	514	--	--	3,645	514	1,031	328	2	2	1,033	328	4,679	607
Hardwoods:														
Alder / maple	359	131	1		360	131	109	116	--	--	109	116	469	175
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	1,307	201	49	27	1,356	203	408	162	14	11	422	163	1,778	259
Western oak	245	82	72	25	317	86	--	--	5	5	5	5	322	86
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	55	27	4	4	58	28	3	3	--	--	3	3	61	28
Total	1,966	253	125	37	2,091	256	520	198	19	12	539	199	2,630	323
Nonstocked	4	3	--	--	4	3	--	--	--	--	--	--	4	3
All forest types	5,615	564	125	37	5,740	565	1,551	379	21	12	1,572	379	7,312	676

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D15: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	15,459	1,134	70	65	15,528	1,136	7,525	1,172	12	10	7,536	1,172	23,065	1,613
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	7,228	830	25	17	7,253	830	3,980	701	132	63	4,112	704	11,365	1,087
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	874	200	62	34	936	203	1,882	328	429	109	2,311	342	3,247	397
Pinyon / juniper	12	12	80	38	91	40	4	6	102	37	106	37	198	55
Ponderosa pine	1,051	190	92	90	1,143	210	159	92	21	15	179	93	1,323	229
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	29	17	29	12	58	21	148	61	--	--	148	61	206	64
Western white pine	111	74	--	--	111	74	216	86	89	62	305	106	416	129
Other western softwoods	--	--	81	72	81	72	98	63	415	117	513	133	594	151
Total	24,764	1,384	438	143	25,202	1,389	14,012	1,371	1,199	184	15,211	1,380	40,413	1,930
Hardwoods:														
Alder / maple	87	60	--	--	87	60	--	--	--	--	--	--	87	60
Aspen / birch	--	--	6	6	6	6	--	--	12	10	12	10	19	12
Elm / ash / cottonwood	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Tanoak / laurel	57	28	35	35	91	44	--	--	--	--	--	--	91	44
Western oak	2,583	451	2,515	386	5,098	591	602	244	358	120	959	272	6,057	649
Woodland hardwoods	--	--	39	24	39	24	--	--	--	--	--	--	39	24
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	84	49	63	28	147	56	--	--	--	--	--	--	147	56
Total	2,810	458	2,659	389	5,469	599	602	244	370	120	972	272	6,441	655
Nonstocked	3,127	835	36	19	3,163	835	1,338	667	136	81	1,474	672	4,637	1,072
All forest types	30,701	1,634	3,133	415	33,834	1,674	15,951	1,519	1,705	233	17,656	1,531	51,490	2,232

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D16: Aboveground Carbon, Dry Weight (Regional Biomass Method) of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	51	28	--	--	51	28	123	68	--	--	123	68	174	73
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	41	37	--	--	41	37	--	--	--	--	--	--	41	37
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	84	54	84	54	84	54
Pinyon / juniper	--	--	90	36	90	36	--	--	32	10	32	10	122	37
Ponderosa pine	1	1	--	--	1	1	18	9	--	--	18	9	18	9
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	35	32	1	1	36	32	--	--	--	--	--	--	36	32
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	128	56	90	36	218	66	141	68	117	55	257	88	475	110
Hardwoods:														
Alder / maple	--	--	2	2	2	2	--	--	--	--	--	--	2	2
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	1	2	1	2	1	2
Tanoak / laurel	--	--	--	--	--	--	--	--	1	1	1	1	1	1
Western oak	276	145	455	109	731	182	404	195	214	85	618	213	1,349	281
Woodland hardwoods	--	--	46	25	46	25	--	--	10	8	10	8	57	26
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	2	1	2	1	--	--	--	--	--	--	2	1
Total	276	145	504	112	781	183	404	195	227	85	631	213	1,411	282
Nonstocked	249	173	23	13	272	173	7	7	4	3	12	7	283	173
All forest types	653	232	618	118	1,270	261	552	207	347	101	899	230	2,170	349

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D17: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	4,215.96	142.33	19.71	8.20	4,235.68	142.48	811.69	53.89	12.08	8.67	823.77	54.37	5,059.45	150.65
Douglas-fir	939.84	73.58	--	--	939.84	73.58	218.37	36.89	30.33	15.37	248.70	39.94	1,188.54	83.35
Fir / spruce / mountain hemlock	1,008.74	64.29	30.89	14.18	1,039.63	65.67	404.03	41.29	39.78	14.09	443.81	43.48	1,483.44	78.59
Western Hemlock / Sitka spruce	25.85	12.01	--	--	25.85	12.01	1.86	1.85	--	--	1.86	1.85	27.71	12.15
Lodgepole pine	224.07	39.66	24.46	8.53	248.53	40.50	244.70	30.78	190.75	37.00	435.44	47.10	683.98	61.97
Pinyon / juniper	17.08	12.22	1,617.34	117.44	1,634.42	118.05	9.74	9.20	775.14	86.17	784.88	86.61	2,419.30	144.32
Ponderosa pine	2,057.84	122.49	77.92	32.41	2,135.76	126.40	148.52	25.95	32.47	13.53	181.00	29.12	2,316.75	129.55
Redwood	606.08	55.61	--	--	606.08	55.61	116.61	29.17	--	--	116.61	29.17	722.69	62.29
Western juniper	257.36	49.69	2,853.27	216.11	3,110.63	220.91	95.51	29.93	85.97	36.06	181.48	46.52	3,292.11	225.45
Western white pine	24.37	11.98	--	--	24.37	11.98	72.24	21.13	38.17	16.89	110.41	27.04	134.78	29.57
Other western softwoods	71.51	23.17	200.25	58.15	271.76	62.59	42.80	16.08	452.15	72.96	494.95	74.30	766.71	96.97
Total	9,448.70	197.70	4,823.84	246.95	14,272.54	306.12	2,166.08	88.51	1,656.83	122.99	3,822.92	144.52	18,095.46	328.35
Hardwoods:														
Alder / maple	241.78	43.31	28.11	10.66	269.89	44.59	50.21	20.83	16.10	12.80	66.32	24.45	336.20	50.83
Aspen / birch	18.29	10.84	38.67	17.37	56.96	20.47	31.41	18.60	32.56	15.38	63.97	24.13	120.93	31.65
Elm / ash / cottonwood	--	--	38.47	14.77	38.47	14.77	0.97	0.96	12.24	8.83	13.21	8.89	51.67	17.24
Tanoak / laurel	1,831.71	118.87	216.06	42.05	2,047.77	125.26	457.78	63.61	145.14	36.51	602.92	72.91	2,650.70	143.79
Western oak	2,910.20	154.26	8,626.73	235.80	11,536.92	271.63	466.29	64.50	1,277.44	100.42	1,743.73	117.11	13,280.65	291.19
Woodland hardwoods	21.31	14.12	196.13	41.56	217.44	43.88	--	--	41.88	15.90	41.88	15.90	259.32	46.67
Exotic hardwoods	3.70	3.78	4.23	3.64	7.93	5.25	--	--	--	--	--	--	7.93	5.25
Other hardwoods	463.93	61.72	230.55	44.36	694.48	75.78	103.59	32.72	37.07	18.43	140.66	37.39	835.14	84.46
Total	5,490.91	198.44	9,378.94	243.61	14,869.85	295.80	1,110.26	98.60	1,562.43	110.96	2,672.69	143.61	17,542.54	320.69
Nonstocked	1,110.25	96.96	259.32	48.13	1,369.57	107.89	321.33	55.23	134.60	35.14	466.08	65.84	1,835.65	126.23
All forest types	16,049.86	240.56	14,462.10	333.38	30,511.96	363.95	3,597.67	128.31	3,353.87	164.73	6,961.69	190.51	37,473.65	380.46

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D18: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	14.96	9.45	--	--	14.96	9.45	--	--	--	--	--	--	14.96	9.45
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	152.20	37.71	152.20	37.71	--	--	25.17	14.84	25.17	14.84	177.36	40.52
Ponderosa pine	--	--	28.60	20.45	28.60	20.45	--	--	3.19	3.04	3.19	3.04	31.79	20.68
Redwood	85.52	20.47	--	--	85.52	20.47	34.25	12.79	--	--	34.25	12.79	119.78	24.37
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	15.45	11.60	--	--	15.45	11.60	--	--	--	--	--	--	15.45	11.60
Total	115.94	25.29	180.80	42.88	296.73	49.79	34.25	12.79	28.36	15.14	62.61	19.82	359.34	53.69
Hardwoods:														
Alder / maple	--	--	7.46	5.59	7.46	5.59	6.98	7.76	--	--	6.98	7.76	14.43	9.57
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	6.16	3.70	6.16	3.70	--	--	0.60	0.81	0.60	0.81	6.76	3.78
Tanoak / laurel	51.60	20.15	87.56	25.65	139.15	32.53	34.36	17.71	58.17	22.16	92.54	28.37	231.69	43.16
Western oak	37.56	18.06	1,366.59	102.27	1,404.15	103.85	27.18	15.66	428.76	56.87	455.94	57.95	1,860.10	117.99
Woodland hardwoods	--	--	--	--	--	--	--	--	5.01	3.56	5.01	3.56	5.01	3.56
Exotic hardwoods	--	--	4.23	3.64	4.23	3.64	--	--	--	--	--	--	4.23	3.64
Other hardwoods	26.00	14.20	35.70	16.64	61.70	21.51	22.50	14.89	26.22	16.24	48.71	21.75	110.42	30.50
Total	115.16	30.52	1,507.71	107.18	1,622.86	111.11	91.02	28.28	518.76	63.81	609.78	67.66	2,232.64	128.89
Nonstocked	7.71	7.72	1.10	0.95	8.81	7.78	13.02	12.09	3.73	3.28	16.75	12.53	25.56	14.75
All forest types	238.80	40.76	1,689.61	115.17	1,928.41	121.76	138.29	32.73	550.84	65.84	689.13	71.14	2,617.54	139.77

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D19: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	10.85	9.26	10.85	9.26	--	--	7.58	6.87	7.58	6.87	18.43	11.53
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	115.75	29.70	115.75	29.70	--	--	0.79	0.82	0.79	0.82	116.55	29.71
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	126.60	31.10	126.60	31.10	--	--	8.37	6.92	8.37	6.92	134.97	31.86
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	126.60	31.10	126.60	31.10	--	--	8.37	6.92	8.37	6.92	134.97	31.86

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D20: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	201.77	31.10	5.21	3.77	206.98	31.31	--	--	--	--	--	--	206.98	31.31
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	58.08	15.24	--	--	58.08	15.24	18.06	8.69	--	--	18.06	8.69	76.14	17.54
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	16.14	8.80	8.22	4.84	24.36	10.04	--	--	--	--	--	--	24.36	10.04
Pinyon / juniper	9.74	9.73	745.19	82.32	754.93	82.87	--	--	263.70	51.52	263.70	51.52	1,018.63	96.21
Ponderosa pine	422.21	65.65	4.74	3.56	426.95	65.73	14.96	7.97	--	--	14.96	7.97	441.91	66.20
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	175.68	44.50	2,133.39	188.94	2,309.07	193.60	--	--	16.24	13.93	16.24	13.93	2,325.31	194.05
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	2.76	2.83	8.76	6.20	11.52	6.81	--	--	55.96	28.45	55.96	28.45	67.48	29.25
Total	886.38	87.33	2,905.51	203.54	3,791.89	220.51	33.02	11.79	335.90	60.58	368.93	61.61	4,160.81	227.67
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08
Aspen / birch	9.93	9.06	29.25	16.37	39.18	18.71	18.44	14.34	0.17	0.17	18.60	14.34	57.79	23.58
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	7.68	6.41	23.47	14.18	31.15	16.82	--	--	--	--	--	--	31.15	16.82
Woodland hardwoods	21.31	14.12	40.13	19.73	61.44	24.26	--	--	--	--	--	--	61.44	24.26
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	47.28	20.32	6.41	6.44	53.70	21.31	--	--	--	--	--	--	53.70	21.31
Total	86.21	27.09	99.26	29.94	185.47	40.88	18.44	14.34	0.25	0.19	18.68	14.34	204.15	43.32
Nonstocked	203.07	42.72	86.85	28.38	289.92	51.26	--	--	8.06	8.20	8.06	8.20	297.98	51.92
All forest types	1,175.66	101.47	3,091.62	206.89	4,267.27	229.02	51.46	18.92	344.21	61.36	395.67	64.09	4,662.95	236.39

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D21: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	1,301.39	78.09	7.87	5.92	1,309.26	78.35	304.87	32.18	8.04	7.89	312.91	33.05	1,622.17	84.81
Douglas-fir	375.74	46.93	--	--	375.74	46.93	132.12	28.14	30.33	15.37	162.45	32.03	538.18	56.68
Fir / spruce / mountain hemlock	104.04	23.55	8.90	6.93	112.94	24.50	111.33	22.94	4.42	4.61	115.76	23.33	228.70	33.83
Western Hemlock / Sitka spruce	--	--	--	--	--	--	1.86	1.85	--	--	1.86	1.85	1.86	1.85
Lodgepole pine	5.12	4.91	--	--	5.12	4.91	9.37	9.44	6.14	6.31	15.51	11.36	20.63	12.38
Pinyon / juniper	--	--	4.55	4.55	4.55	4.55	--	--	--	--	--	--	4.55	4.55
Ponderosa pine	157.80	30.02	--	--	157.80	30.02	19.10	7.18	6.42	4.30	25.52	8.37	183.32	31.13
Redwood	8.24	5.92	--	--	8.24	5.92	21.13	12.70	--	--	21.13	12.70	29.37	14.01
Western juniper	--	--	34.90	22.17	34.90	22.17	--	--	--	--	--	--	34.90	22.17
Western white pine	7.52	5.81	--	--	7.52	5.81	43.07	18.87	11.50	11.94	54.57	22.33	62.09	23.07
Other western softwoods	19.05	12.19	76.18	30.03	95.24	32.41	4.69	4.13	8.84	9.03	13.53	9.93	108.77	33.80
Total	1,978.90	98.47	132.40	38.68	2,111.30	105.60	647.55	51.77	75.70	25.28	723.24	57.47	2,834.54	119.00
Hardwoods:														
Alder / maple	108.19	29.53	11.16	7.03	119.35	30.36	31.81	16.79	16.03	12.80	47.83	21.11	167.19	36.98
Aspen / birch	--	--	--	--	--	--	--	--	7.23	7.25	7.23	7.25	7.23	7.25
Elm / ash / cottonwood	--	--	6.77	4.80	6.77	4.80	0.97	0.96	--	--	0.97	0.96	7.74	4.90
Tanoak / laurel	592.84	70.19	38.73	17.48	631.58	72.25	262.81	48.18	43.46	20.47	306.27	52.23	937.85	88.75
Western oak	1,316.27	106.02	2,513.18	142.14	3,829.45	175.47	218.56	44.85	357.30	55.76	575.86	71.59	4,405.31	188.50
Woodland hardwoods	--	--	3.46	2.05	3.46	2.05	--	--	10.71	8.97	10.71	8.97	14.17	9.20
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	159.05	36.24	14.87	10.68	173.92	37.71	62.60	25.95	9.29	8.59	71.89	27.33	245.81	46.58
Total	2,176.36	133.39	2,588.18	143.55	4,764.53	193.27	576.75	71.86	444.01	62.36	1,020.76	94.28	5,785.30	213.12
Nonstocked	201.60	41.84	20.16	12.30	221.77	43.61	130.86	34.74	11.62	10.65	142.48	36.33	364.24	56.72
All forest types	4,356.86	165.77	2,740.73	149.02	7,097.60	218.46	1,355.15	90.02	531.33	68.10	1,886.49	110.40	8,984.08	240.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D22: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	549.14	57.33	--	--	549.14	57.33	86.26	24.20	--	--	86.26	24.20	635.40	61.95
Fir / spruce / mountain hemlock	6.37	4.26	--	--	6.37	4.26	--	--	--	--	--	--	6.37	4.26
Western Hemlock / Sitka spruce	25.85	12.01	--	--	25.85	12.01	--	--	--	--	--	--	25.85	12.01
Lodgepole pine	--	--	--	--	--	--	4.51	4.61	0.51	0.82	5.02	4.68	5.02	4.68
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	507.98	51.97	--	--	507.98	51.97	61.22	23.49	--	--	61.22	23.49	569.20	56.51
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	2.76	2.01	--	--	2.76	2.01	2.35	2.35	22.98	19.73	25.33	19.87	28.09	19.97
Total	1,092.10	76.25	--	--	1,092.10	76.25	154.34	33.19	23.49	19.75	177.83	38.66	1,269.93	84.35
Hardwoods:														
Alder / maple	120.42	30.66	1.53	1.43	121.96	30.68	11.43	9.57	--	--	11.43	9.57	133.39	32.14
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	1,098.91	94.15	52.05	21.02	1,150.96	96.25	160.61	37.97	33.03	17.80	193.64	41.73	1,344.59	104.21
Western oak	213.58	43.29	239.62	41.49	453.20	60.02	--	--	30.89	15.43	30.89	15.43	484.09	62.42
Woodland hardwoods	--	--	--	--	--	--	--	--	1.98	1.79	1.98	1.79	1.98	1.79
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	87.38	26.75	2.46	2.34	89.84	26.85	18.50	13.64	--	--	18.50	13.64	108.34	30.12
Total	1,520.29	109.29	295.66	46.52	1,815.95	118.00	190.53	41.28	65.90	23.63	256.43	47.18	2,072.38	126.41
Nonstocked	21.61	12.89	--	--	21.61	12.89	--	--	--	--	--	--	21.61	12.89
All forest types	2,634.01	126.98	295.66	46.52	2,929.66	134.16	344.87	50.81	89.39	30.79	434.26	59.00	3,363.93	144.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D23: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	2,690.24	124.75	6.64	4.25	2,696.88	124.80	488.98	45.05	4.03	3.59	493.01	45.15	3,189.89	131.46
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	833.49	58.51	21.99	12.37	855.48	59.71	274.64	34.35	35.36	13.31	310.00	36.77	1,165.47	69.95
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	202.81	38.43	16.24	7.05	219.05	39.02	230.82	28.94	173.71	36.00	404.53	45.19	623.58	59.56
Pinyon / juniper	7.34	7.40	328.36	55.43	335.70	55.92	9.74	9.20	233.09	49.01	242.83	49.84	578.53	74.67
Ponderosa pine	1,472.68	102.77	44.58	24.89	1,517.26	105.51	90.48	20.39	20.57	12.25	111.04	23.76	1,628.30	108.13
Redwood	4.34	3.98	--	--	4.34	3.98	--	--	--	--	--	--	4.34	3.98
Western juniper	72.24	21.21	680.14	106.11	752.38	108.05	95.51	29.93	69.73	33.26	165.24	44.39	917.61	116.75
Western white pine	16.85	10.48	--	--	16.85	10.48	29.17	9.54	26.67	11.95	55.84	15.27	72.69	18.52
Other western softwoods	31.49	15.55	115.30	49.41	146.79	51.80	29.80	14.36	360.34	63.57	390.14	64.72	536.94	82.76
Total	5,331.47	167.57	1,213.25	131.70	6,544.72	209.61	1,249.14	70.71	923.51	93.33	2,172.64	112.10	8,717.37	234.89
Hardwoods:														
Alder / maple	13.16	8.94	--	--	13.16	8.94	--	--	--	--	--	--	13.16	8.94
Aspen / birch	8.36	5.95	9.42	5.82	17.78	8.32	12.97	11.84	25.17	13.56	38.14	18.01	55.92	19.84
Elm / ash / cottonwood	--	--	14.56	9.78	14.56	9.78	--	--	--	--	--	--	14.56	9.78
Tanoak / laurel	88.36	27.25	37.72	19.31	126.08	33.38	--	--	--	--	--	--	126.08	33.38
Western oak	1,257.24	103.56	3,893.24	171.54	5,150.49	196.63	151.94	35.98	320.37	53.80	472.31	64.83	5,622.80	205.80
Woodland hardwoods	--	--	56.92	23.25	56.92	23.25	--	--	6.24	5.64	6.24	5.64	63.15	23.93
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	144.21	34.52	142.18	35.90	286.39	49.78	--	--	1.56	1.46	1.56	1.46	287.95	49.80
Total	1,511.34	112.42	4,154.03	176.64	5,665.37	205.24	164.92	37.88	353.34	55.71	518.26	67.47	6,183.63	214.74
Nonstocked	619.72	72.75	96.82	30.15	716.53	78.63	162.62	40.04	69.17	25.83	231.79	47.59	948.32	91.89
All forest types	7,462.53	202.64	5,464.10	218.99	12,926.63	285.24	1,576.68	86.48	1,346.01	110.77	2,922.69	134.27	15,849.32	308.54

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D24: Aboveground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	22.56	11.41	--	--	22.56	11.41	17.85	9.29	--	--	17.85	9.29	40.40	14.71
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	6.75	4.95	--	--	6.75	4.95	--	--	--	--	--	--	6.75	4.95
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	10.38	6.34	10.38	6.34	10.38	6.34
Pinyon / juniper	--	--	387.05	60.33	387.05	60.33	--	--	253.18	50.32	253.18	50.32	640.23	78.45
Ponderosa pine	5.15	3.71	--	--	5.15	3.71	23.99	12.30	2.29	2.31	26.28	12.51	31.43	13.05
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	9.44	6.91	4.85	4.89	14.29	8.46	--	--	--	--	--	--	14.29	8.46
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	5.95	5.45	4.02	5.00	9.97	7.40	9.97	7.40
Total	43.91	14.69	391.89	60.53	435.80	62.23	47.78	16.21	269.88	50.96	317.66	53.48	753.46	81.94
Hardwoods:														
Alder / maple	--	--	7.96	5.55	7.96	5.55	--	--	--	--	--	--	7.96	5.55
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	0.12	0.12	0.12	0.12	--	--	4.07	5.54	4.07	5.54	4.19	5.55
Tanoak / laurel	--	--	--	--	--	--	--	--	10.48	10.29	10.48	10.29	10.48	10.29
Western oak	77.86	25.70	474.87	60.49	552.73	66.41	68.60	26.43	139.32	36.80	207.92	44.83	760.65	79.80
Woodland hardwoods	--	--	95.62	28.21	95.62	28.21	--	--	17.95	11.17	17.95	11.17	113.57	30.33
Exotic hardwoods	3.70	3.78	--	--	3.70	3.78	--	--	--	--	--	--	3.70	3.78
Other hardwoods	--	--	28.93	15.69	28.93	15.69	--	--	--	--	--	--	28.93	15.69
Total	81.55	25.97	607.50	68.60	689.05	73.97	68.60	26.43	171.81	40.20	240.41	47.66	929.47	87.65
Nonstocked	56.54	23.14	54.39	21.81	110.93	31.72	14.83	11.26	42.02	19.46	67.00	24.09	177.93	39.83
All forest types	182.00	37.62	1,053.78	94.14	1,235.79	101.68	131.22	32.79	483.71	67.34	625.07	74.86	1,860.86	125.78

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D25: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	468.44	15.81	2.19	0.91	470.63	15.83	90.19	5.99	1.34	0.96	91.53	6.04	562.16	16.74
Douglas-fir	104.43	8.18	--	--	104.43	8.18	24.26	4.10	3.37	1.71	27.63	4.44	132.06	9.26
Fir / spruce / mountain hemlock	112.08	7.14	3.43	1.58	115.51	7.30	44.89	4.59	4.42	1.57	49.31	4.83	164.83	8.73
Western Hemlock / Sitka spruce	2.87	1.33	--	--	2.87	1.33	0.21	0.21	--	--	0.21	0.21	3.08	1.35
Lodgepole pine	24.90	4.41	2.72	0.95	27.61	4.50	27.19	3.42	21.19	4.11	48.38	5.23	76.00	6.89
Pinyon / juniper	1.90	1.36	179.70	13.05	181.60	13.12	1.08	1.02	86.13	9.57	87.21	9.62	268.81	16.04
Ponderosa pine	228.65	13.61	8.66	3.60	237.31	14.04	16.50	2.88	3.61	1.50	20.11	3.24	257.42	14.39
Redwood	67.34	6.18	--	--	67.34	6.18	12.96	3.24	--	--	12.96	3.24	80.30	6.92
Western white pine	2.71	1.33	--	--	2.71	1.33	8.03	2.35	4.24	1.88	12.27	3.00	14.98	3.29
Other western softwoods	36.54	6.09	339.28	24.77	375.82	25.39	15.37	3.77	59.79	9.00	75.16	9.68	450.98	27.02
Total	1,049.86	21.97	535.98	27.44	1,585.84	34.01	240.68	9.83	184.09	13.67	424.77	16.06	2,010.61	36.48
Hardwoods:														
Alder / maple	26.86	4.81	3.12	1.18	29.99	4.95	5.58	2.31	1.79	1.42	7.37	2.72	37.36	5.65
Aspen / birch	2.03	1.20	4.30	1.93	6.33	2.27	3.49	2.07	3.62	1.71	7.11	2.68	13.44	3.52
Elm / ash / cottonwood	--	--	4.27	1.64	4.27	1.64	0.11	0.11	1.36	0.98	1.47	0.99	5.74	1.92
Tanoak / laurel	203.52	13.21	24.01	4.67	227.53	13.92	50.86	7.07	16.13	4.06	66.99	8.10	294.52	15.98
Western oak	323.35	17.14	958.52	26.20	1,281.88	30.18	51.81	7.17	141.94	11.16	193.75	13.01	1,475.63	32.35
Woodland hardwoods	2.37	1.57	21.79	4.62	24.16	4.88	--	--	4.65	1.77	4.65	1.77	28.81	5.19
Exotic hardwoods	0.41	0.42	0.47	0.40	0.88	0.58	--	--	--	--	--	--	0.88	0.58
Other hardwoods	51.55	6.86	25.62	4.93	77.16	8.42	11.51	3.64	4.12	2.05	15.63	4.15	92.79	9.38
Total	610.10	22.05	1,042.10	27.07	1,652.21	32.87	123.36	10.96	173.60	12.33	296.97	15.96	1,949.17	35.63
Nonstocked	123.36	10.77	28.81	5.35	152.17	11.99	35.70	6.14	14.96	3.90	51.79	7.32	203.96	14.03
All forest types	1,783.32	26.73	1,606.90	37.04	3,390.22	40.44	399.74	14.26	372.65	18.30	773.52	21.17	4,163.74	42.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D26: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	1.66	1.05	--	--	1.66	1.05	--	--	--	--	--	--	1.66	1.05
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	16.91	4.19	16.91	4.19	--	--	2.80	1.65	2.80	1.65	19.71	4.50
Ponderosa pine	--	--	3.18	2.27	3.18	2.27	--	--	0.35	0.34	0.35	0.34	3.53	2.30
Redwood	9.50	2.27	--	--	9.50	2.27	3.81	1.42	--	--	3.81	1.42	13.31	2.71
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	1.72	1.29	--	--	1.72	1.29	--	--	--	--	--	--	1.72	1.29
Total	12.88	2.81	20.09	4.76	32.97	5.53	3.81	1.42	3.15	1.68	6.96	2.20	39.93	5.97
Hardwoods:														
Alder / maple	--	--	0.83	0.62	0.83	0.62	0.78	0.86	--	--	0.78	0.86	1.60	1.06
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	0.69	0.41	0.69	0.41	--	--	0.07	0.09	0.07	0.09	0.75	0.42
Tanoak / laurel	5.73	2.24	9.73	2.85	15.46	3.61	3.82	1.97	6.46	2.46	10.28	3.15	25.74	4.80
Western oak	4.17	2.01	151.84	11.36	156.02	11.54	3.02	1.74	47.64	6.32	50.66	6.44	206.68	13.11
Woodland hardwoods	--	--	--	--	--	--	--	--	0.56	0.40	0.56	0.40	0.56	0.40
Exotic hardwoods	--	--	0.47	0.40	0.47	0.40	--	--	--	--	--	--	0.47	0.40
Other hardwoods	2.89	1.58	3.97	1.85	6.86	2.39	2.50	1.65	2.91	1.80	5.41	2.42	12.27	3.39
Total	12.80	3.39	167.52	11.91	180.32	12.35	10.11	3.14	57.64	7.09	67.75	7.52	248.07	14.32
Nonstocked	0.86	0.86	0.12	0.11	0.98	0.86	1.45	1.34	0.41	0.36	1.86	1.39	2.84	1.64
All forest types	26.53	4.53	187.73	12.80	214.27	13.53	15.37	3.64	61.20	7.32	76.57	7.90	290.84	15.53

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D27: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	1.21	1.03	1.21	1.03	--	--	0.84	0.76	0.84	0.76	2.05	1.28
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	12.86	3.30	12.86	3.30	--	--	0.09	0.09	0.09	0.09	12.95	3.30
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	14.07	3.46	14.07	3.46	--	--	0.93	0.77	0.93	0.77	15.00	3.54
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	14.07	3.46	14.07	3.46	--	--	0.93	0.77	0.93	0.77	15.00	3.54

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D28: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	22.42	3.46	0.58	0.42	23.00	3.48	--	--	--	--	--	--	23.00	3.48
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	6.45	1.69	--	--	6.45	1.69	2.01	0.97	--	--	2.01	0.97	8.46	1.95
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1.79	0.98	0.91	0.54	2.71	1.12	--	--	--	--	--	--	2.71	1.12
Pinyon / juniper	1.08	1.08	82.80	9.15	83.88	9.21	--	--	29.30	5.72	29.30	5.72	113.18	10.69
Ponderosa pine	46.91	7.29	0.53	0.40	47.44	7.30	1.66	0.89	--	--	1.66	0.89	49.10	7.36
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	19.83	4.95	238.02	21.00	257.84	21.52	--	--	8.02	3.52	8.02	3.52	265.87	21.80
Total	98.49	9.70	322.83	22.62	421.32	24.50	3.67	1.31	37.32	6.73	40.99	6.85	462.31	25.30
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01
Aspen / birch	1.10	1.01	3.25	1.82	4.35	2.08	2.05	1.59	0.02	0.02	2.07	1.59	6.42	2.62
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	0.85	0.71	2.61	1.58	3.46	1.87	--	--	--	--	--	--	3.46	1.87
Woodland hardwoods	2.37	1.57	4.46	2.19	6.83	2.70	--	--	--	--	--	--	6.83	2.70
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	5.25	2.26	0.71	0.72	5.97	2.37	--	--	--	--	--	--	5.97	2.37
Total	9.58	3.01	11.03	3.33	20.61	4.54	2.05	1.59	0.03	0.02	2.08	1.59	22.68	4.81
Nonstocked	22.56	4.75	9.65	3.15	32.21	5.70	--	--	0.90	0.91	0.90	0.91	33.11	5.77
All forest types	130.63	11.27	343.51	22.99	474.14	25.45	5.72	2.10	38.25	6.82	43.96	7.12	518.10	26.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D29: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	144.60	8.68	0.87	0.66	145.47	8.71	33.87	3.58	0.89	0.88	34.77	3.67	180.24	9.42
Douglas-fir	41.75	5.21	--	--	41.75	5.21	14.68	3.13	3.37	1.71	18.05	3.56	59.80	6.30
Fir / spruce / mountain hemlock	11.56	2.62	0.99	0.77	12.55	2.72	12.37	2.55	0.49	0.51	12.86	2.59	25.41	3.76
Western Hemlock / Sitka spruce	--	--	--	--	--	--	0.21	0.21	--	--	0.21	0.21	0.21	0.21
Lodgepole pine	0.57	0.55	--	--	0.57	0.55	1.04	1.05	0.68	0.70	1.72	1.26	2.29	1.38
Pinyon / juniper	--	--	0.51	0.51	0.51	0.51	--	--	--	--	--	--	0.51	0.51
Ponderosa pine	17.53	3.34	--	--	17.53	3.34	2.12	0.80	0.71	0.48	2.84	0.93	20.37	3.46
Redwood	0.92	0.66	--	--	0.92	0.66	2.35	1.41	--	--	2.35	1.41	3.26	1.56
Western white pine	0.84	0.65	--	--	0.84	0.65	4.79	2.10	1.28	1.33	6.06	2.48	6.90	2.56
Other western softwoods	2.12	1.35	12.34	4.15	14.46	4.36	0.52	0.46	0.98	1.00	1.50	1.10	15.96	4.49
Total	219.88	10.94	14.71	4.30	234.59	11.73	71.95	5.75	8.41	2.81	80.36	6.39	314.95	13.22
Hardwoods:														
Alder / maple	12.02	3.28	1.24	0.78	13.26	3.37	3.53	1.87	1.78	1.42	5.31	2.35	18.58	4.11
Aspen / birch	--	--	--	--	--	--	--	--	0.80	0.81	0.80	0.81	0.80	0.81
Elm / ash / cottonwood	--	--	0.75	0.53	0.75	0.53	0.11	0.11	--	--	0.11	0.11	0.86	0.54
Tanoak / laurel	65.87	7.80	4.30	1.94	70.18	8.03	29.20	5.35	4.83	2.27	34.03	5.80	104.21	9.86
Western oak	146.25	11.78	279.24	15.79	425.49	19.50	24.28	4.98	39.70	6.20	63.98	7.95	489.48	20.94
Woodland hardwoods	--	--	0.38	0.23	0.38	0.23	--	--	1.19	1.00	1.19	1.00	1.57	1.02
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	17.67	4.03	1.65	1.19	19.32	4.19	6.96	2.88	1.03	0.95	7.99	3.04	27.31	5.18
Total	241.82	14.82	287.58	15.95	529.39	21.47	64.08	7.98	49.33	6.93	113.42	10.48	642.81	23.68
Nonstocked	22.40	4.65	2.24	1.37	24.64	4.85	14.54	3.86	1.29	1.18	15.83	4.04	40.47	6.30
All forest types	484.10	18.42	304.53	16.56	788.62	24.27	150.57	10.00	59.04	7.57	209.61	12.27	998.23	26.72

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D30: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	61.02	6.37	--	--	61.02	6.37	9.58	2.69	--	--	9.58	2.69	70.60	6.88
Fir / spruce / mountain hemlock	0.71	0.47	--	--	0.71	0.47	--	--	--	--	--	--	0.71	0.47
Western Hemlock / Sitka spruce	2.87	1.33	--	--	2.87	1.33	--	--	--	--	--	--	2.87	1.33
Lodgepole pine	--	--	--	--	--	--	0.50	0.51	0.06	0.09	0.56	0.52	0.56	0.52
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	56.44	5.77	--	--	56.44	5.77	6.80	2.61	--	--	6.80	2.61	63.24	6.28
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	0.31	0.22	--	--	0.31	0.22	0.26	0.26	2.55	2.19	2.82	2.21	3.12	2.22
Total	121.34	8.47	--	--	121.34	8.47	17.15	3.69	2.61	2.19	19.76	4.30	141.10	9.37
Hardwoods:														
Alder / maple	13.38	3.41	0.17	0.16	13.55	3.41	1.27	1.06	--	--	1.27	1.06	14.82	3.57
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	122.10	10.46	5.78	2.34	127.88	10.69	17.85	4.22	3.67	1.98	21.52	4.64	149.40	11.58
Western oak	23.73	4.81	26.62	4.61	50.36	6.67	--	--	3.43	1.71	3.43	1.71	53.79	6.94
Woodland hardwoods	--	--	--	--	--	--	--	--	0.22	0.20	0.22	0.20	0.22	0.20
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	9.71	2.97	0.27	0.26	9.98	2.98	2.06	1.52	--	--	2.06	1.52	12.04	3.35
Total	168.92	12.14	32.85	5.17	201.77	13.11	21.17	4.59	7.32	2.63	28.49	5.24	230.27	14.05
Nonstocked	2.40	1.43	--	--	2.40	1.43	--	--	--	--	--	--	2.40	1.43
All forest types	292.67	14.11	32.85	5.17	325.52	14.91	38.32	5.65	9.93	3.42	48.25	6.56	373.77	16.03

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D31: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	298.92	13.86	0.74	0.47	299.65	13.87	54.33	5.01	0.45	0.40	54.78	5.02	354.43	14.61
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	92.61	6.50	2.44	1.37	95.05	6.63	30.52	3.82	3.93	1.48	34.44	4.09	129.50	7.77
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	22.53	4.27	1.80	0.78	24.34	4.34	25.65	3.22	19.30	4.00	44.95	5.02	69.29	6.62
Pinyon / juniper	0.82	0.82	36.48	6.16	37.30	6.21	1.08	1.02	25.90	5.45	26.98	5.54	64.28	8.30
Ponderosa pine	163.63	11.42	4.95	2.77	168.58	11.72	10.05	2.27	2.29	1.36	12.34	2.64	180.92	12.01
Redwood	0.48	0.44	--	--	0.48	0.44	--	--	--	--	--	--	0.48	0.44
Western white pine	1.87	1.16	--	--	1.87	1.16	3.24	1.06	2.96	1.33	6.20	1.70	8.08	2.06
Other western softwoods	11.52	2.92	88.38	12.99	99.91	13.30	13.92	3.69	47.79	7.93	61.71	8.65	161.62	15.84
Total	592.39	18.62	134.81	14.63	727.19	23.29	138.79	7.86	102.61	10.37	241.40	12.46	968.60	26.10
Hardwoods:														
Alder / maple	1.46	0.99	--	--	1.46	0.99	--	--	--	--	--	--	1.46	0.99
Aspen / birch	0.93	0.66	1.05	0.65	1.98	0.92	1.44	1.32	2.80	1.51	4.24	2.00	6.21	2.20
Elm / ash / cottonwood	--	--	1.62	1.09	1.62	1.09	--	--	--	--	--	--	1.62	1.09
Tanoak / laurel	9.82	3.03	4.19	2.15	14.01	3.71	--	--	--	--	--	--	14.01	3.71
Western oak	139.69	11.51	432.58	19.06	572.28	21.85	16.88	4.00	35.60	5.98	52.48	7.20	624.76	22.87
Woodland hardwoods	--	--	6.32	2.58	6.32	2.58	--	--	0.69	0.63	0.69	0.63	7.02	2.66
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	16.02	3.84	15.80	3.99	31.82	5.53	--	--	0.17	0.16	0.17	0.16	31.99	5.53
Total	167.93	12.49	461.56	19.63	629.49	22.80	18.32	4.21	39.26	6.19	57.58	7.50	687.07	23.86
Nonstocked	68.86	8.08	10.76	3.35	79.61	8.74	18.07	4.45	7.69	2.87	25.75	5.29	105.37	10.21
All forest types	829.17	22.52	607.12	24.33	1,436.29	31.69	175.19	9.61	149.56	12.31	324.74	14.92	1,761.03	34.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D32: Belowground Carbon, Dry Weight of Live Understory Vegetation, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	2.51	1.27	--	--	2.51	1.27	1.98	1.03	--	--	1.98	1.03	4.49	1.63
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	0.75	0.55	--	--	0.75	0.55	--	--	--	--	--	--	0.75	0.55
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	1.15	0.70	1.15	0.70	1.15	0.70
Pinyon / juniper	--	--	43.01	6.70	43.01	6.70	--	--	28.13	5.59	28.13	5.59	71.14	8.72
Ponderosa pine	0.57	0.41	--	--	0.57	0.41	2.67	1.37	0.25	0.26	2.92	1.39	3.49	1.45
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	1.05	0.77	0.54	0.54	1.59	0.94	0.66	0.61	0.45	0.56	1.11	0.82	2.70	1.25
Total	4.88	1.63	43.54	6.73	48.42	6.91	5.31	1.80	29.99	5.66	35.30	5.94	83.72	9.10
Hardwoods:														
Alder / maple	--	--	0.88	0.62	0.88	0.62	--	--	--	--	--	--	0.88	0.62
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	0.01	0.01	0.01	0.01	--	--	0.45	0.62	0.45	0.62	0.47	0.62
Tanoak / laurel	--	--	--	--	--	--	--	--	1.16	1.14	1.16	1.14	1.16	1.14
Western oak	8.65	2.86	52.76	6.72	61.41	7.38	7.62	2.94	15.48	4.09	23.10	4.98	84.52	8.87
Woodland hardwoods	--	--	10.62	3.13	10.62	3.13	--	--	1.99	1.24	1.99	1.24	12.62	3.37
Exotic hardwoods	0.41	0.42	--	--	0.41	0.42	--	--	--	--	--	--	0.41	0.42
Other hardwoods	--	--	3.21	1.74	3.21	1.74	--	--	--	--	--	--	3.21	1.74
Total	9.06	2.89	67.50	7.62	76.56	8.22	7.62	2.94	19.09	4.47	26.71	5.30	103.27	9.74
Nonstocked	6.28	2.57	6.04	2.42	12.33	3.52	1.65	1.25	4.67	2.16	7.44	2.68	19.77	4.43
All forest types	20.22	4.18	117.09	10.46	137.31	11.30	14.58	3.64	53.74	7.48	69.45	8.32	206.76	13.98

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D33: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	57,412	1,719	93	48	57,505	1,719	14,529	985	105	84	14,633	987	72,139	1,921
Douglas-fir	11,467	1,035	--	--	11,467	1,035	3,750	713	52	30	3,802	713	15,268	1,249
Fir / spruce / mountain hemlock	12,847	953	143	94	12,990	957	6,466	798	262	117	6,728	806	19,718	1,247
Western Hemlock / Sitka spruce	507	230	--	--	507	230	24	24	--	--	24	24	531	232
Lodgepole pine	1,562	269	298	109	1,861	289	3,573	455	1,029	217	4,602	486	6,463	561
Pinyon / juniper	18	14	796	84	814	85	4	4	478	70	481	71	1,295	110
Ponderosa pine	9,124	586	99	49	9,224	587	1,278	251	97	45	1,375	255	10,599	637
Redwood	10,674	1,081	--	--	10,674	1,081	5,171	1,482	--	--	5,171	1,482	15,845	1,815
Western juniper	404	78	896	83	1,300	113	306	95	53	23	359	98	1,658	149
Western white pine	111	54	--	--	111	54	442	135	121	54	563	145	674	155
Other western softwoods	336	136	127	41	463	142	191	88	917	179	1,108	199	1,571	244
Total	104,461	2,150	2,453	197	106,914	2,149	35,733	1,922	3,113	322	38,846	1,929	145,761	2,713
Hardwoods:														
Alder / maple	1,158	246	91	46	1,249	250	488	209	3	4	491	209	1,740	326
Aspen / birch	57	38	16	7	73	38	7	5	50	34	57	35	130	52
Elm / ash / cottonwood	--	--	93	53	93	53	--	--	34	28	34	28	127	60
Tanoak / laurel	14,341	1,080	736	181	15,076	1,092	3,623	615	511	217	4,134	649	19,210	1,263
Western oak	12,580	833	16,697	660	29,277	1,030	1,491	267	2,730	303	4,221	401	33,498	1,094
Woodland hardwoods	17	12	72	23	88	26	--	--	42	21	42	21	130	33
Exotic hardwoods		1	--	--	1	--	--	--	--	--	--	--		1
Other hardwoods	2,128	408	197	48	2,325	411	439	220	36	26	475	222	2,801	464
Total	30,281	1,388	17,902	683	48,183	1,489	6,048	718	3,405	376	9,453	800	57,636	1,661
Nonstocked	206	44	11	9	217	44	77	39	2	2	79	39	296	59
All forest types	134,949	2,194	20,365	706	155,314	2,159	41,858	1,946	6,521	490	48,379	1,962	203,693	2,618

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D34: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	266	175	--	--	266	175	--	--	--	--	--	--	266	175
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	34	10	34	10	--	--	4	2	4	2	38	11
Ponderosa pine	--	--	8	6	8	6	--	--	11	11	11	11	20	12
Redwood	2,105	534	--	--	2,105	534	1,296	506	--	--	1,296	506	3,400	754
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	131	103	--	--	131	103	--	--	--	--	--	--	131	103
Total	2,502	571	43	12	2,545	571	1,296	506	15	11	1,311	506	3,855	780
Hardwoods:														
Alder / maple	--	--	16	12	16	12	69	77	--	--	69	77	85	77
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	9	7	9	7	--	--	1	1	1	1	10	7
Tanoak / laurel	555	225	342	111	897	251	588	322	207	92	796	335	1,692	419
Western oak	182	89	2,669	252	2,851	267	60	42	864	147	923	151	3,774	303
Woodland hardwoods	--	--	--	--	--	--	--	--	1	1	1	1	1	1
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	281	175	44	20	325	176	268	191	2	2	271	191	596	255
Total	1,018	299	3,080	275	4,098	403	985	375	1,076	175	2,061	407	6,158	565
Nonstocked	4	4	10	9	14	9	--	--	--	--	--	--	14	9
All forest types	3,524	641	3,132	275	6,656	694	2,281	614	1,091	176	3,371	635	10,027	943

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D35: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	46	48	46	48	--	--	27	27	27	27	73	55
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	166	55	166	55	--	--	2	3	2	3	169	55
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	213	72	213	72	--	--	29	27	29	27	242	77
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	213	72	213	72	--	--	29	27	29	27	242	77

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D36: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	1,153	179	42	35	1,194	182	--	--	--	--	--	--	1,194	182
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	576	175	--	--	576	175	249	140	--	--	249	140	826	224
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	105	55	130	80	235	97	--	--	--	--	--	--	235	97
Pinyon / juniper	5	5	419	59	424	60	--	--	192	44	192	44	616	73
Ponderosa pine	1,240	177	20	13	1,260	177	101	55	--	--	101	55	1,361	185
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	186	46	657	70	842	83	--	--	8	7	8	7	851	83
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	10	10	33	24	43	26	--	--	252	99	252	99	294	102
Total	3,275	313	1,299	128	4,574	338	351	150	452	108	803	185	5,377	385
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	26	24	10	6	36	25	4	4	--	--	4	4	40	25
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	14	12	23	19	37	22	--	--	--	--	--	--	37	22
Woodland hardwoods	17	12	19	11	35	16	--	--	--	--	--	--	35	16
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	14	9			14	9	--	--	--	--	--	--	14	9
Total	71	31	51	23	122	38	4	4	--	--	4	4	127	39
Nonstocked	17	8			18	8	--	--	--	--	--	--	18	8
All forest types	3,363	316	1,351	130	4,714	341	355	151	452	108	807	185	5,521	388

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D37: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	21,724	1,286	14	13	21,739	1,286	6,290	649	12	11	6,302	649	28,040	1,433
Douglas-fir	4,798	666	--	--	4,798	666	2,172	507	52	30	2,223	508	7,022	836
Fir / spruce / mountain hemlock	1,009	278	29	35	1,038	280	1,338	337	9	9	1,347	337	2,385	438
Western Hemlock / Sitka spruce	--	--	--	--	--	--	24	24	--	--	24	24	24	24
Lodgepole pine	22	21	--	--	22	21	8	8	12	13	20	15	43	26
Pinyon / juniper	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Ponderosa pine	764	175	--	--	764	175	362	152	27	27	389	154	1,153	233
Redwood	131	127	--	--	131	127	1,110	672	--	--	1,110	672	1,240	684
Western juniper	--	--	4	3	4	3	--	--	--	--	--	--	4	3
Western white pine	53	44	--	--	53	44	53	26	4	4	57	26	110	51
Other western softwoods	41	29	60	29	101	41	14	12	6	6	19	13	121	43
Total	28,543	1,449	108	48	28,651	1,449	11,371	1,051	121	45	11,492	1,052	40,143	1,768
Hardwoods:														
Alder / maple	444	138	42	33	486	142	286	158	3	4	289	158	775	212
Aspen / birch	--	--	--	--	--	--	--	--	2	2	2	2	2	2
Elm / ash / cottonwood	--	--	17	12	17	12	--	--	--	--	--	--	17	12
Tanoak / laurel	5,203	742	127	66	5,330	745	1,846	422	62	50	1,908	425	7,238	856
Western oak	6,333	627	5,776	438	12,108	757	743	188	990	201	1,733	276	13,841	803
Woodland hardwoods	--	--	1	1	1	1	--	--	6	5	6	5	7	6
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	933	271	37	29	970	273	27	19	25	25	52	32	1,022	274
Total	12,913	1,004	6,000	444	18,914	1,087	2,902	483	1,088	209	3,989	526	22,903	1,200
Nonstocked	33	12	--	--	33	12	55	35	--	--	55	35	88	37
All forest types	41,489	1,713	6,109	446	47,598	1,755	14,327	1,107	1,209	214	15,536	1,123	63,134	2,043

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D38: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	6,402	788	--	--	6,402	788	1,578	512	--	--	1,578	512	7,980	933
Fir / spruce / mountain hemlock	79	53	--	--	79	53	--	--	--	--	--	--	79	53
Western Hemlock / Sitka spruce	507	230	--	--	507	230	--	--	--	--	--	--	507	230
Lodgepole pine	--	--	--	--	--	--	5	5	--	--	5	5	5	5
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	8,433	950	--	--	8,433	950	2,766	1,246	--	--	2,766	1,246	11,199	1,540
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	69	65	--	--	69	65	28	45	5	5	34	45	103	79
Total	15,489	1,226	--	--	15,489	1,226	4,377	1,327	5	5	4,383	1,327	19,872	1,765
Hardwoods:														
Alder / maple	606	187	--	--	606	187	134	113	--	--	134	113	740	219
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	7,936	752	264	128	8,200	761	1,188	321	231	189	1,420	372	9,620	843
Western oak	1,103	247	729	145	1,832	286	--	--	99	59	99	59	1,931	292
Woodland hardwoods	--	--	--	--	--	--	--	--	20	18	20	18	20	18
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	581	193	13	13	594	193	144	112	--	--	144	112	738	223
Total	10,227	824	1,006	194	11,233	842	1,466	353	350	199	1,816	404	13,048	929
Nonstocked	7	5	--	--	7	5	--	--	--	--	--	--	7	5
All forest types	25,723	1,419	1,006	194	26,729	1,427	5,843	1,349	355	199	6,198	1,363	32,927	1,923

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D39: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	34,380	1,423	37	30	34,417	1,424	8,078	786	93	83	8,172	789	42,589	1,588
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	11,100	902	114	87	11,214	906	4,878	722	253	117	5,131	731	16,345	1,161
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,435	262	169	75	1,604	272	3,560	455	963	215	4,523	485	6,127	552
Pinyon / juniper	13	13	203	50	216	51	4	4	208	52	212	52	428	73
Ponderosa pine	7,055	538	71	47	7,126	540	688	185	33	21	721	186	7,847	570
Redwood	6	5	--	--	6	5	--	--	--	--	--	--	6	5
Western juniper	176	55	223	43	399	70	306	95	44	21	350	97	749	120
Western white pine	58	32	--	--	58	32	389	133	117	54	505	143	564	147
Other western softwoods	84	52	34	16	118	54	140	75	655	150	794	166	913	175
Total	54,306	1,640	852	144	55,158	1,643	18,043	1,103	2,366	301	20,409	1,123	75,567	1,926
Hardwoods:														
Alder / maple	108	84	--	--	108	84	--	--	--	--	--	--	108	84
Aspen / birch	30	29	6	4	37	29	2	2	48	34	50	34	87	45
Elm / ash / cottonwood	--	--	21	18	21	18	--	--	--	--	--	--	21	18
Tanoak / laurel	646	237	3	2	649	237	--	--	--	--	--	--	649	237
Western oak	4,745	496	6,603	422	11,349	637	609	179	595	152	1,204	234	12,552	673
Woodland hardwoods	--	--	12	8	12	8	--	--	1	1	1	1	14	8
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	319	160	83	28	402	163	--	--	9	9	9	9	411	163
Total	5,849	577	6,729	423	12,578	699	611	179	653	156	1,264	237	13,843	733
Nonstocked	142	41			143	41	21	18	2	2	23	18	166	45
All forest types	60,298	1,677	7,581	446	67,879	1,691	18,675	1,112	3,022	338	21,697	1,136	89,576	1,948

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D40: Belowground Carbon, Dry Weight of Live Trees (>= 1 inch) by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	155	88	--	--	155	88	160	84	--	--	160	84	315	121
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	83	62	--	--	83	62	--	--	--	--	--	--	83	62
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	54	33	54	33	54	33
Pinyon / juniper	--	--	139	40	139	40	--	--	73	24	73	24	212	47
Ponderosa pine	65	47	--	--	65	47	127	62	26	27	153	68	218	82
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	43	31	12	12	55	34	--	--	--	--	--	--	55	34
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	9	8	--	--	9	8	9	8
Total	346	121	151	42	497	128	296	103	154	49	449	114	947	172
Hardwoods:														
Alder / maple	--	--	33	29	33	29	--	--	--	--	--	--	33	29
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	6	8	6	8	6	8
Tanoak / laurel	--	--	--	--	--	--	--	--	11	10	11	10	11	10
Western oak	202	81	731	145	934	169	80	49	180	79	260	93	1,194	192
Woodland hardwoods	--	--	39	19	39	19	--	--	13	8	13	8	53	20
Exotic hardwoods	--	1	--	--	--	1	--	--	--	--	--	--	--	1
Other hardwoods	--	--	19	12	19	12	--	--	--	--	--	--	19	12
Total	203	81	823	149	1,026	172	80	49	210	81	290	94	1,315	196
Nonstocked	3	2			3	2	1	1	--	--	1	1	4	2
All forest types	552	146	974	155	1,526	215	377	116	363	94	740	149	2,266	261

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D41: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	5,732	291	22	17	5,754	291	2,817	294	3	2	2,820	294	8,573	409
Douglas-fir	742	105	--	--	742	105	359	87	5	4	364	87	1,106	136
Fir / spruce / mountain hemlock	1,787	187	9	5	1,796	187	1,200	180	31	14	1,232	181	3,027	259
Western Hemlock / Sitka spruce	76	60	--	--	76	60	--	--	--	--	--	--	76	60
Lodgepole pine	212	49	50	31	262	58	454	78	129	31	583	82	845	100
Pinyon / juniper	3	3	66	13	70	13	1	1	39	8	40	8	109	16
Ponderosa pine	356	55	22	21	378	59	55	19	14	7	69	20	447	62
Redwood	718	120	--	--	718	120	252	90	--	--	252	90	970	149
Western juniper	20	8	32	7	52	10	36	14	--	--	36	14	88	18
Western white pine	29	16	--	--	29	16	66	22	22	15	88	27	117	31
Other western softwoods	27	14	44	24	71	28	29	17	136	34	165	38	237	47
Total	9,702	368	245	49	9,947	370	5,270	351	378	50	5,648	353	15,595	501
Hardwoods:														
Alder / maple	243	71	6	5	249	71	47	26	5	4	52	26	301	76
Aspen / birch	2	2	1	1	4	2	10	8	2	2	13	8	16	9
Elm / ash / cottonwood	--	--	5	5	5	5	--	--	3	3	3	3	9	6
Tanoak / laurel	727	93	57	24	784	96	302	69	80	39	382	79	1,166	124
Western oak	1,463	227	1,199	110	2,661	251	429	111	292	56	721	122	3,382	279
Woodland hardwoods	4	3	25	8	29	9	--	--	8	5	8	5	37	10
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	172	50	19	7	190	51	51	24	1	1	52	24	242	56
Total	2,612	259	1,312	113	3,923	280	839	134	391	68	1,230	149	5,154	316
Nonstocked	1,210	252	24	8	1,234	252	630	176	40	21	670	178	1,903	309
All forest types	13,523	485	1,581	123	15,104	494	6,739	395	809	87	7,548	399	22,652	619

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D42: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	5	4	--	--	5	4	--	--	--	--	--	--	5	4
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	3	1	3	1	--	--					3	1
Ponderosa pine	--	--					--	--	1	1	1	1	1	1
Redwood	81	26	--	--	81	26	37	23	--	--	37	23	117	35
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	17	13	--	--	17	13	--	--	--	--	--	--	17	13
Total	103	29	3	1	105	29	37	23	1	1	38	23	143	37
Hardwoods:														
Alder / maple	--	--	--	--	--	--	1	1	--	--	1	1	1	1
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	15	7	25	17	40	19	13	8	57	36	70	37	111	42
Western oak	4	2	154	25	158	25	2	2	75	39	77	39	235	47
Woodland hardwoods	--	--	--	--	--	--	--	--	4	4	4	4	4	4
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	23	16	1	1	25	16	24	17	1	1	25	17	49	23
Total	42	17	180	31	223	35	40	19	137	54	177	57	399	67
Nonstocked			--	--			2	2	--	--	2	2	2	2
All forest types	145	34	183	31	328	45	79	29	138	54	217	61	545	76

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D43: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	4	4	4	4	--	--	3	3	3	3	8	6
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	6	3	6	3	--	--	--	--	--	--	6	3
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	11	6	11	6	--	--	3	3	3	3	14	6
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	11	6	11	6	--	--	3	3	3	3	14	6

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D44: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	86	21	1	1	87	21	--	--	--	--	--	--	87	21
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	67	25	--	--	67	25	20	11	--	--	20	11	87	27
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	3	2	35	29	37	29	--	--	--	--	--	--	37	29
Pinyon / juniper	--	--	27	6	27	6	--	--	9	3	9	3	36	7
Ponderosa pine	31	10			32	10	4	3	--	--	4	3	36	11
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	6	3	23	6	29	7	--	--	--	--	--	--	29	7
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	5	5	5	5	--	--	23	11	23	11	28	12
Total	193	34	90	31	284	46	24	12	32	11	57	16	341	49
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	2	2			2	2	10	8	--	--	10	8	13	8
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	2	2	--	--	2	2	--	--	--	--	--	--	2	2
Woodland hardwoods	4	3	6	3	10	4	--	--	--	--	--	--	10	4
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	3	3	--	--	3	3	--	--	--	--	--	--	3	3
Total	12	5	6	3	18	6	10	8	--	--	10	8	28	10
Nonstocked	64	29	4	4	68	29	--	--	--	--	--	--	68	29
All forest types	269	45	100	31	369	55	35	15	32	11	67	18	437	58

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D45: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	2,271	206	3	3	2,274	206	1,240	200	--	--	1,240	200	3,514	287
Douglas-fir	406	86	--	--	406	86	251	77	5	4	256	77	662	115
Fir / spruce / mountain hemlock	147	43	3	3	150	43	360	114			361	114	511	122
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine			--	--			2	2	1	1	2	2	3	2
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	68	28	--	--	68	28	16	10	8	6	23	11	92	30
Redwood	6	6	--	--	6	6	25	16	--	--	25	16	32	17
Western juniper	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Western white pine	8	6	--	--	8	6	15	8	1	1	16	8	23	10
Other western softwoods	9	6	19	15	28	16			--	--			28	16
Total	2,916	226	26	16	2,942	227	1,910	231	14	7	1,924	231	4,866	322
Hardwoods:														
Alder / maple	78	44	5	5	83	44	28	17	5	4	33	18	115	48
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Tanoak / laurel	372	80	13	13	385	81	177	54	19	13	196	56	581	98
Western oak	710	198	307	55	1,017	205	194	86	76	22	270	89	1,288	224
Woodland hardwoods	--	--	--	--	--	--	--	--	1	1	1	1	1	1
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	109	45	1	1	110	45	26	17			26	17	136	48
Total	1,269	222	327	56	1,596	229	426	104	101	26	526	107	2,122	253
Nonstocked	408	173	4	3	412	173	363	131	5	5	368	131	780	217
All forest types	4,593	355	357	59	4,950	359	2,698	275	120	29	2,818	276	7,768	450

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D46: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	331	60	--	--	331	60	108	42	--	--	108	42	439	74
Fir / spruce / mountain hemlock	10	10	--	--	10	10	--	--	--	--	--	--	10	10
Western Hemlock / Sitka spruce	76	60	--	--	76	60	--	--	--	--	--	--	76	60
Lodgepole pine	--	--	--	--	--	--	2	2	--	--	2	2	2	2
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	631	117	--	--	631	117	190	86	--	--	190	86	820	144
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	1	1	--	--	1	1	3	5	1		4	5	5	6
Total	1,050	144	--	--	1,050	144	304	95	1		304	95	1,354	171
Hardwoods:														
Alder / maple	149	55			149	55	18	19	--	--	18	19	168	58
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	320	47	11	6	330	47	111	42	4	3	115	42	446	63
Western oak	61	20	17	6	78	21	--	--	1	1	1	1	79	21
Woodland hardwoods	--	--	--	--	--	--	--	--						
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	14	6	1	1	15	7	1	1	--	--	1	1	16	7
Total	543	75	30	9	573	75	131	46	5	4	136	46	709	88
Nonstocked	2	1	--	--	2	1	--	--	--	--	--	--	2	1
All forest types	1,594	162	30	9	1,624	162	434	104	6	4	440	104	2,064	191

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D47: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	3,363	226	18	17	3,381	227	1,550	222	3	2	1,553	222	4,934	313
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	1,555	181	6	4	1,561	181	820	141	31	14	851	142	2,412	229
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	209	49	15	9	224	50	450	77	105	27	555	81	779	95
Pinyon / juniper	3	3	17	8	20	9	1	1	21	7	22	7	43	12
Ponderosa pine	256	46	22	21	278	51	30	15	5	4	35	16	313	53
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	8	4	7	3	15	5	36	14	--	--	36	14	51	15
Western white pine	21	15	--	--	21	15	51	21	21	15	72	25	93	29
Other western softwoods	--	--	20	18	20	18	26	17	112	32	137	36	158	40
Total	5,415	286	106	35	5,521	288	2,963	266	298	47	3,261	269	8,782	388
Hardwoods:														
Alder / maple	17	12	--	--	17	12	--	--	--	--	--	--	17	12
Aspen / birch	--	--	1	1	1	1	--	--	2	2	2	2	3	2
Elm / ash / cottonwood	--	--					--	--	--	--	--	--		
Tanoak / laurel	21	9	7	7	28	12	--	--	--	--	--	--	28	12
Western oak	624	107	611	89	1,235	138	140	54	82	27	222	60	1,457	150
Woodland hardwoods	--	--	9	5	9	5	--	--	--	--	--	--	9	5
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	23	14	15	7	37	15	--	--	--	--	--	--	37	15
Total	684	108	644	89	1,327	140	140	54	84	27	225	60	1,552	152
Nonstocked	674	178	10	6	685	178	263	118	34	20	297	120	982	215
All forest types	6,773	343	760	96	7,533	353	3,367	291	416	57	3,783	295	11,316	452

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D48: Belowground Carbon, Dry Weight of Dead Trees (>= 5 inch) by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	11	7	--	--	11	7	26	15	--	--	26	15	38	16
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	7	6	--	--	7	6	--	--	--	--	--	--	7	6
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	24	16	24	16	24	16
Pinyon / juniper	--	--	20	8	20	8	--	--	8	3	8	3	28	8
Ponderosa pine			--	--			5	3	--	--	5	3	5	3
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	6	6			7	6	--	--	--	--	--	--	7	6
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	25	11	20	8	45	13	32	15	32	16	64	22	109	25
Hardwoods:														
Alder / maple	--	--	1	1	1	1	--	--	--	--	--	--	1	1
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	63	33	102	24	165	41	92	45	57	22	150	50	315	65
Woodland hardwoods	--	--	10	5	10	5	--	--	3	2	3	2	13	6
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	63	33	114	25	177	41	92	45	61	22	153	50	330	65
Nonstocked	61	40	6	3	67	41	2	2			2	2	70	41
All forest types	149	53	140	26	289	59	126	47	94	27	220	55	509	81

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D49: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	306,286.38	7,604.93	1,277.83	584.00	307,564.21	7,619.57	71,676.80	4,120.04	718.41	473.64	72,395.21	4,135.54	379,959.42	8,413.88
Douglas-fir	40,436.98	3,184.57	--	--	40,436.98	3,184.57	11,383.89	1,917.14	1,332.08	666.41	12,715.97	2,028.77	53,152.95	3,757.86
Fir / spruce / mountain hemlock	69,133.12	4,323.24	1,756.44	749.78	70,889.56	4,380.50	28,101.03	2,845.15	2,785.75	978.37	30,886.78	2,997.17	101,776.34	5,296.75
Western Hemlock / Sitka spruce	1,249.27	587.21	--	--	1,249.27	587.21	92.03	91.56	--	--	92.03	91.56	1,341.30	593.95
Lodgepole pine	12,616.22	1,819.76	2,200.57	763.10	14,816.78	1,962.94	18,279.86	2,075.80	9,599.81	1,576.08	27,879.67	2,501.97	42,696.46	3,162.68
Pinyon / juniper	422.73	302.77	35,741.12	2,622.15	36,163.84	2,638.91	194.50	183.24	16,133.14	1,818.95	16,327.64	1,827.13	52,491.48	3,169.31
Ponderosa pine	86,480.42	4,184.84	1,828.40	647.48	88,308.82	4,226.24	9,210.33	1,526.22	1,451.38	554.98	10,661.71	1,618.45	98,970.53	4,507.73
Redwood	32,819.03	2,977.07	--	--	32,819.03	2,977.07	5,249.64	1,197.98	--	--	5,249.64	1,197.98	38,068.67	3,188.07
Western juniper	7,730.62	1,343.19	48,884.59	3,406.20	56,615.21	3,635.45	4,079.48	1,093.64	1,864.15	712.92	5,943.63	1,299.84	62,558.85	3,852.54
Western white pine	1,331.89	575.48	--	--	1,331.89	575.48	4,012.05	1,038.17	1,849.57	724.62	5,861.62	1,264.96	7,193.51	1,389.26
Other western softwoods	3,038.30	861.28	4,338.21	1,055.46	7,376.51	1,362.28	2,301.29	787.86	15,642.25	1,984.24	17,943.54	2,112.52	25,320.05	2,509.59
Total	561,544.95	8,478.91	96,027.15	4,435.70	657,572.11	9,208.62	154,580.91	5,207.94	51,376.54	3,337.96	205,957.45	5,753.10	863,529.56	10,043.12
Hardwoods:														
Alder / maple	7,139.14	1,289.69	783.74	304.19	7,922.89	1,324.56	1,467.85	608.61	476.21	378.03	1,944.06	716.46	9,866.94	1,505.55
Aspen / birch	585.62	351.66	1,147.25	522.31	1,732.88	629.66	916.46	540.96	958.34	461.70	1,874.80	711.20	3,607.68	949.88
Elm / ash / cottonwood	--	--	1,086.05	447.73	1,086.05	447.73	20.62	20.43	327.37	245.24	347.99	246.09	1,434.04	510.88
Tanoak / laurel	53,983.27	3,552.35	6,080.85	1,182.06	60,064.12	3,721.85	14,680.09	2,064.41	4,467.54	1,142.31	19,147.63	2,345.27	79,211.75	4,366.03
Western oak	85,952.87	4,590.98	228,108.88	6,362.65	314,061.75	7,547.68	13,850.30	1,917.67	35,382.07	2,818.98	49,232.37	3,350.61	363,294.11	8,131.26
Woodland hardwoods	681.14	451.37	4,422.07	965.44	5,103.21	1,065.19	--	--	1,061.38	400.13	1,061.38	400.13	6,164.59	1,137.78
Exotic hardwoods	74.30	75.91	75.06	64.57	149.36	99.65	--	--	--	--	--	--	149.36	99.65
Other hardwoods	14,898.10	1,995.61	6,685.08	1,281.88	21,583.18	2,363.43	3,670.54	1,161.14	881.51	421.99	4,552.05	1,230.88	26,135.23	2,663.10
Total	163,314.43	5,970.31	248,389.00	6,579.07	411,703.43	8,345.52	34,605.86	3,096.34	43,554.41	3,139.29	78,160.27	4,268.41	489,863.70	9,138.29
Nonstocked	28,213.81	2,475.50	6,408.45	1,208.04	34,622.26	2,745.72	8,626.63	1,497.55	3,034.11	805.06	11,934.51	1,712.72	46,556.77	3,232.38
All forest types	753,073.20	7,940.23	350,824.60	7,653.88	1,103,897.80	8,954.73	197,813.40	5,483.49	97,965.06	4,506.98	296,052.22	6,130.71	1,399,950.03	8,855.48

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D50: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	724.95	454.05	--	--	724.95	454.05	--	--	--	--	--	--	724.95	454.05
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	3,136.58	783.83	3,136.58	783.83	--	--	565.74	334.18	565.74	334.18	3,702.31	852.01
Ponderosa pine	--	--	551.79	394.60	551.79	394.60	--	--	187.44	178.49	187.44	178.49	739.24	433.09
Redwood	4,525.48	1,086.50	--	--	4,525.48	1,086.50	1,955.48	724.39	--	--	1,955.48	724.39	6,480.96	1,313.08
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	753.81	463.42	--	--	753.81	463.42	--	--	--	--	--	--	753.81	463.42
Total	6,004.24	1,262.29	3,688.37	877.20	9,692.61	1,537.16	1,955.48	724.39	753.18	378.85	2,708.66	817.48	12,401.28	1,746.41
Hardwoods:														
Alder / maple	--	--	215.09	170.29	215.09	170.29	237.56	264.40	--	--	237.56	264.40	452.65	314.49
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	167.00	104.66	167.00	104.66	--	--	19.94	27.18	19.94	27.18	186.95	108.14
Tanoak / laurel	1,693.88	664.87	2,563.94	754.41	4,257.82	1,003.12	1,133.86	585.63	1,644.38	624.52	2,778.24	856.15	7,036.06	1,318.59
Western oak	1,117.13	543.77	35,575.28	2,685.43	36,692.42	2,739.86	753.20	448.27	11,220.87	1,504.50	11,974.07	1,537.07	48,666.49	3,117.42
Woodland hardwoods	--	--	--	--	--	--	--	--	134.49	95.55	134.49	95.55	134.49	95.55
Exotic hardwoods	--	--	75.06	64.57	75.06	64.57	--	--	--	--	--	--	75.06	64.57
Other hardwoods	1,075.36	587.14	1,268.96	597.50	2,344.33	824.23	932.65	617.04	585.12	351.92	1,517.77	702.37	3,862.10	1,079.17
Total	3,886.38	1,039.13	39,865.34	2,859.77	43,751.72	3,028.89	3,057.26	972.74	13,604.80	1,686.13	16,662.07	1,876.90	60,413.78	3,530.51
Nonstocked	145.70	145.88	29.30	25.13	175.00	148.03	352.06	327.03	68.65	60.44	420.71	332.57	595.71	364.03
All forest types	10,036.32	1,639.84	43,583.01	2,986.04	53,619.33	3,387.38	5,364.80	1,225.25	14,426.63	1,728.82	19,791.44	2,037.27	73,410.77	3,916.87

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D51: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	327.93	300.57	327.93	300.57	--	--	235.31	223.82	235.31	223.82	563.24	374.75
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	2,526.69	652.21	2,526.69	652.21	--	--	16.29	16.80	16.29	16.80	2,542.97	652.43
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	2,854.62	718.03	2,854.62	718.03	--	--	251.59	224.45	251.59	224.45	3,106.22	752.30
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	2,854.62	718.03	2,854.62	718.03	--	--	251.59	224.45	251.59	224.45	3,106.22	752.30

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D52: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	11,646.89	1,695.77	409.86	314.14	12,056.75	1,723.00	--	--	--	--	--	--	12,056.75	1,723.00
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	4,019.02	1,044.94	--	--	4,019.02	1,044.94	1,451.89	698.37	--	--	1,451.89	698.37	5,470.91	1,256.83
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	853.01	440.57	788.76	461.07	1,641.77	637.72	--	--	--	--	--	--	1,641.77	637.72
Pinyon / juniper	241.96	241.77	16,726.75	1,861.67	16,968.70	1,876.74	--	--	5,398.80	1,065.34	5,398.80	1,065.34	22,367.51	2,132.05
Ponderosa pine	15,261.89	1,852.72	253.01	171.40	15,514.90	1,859.90	899.48	454.94	--	--	899.48	454.94	16,414.38	1,913.82
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	4,310.86	997.19	36,406.43	2,966.27	40,717.29	3,114.29	--	--	349.81	299.99	349.81	299.99	41,067.10	3,127.92
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	197.29	202.44	542.13	381.33	739.42	431.73	--	--	2,657.19	840.46	2,657.19	840.46	3,396.61	944.86
Total	36,530.92	2,926.93	55,126.94	3,510.07	91,657.86	4,548.39	2,351.37	833.48	8,405.80	1,392.43	10,757.17	1,613.73	102,415.03	4,799.40
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	1.62	1.67	1.62	1.67	1.62	1.67
Aspen / birch	323.20	294.91	889.68	499.97	1,212.88	580.47	562.07	433.54	5.01	5.17	567.08	433.57	1,779.96	724.52
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	210.39	178.26	632.72	388.59	843.11	459.96	--	--	--	--	--	--	843.11	459.96
Woodland hardwoods	681.14	451.37	1,172.77	580.73	1,853.91	735.52	--	--	--	--	--	--	1,853.91	735.52
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	1,352.93	585.94	185.04	185.83	1,537.97	614.70	--	--	--	--	--	--	1,537.97	614.70
Total	2,567.67	815.30	2,880.20	877.28	5,447.87	1,209.44	562.07	433.54	6.63	5.42	568.70	433.57	6,016.57	1,284.81
Nonstocked	5,284.15	1,113.29	2,346.75	776.37	7,630.91	1,356.66	--	--	164.85	167.69	164.85	167.69	7,795.75	1,366.99
All forest types	44,382.74	3,263.02	60,353.90	3,673.72	104,736.64	4,878.38	2,913.44	956.94	8,577.28	1,411.68	11,490.72	1,694.94	116,227.36	5,134.12

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D53: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	104,985.79	5,248.53	383.17	332.16	105,368.96	5,259.85	30,134.58	2,748.17	321.05	315.18	30,455.63	2,762.07	135,824.59	5,910.40
Douglas-fir	17,869.57	2,247.47	--	--	17,869.57	2,247.47	7,459.33	1,579.71	1,332.08	666.41	8,791.41	1,713.48	26,660.98	2,817.15
Fir / spruce / mountain hemlock	6,461.69	1,413.33	514.01	397.34	6,975.70	1,464.78	7,946.54	1,605.57	270.53	282.27	8,217.08	1,624.88	15,192.77	2,187.65
Western Hemlock / Sitka spruce	--	--	--	--	--	--	92.03	91.56	--	--	92.03	91.56	92.03	91.56
Lodgepole pine	309.86	297.37	--	--	309.86	297.37	294.36	296.78	290.22	298.40	584.58	420.86	894.44	515.32
Pinyon / juniper	--	--	133.08	133.25	133.08	133.25	--	--	--	--	--	--	133.08	133.25
Ponderosa pine	7,520.94	1,318.85	--	--	7,520.94	1,318.85	1,688.44	653.06	314.51	226.26	2,002.95	691.15	9,523.89	1,487.95
Redwood	409.10	317.00	--	--	409.10	317.00	868.99	511.79	--	--	868.99	511.79	1,278.09	602.01
Western juniper	--	--	593.09	359.57	593.09	359.57	--	--	--	--	--	--	593.09	359.57
Western white pine	492.46	358.49	--	--	492.46	358.49	1,445.75	624.14	287.66	298.57	1,733.40	691.87	2,225.86	778.79
Other western softwoods	746.36	435.22	2,001.96	736.43	2,748.32	855.42	198.86	175.10	268.55	274.37	467.41	325.48	3,215.73	910.23
Total	138,795.75	5,914.91	3,625.32	978.18	142,421.07	5,979.23	50,128.89	3,370.65	3,084.60	989.98	53,213.49	3,504.29	195,634.56	6,830.58
Hardwoods:														
Alder / maple	3,418.74	930.22	292.68	185.93	3,711.42	948.62	911.95	479.26	474.59	378.03	1,386.54	610.41	5,097.96	1,128.04
Aspen / birch	--	--	--	--	--	--	--	--	268.41	269.35	268.41	269.35	268.41	269.35
Elm / ash / cottonwood	--	--	187.38	136.54	187.38	136.54	20.62	20.43	--	--	20.62	20.43	208.01	138.06
Tanoak / laurel	19,854.37	2,363.33	1,178.32	534.99	21,032.69	2,421.22	9,016.40	1,658.69	1,614.55	763.27	10,630.95	1,822.09	31,663.64	3,015.14
Western oak	40,538.70	3,286.39	70,448.30	4,056.70	110,987.00	5,161.96	6,816.63	1,398.24	11,094.63	1,749.18	17,911.26	2,245.39	128,898.25	5,598.93
Woodland hardwoods	--	--	96.34	57.48	96.34	57.48	--	--	305.54	255.09	305.54	255.09	401.88	261.49
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	5,303.64	1,217.78	438.54	301.95	5,742.18	1,253.24	2,132.67	884.06	251.21	229.04	2,383.89	913.24	8,126.07	1,550.69
Total	69,115.45	4,257.14	72,641.57	4,101.16	141,757.01	5,825.47	18,898.27	2,360.95	14,008.93	1,989.48	32,907.19	3,064.43	174,664.21	6,519.97
Nonstocked	5,508.61	1,150.82	552.95	342.26	6,061.56	1,200.64	3,781.78	1,015.12	281.37	257.75	4,063.15	1,047.33	10,124.70	1,592.23
All forest types	213,419.80	7,078.50	76,819.84	4,226.54	290,239.64	8,084.47	72,808.94	3,915.72	17,374.89	2,237.38	90,183.83	4,404.35	380,423.47	8,976.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D54: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	21,842.46	2,275.67	--	--	21,842.46	2,275.67	3,924.56	1,105.33	--	--	3,924.56	1,105.33	25,767.02	2,518.02
Fir / spruce / mountain hemlock	462.78	310.81	--	--	462.78	310.81	--	--	--	--	--	--	462.78	310.81
Western Hemlock / Sitka spruce	1,249.27	587.21	--	--	1,249.27	587.21	--	--	--	--	--	--	1,249.27	587.21
Lodgepole pine	--	--	--	--	--	--	156.16	159.68	11.92	19.07	168.08	160.82	168.08	160.82
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	27,732.16	2,792.45	--	--	27,732.16	2,792.45	2,425.16	828.08	--	--	2,425.16	828.08	30,157.32	2,895.17
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	262.09	216.77	--	--	262.09	216.77	137.70	180.16	403.84	346.71	541.54	390.73	803.63	446.83
Total	51,548.75	3,562.53	--	--	51,548.75	3,562.53	6,643.58	1,367.96	415.76	347.24	7,059.34	1,413.73	58,608.09	3,782.95
Hardwoods:														
Alder / maple	3,369.78	868.16	50.08	46.66	3,419.86	869.16	318.34	266.09	--	--	318.34	266.09	3,738.20	908.82
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	29,536.73	2,550.50	1,458.04	588.40	30,994.77	2,612.00	4,529.84	1,092.21	976.48	529.40	5,506.31	1,205.06	36,501.08	2,858.65
Western oak	6,028.09	1,229.86	6,877.87	1,197.98	12,905.96	1,717.90	--	--	895.11	445.89	895.11	445.89	13,801.07	1,788.26
Woodland hardwoods	--	--	--	--	--	--	--	--	67.01	60.80	67.01	60.80	67.01	60.80
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	2,725.89	835.77	81.68	77.60	2,807.56	839.37	605.22	448.33	--	--	605.22	448.33	3,412.78	951.60
Total	41,660.48	3,022.28	8,467.67	1,335.95	50,128.14	3,282.62	5,453.40	1,202.48	1,938.60	694.80	7,392.00	1,375.34	57,520.14	3,541.57
Nonstocked	508.43	303.00	--	--	508.43	303.00	--	--	--	--	--	--	508.43	303.00
All forest types	93,717.65	4,427.68	8,467.67	1,335.95	102,185.32	4,595.30	12,096.98	1,742.12	2,354.36	776.74	14,451.34	1,895.07	116,636.66	4,878.68

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D55: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	188,355.03	6,486.18	484.80	363.38	188,839.83	6,495.66	40,174.55	3,282.55	397.36	353.55	40,571.91	3,298.08	229,411.74	7,116.09
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	57,606.02	3,983.91	1,242.43	635.84	58,848.45	4,030.36	18,702.59	2,324.40	2,515.22	936.76	21,217.81	2,500.24	80,066.26	4,731.87
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	11,453.35	1,744.33	1,411.81	611.70	12,865.16	1,841.42	17,829.34	2,048.52	8,592.48	1,495.29	26,421.82	2,435.22	39,286.98	3,036.02
Pinyon / juniper	180.77	182.26	7,516.33	1,277.81	7,697.10	1,290.51	194.50	183.24	4,721.29	1,002.79	4,915.79	1,018.93	12,612.90	1,639.48
Ponderosa pine	63,276.00	3,664.10	1,023.60	483.89	64,299.61	3,690.39	5,337.40	1,160.06	727.03	417.97	6,064.42	1,230.63	70,364.03	3,883.86
Redwood	152.30	139.51	--	--	152.30	139.51	--	--	--	--	--	--	152.30	139.51
Western juniper	2,907.10	822.67	11,630.41	1,674.43	14,537.51	1,860.92	4,079.48	1,093.64	1,514.34	646.73	5,593.83	1,264.74	20,131.34	2,248.60
Western white pine	839.43	450.18	--	--	839.43	450.18	2,566.30	830.75	1,561.92	660.25	4,128.22	1,059.88	4,967.65	1,151.52
Other western softwoods	1,078.74	500.15	1,794.12	655.98	2,872.87	824.90	1,617.21	675.47	12,237.84	1,754.87	13,855.05	1,857.33	16,727.91	2,030.76
Total	325,848.75	7,784.78	25,103.49	2,423.30	350,952.24	8,061.16	90,501.37	4,425.89	32,267.48	2,743.52	122,768.85	4,916.50	473,721.09	9,115.60
Hardwoods:														
Alder / maple	350.63	238.69	--	--	350.63	238.69	--	--	--	--	--	--	350.63	238.69
Aspen / birch	262.42	191.55	257.57	151.72	520.00	244.36	354.39	323.55	684.92	374.98	1,039.31	495.28	1,559.31	552.28
Elm / ash / cottonwood	--	--	401.44	283.76	401.44	283.76	--	--	--	--	--	--	401.44	283.76
Tanoak / laurel	2,898.29	900.58	880.55	451.14	3,778.84	1,006.79	--	--	--	--	--	--	3,778.84	1,006.79
Western oak	36,000.21	2,982.19	100,115.89	4,461.58	136,116.10	5,255.03	4,476.15	1,057.77	8,588.19	1,444.89	13,064.34	1,793.96	149,180.44	5,515.09
Woodland hardwoods	--	--	1,359.31	561.48	1,359.31	561.48	--	--	166.30	150.40	166.30	150.40	1,525.61	581.27
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	4,440.28	1,066.46	3,916.55	990.41	8,356.83	1,454.85	--	--	45.17	42.09	45.17	42.09	8,402.01	1,455.38
Total	43,951.83	3,288.20	106,931.32	4,599.84	150,883.14	5,529.68	4,830.54	1,106.15	9,484.59	1,498.80	14,315.13	1,865.93	165,198.27	5,796.59
Nonstocked	15,386.03	1,809.64	2,224.26	698.72	17,610.28	1,936.82	4,171.65	1,033.26	1,718.51	643.89	5,890.15	1,216.24	23,500.44	2,286.41
All forest types	385,186.60	8,140.17	134,259.07	5,173.39	519,445.67	9,120.28	99,503.56	4,540.45	43,470.57	3,158.26	142,974.14	5,162.52	662,419.81	9,963.37

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D56: Soil Organic Carbon by Forest Type Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	1,298.66	573.59	--	--	1,298.66	573.59	1,367.68	647.33	--	--	1,367.68	647.33	2,666.34	864.90
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	583.62	455.65	--	--	583.62	455.65	--	--	--	--	--	--	583.62	455.65
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	705.19	430.19	705.19	430.19	705.19	430.19
Pinyon / juniper	--	--	8,228.38	1,309.70	8,228.38	1,309.70	--	--	5,447.30	1,107.36	5,447.30	1,107.36	13,675.68	1,712.60
Ponderosa pine	421.59	318.18	--	--	421.59	318.18	1,285.01	621.58	222.39	224.17	1,507.41	660.77	1,929.00	733.39
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	512.67	376.25	254.65	256.75	767.32	455.51	--	--	--	--	--	--	767.32	455.51
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	347.52	318.35	74.83	93.10	422.35	331.69	422.35	331.69
Total	2,816.54	881.95	8,483.03	1,334.63	11,299.58	1,597.16	3,000.21	942.07	6,449.72	1,208.81	9,449.93	1,532.55	20,749.51	2,211.30
Hardwoods:														
Alder / maple	--	--	225.89	163.67	225.89	163.67	--	--	--	--	--	--	225.89	163.67
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	2.29	2.18	2.29	2.18	--	--	72.12	98.31	72.12	98.31	74.41	98.33
Tanoak / laurel	--	--	--	--	--	--	--	--	232.13	228.05	232.13	228.05	232.13	228.05
Western oak	2,058.35	681.00	11,932.13	1,542.35	13,990.48	1,705.34	1,804.32	692.79	3,566.98	944.80	5,371.30	1,161.42	19,361.77	2,055.46
Woodland hardwoods	--	--	1,793.65	526.88	1,793.65	526.88	--	--	388.03	244.10	388.03	244.10	2,181.69	580.60
Exotic hardwoods	74.30	75.91	--	--	74.30	75.91	--	--	--	--	--	--	74.30	75.91
Other hardwoods	--	--	794.30	420.43	794.30	420.43	--	--	--	--	--	--	794.30	420.43
Total	2,132.64	685.22	14,748.28	1,686.43	16,880.92	1,838.25	1,804.32	692.79	4,259.26	1,006.92	6,063.58	1,212.49	22,944.50	2,193.53
Nonstocked	1,380.90	574.60	1,255.19	516.32	2,636.09	770.75	321.15	245.93	800.74	370.02	1,395.65	503.60	4,031.73	920.69
All forest types	6,330.08	1,252.04	24,486.50	2,210.33	30,816.58	2,547.96	5,125.68	1,191.35	11,509.72	1,607.92	16,909.16	1,997.86	47,725.75	3,225.16

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D57: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	31,553.07	1,185.91	73.45	45.08	31,626.52	1,186.52	8,507.20	741.06	14.15	10.41	8,521.35	740.90	40,147.87	1,382.43
Douglas-fir	5,517.72	633.36	--	--	5,517.72	633.36	1,190.17	319.08	13.17	7.58	1,203.34	319.16	6,721.07	708.04
Fir / spruce / mountain hemlock	7,135.82	592.44	68.98	37.43	7,204.79	593.46	3,479.30	573.57	247.64	158.66	3,726.94	594.94	10,931.74	838.94
Western Hemlock / Sitka spruce	306.17	232.84	--	--	306.17	232.84	2.49	2.48	--	--	2.49	2.48	308.67	232.85
Lodgepole pine	1,486.43	283.83	193.50	89.07	1,679.93	296.57	1,796.54	403.33	621.13	153.22	2,417.67	427.72	4,097.60	519.84
Pinyon / juniper	12.31	12.17	1,202.35	164.85	1,214.66	165.30	7.49	6.52	700.69	159.89	708.18	160.01	1,922.85	229.13
Ponderosa pine	4,575.41	361.83	50.12	22.16	4,625.52	362.22	829.34	239.42	48.74	25.04	878.08	240.72	5,503.61	433.59
Redwood	5,607.86	770.48	--	--	5,607.86	770.48	1,846.99	570.05	--	--	1,846.99	570.05	7,454.86	954.47
Western juniper	300.90	71.24	694.25	93.57	995.15	116.90	293.83	120.68	53.52	35.16	347.35	125.70	1,342.50	171.63
Western white pine	139.75	65.40	--	--	139.75	65.40	225.45	96.33	79.06	52.05	304.51	109.42	444.26	127.44
Other western softwoods	291.32	130.67	132.69	43.80	424.01	137.82	188.47	89.36	930.94	216.31	1,119.41	233.53	1,543.41	270.85
Total	56,926.78	1,572.47	2,415.32	218.09	59,342.10	1,579.46	18,367.29	1,159.25	2,709.04	348.52	21,076.33	1,198.79	80,418.43	1,940.69
Hardwoods:														
Alder / maple	1,014.95	230.62	124.79	77.50	1,139.74	243.29	280.01	143.72	110.33	91.97	390.35	170.63	1,530.08	297.06
Aspen / birch	18.82	11.72	68.56	32.13	87.37	34.20	93.66	74.90	107.57	83.23	201.23	111.97	288.60	117.08
Elm / ash / cottonwood	--	--	61.15	27.16	61.15	27.16	--	--	11.69	10.77	11.69	10.77	72.84	29.22
Tanoak / laurel	7,918.39	759.08	387.91	120.56	8,306.30	767.60	1,511.75	267.55	323.59	139.99	1,835.34	301.11	10,141.64	821.32
Western oak	6,543.42	530.99	8,077.00	461.82	14,620.41	700.15	730.51	150.93	1,723.35	253.13	2,453.86	292.48	17,074.28	754.22
Woodland hardwoods	10.33	8.39	133.74	48.09	144.07	48.82	--	--	88.89	56.53	88.89	56.53	232.96	74.69
Exotic hardwoods	6.33	6.47	0.03	0.03	6.36	6.47	--	--	--	--	--	--	6.36	6.47
Other hardwoods	1,554.22	357.99	243.09	73.85	1,797.31	365.28	188.24	103.11	97.17	86.96	285.41	134.86	2,082.73	389.12
Total	17,066.45	998.78	9,096.27	490.47	26,162.71	1,099.48	2,804.17	363.26	2,462.60	331.41	5,266.77	486.19	31,429.49	1,190.84
Nonstocked	2,264.55	326.67	228.06	65.27	2,492.60	332.98	1,286.32	371.14	285.38	114.21	1,595.45	388.78	4,088.06	511.85
All forest types	76,257.77	1,717.93	11,739.65	535.74	87,997.42	1,751.91	22,457.78	1,210.95	5,457.02	487.61	27,938.55	1,273.96	115,935.97	2,087.57

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D58: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	69.36	50.35	--	--	69.36	50.35	--	--	--	--	--	--	69.36	50.35
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	29.58	18.79	29.58	18.79	--	--	0.46	0.36	0.46	0.36	30.04	18.79
Ponderosa pine	--	--	13.54	10.96	13.54	10.96	--	--	0.44	0.42	0.44	0.42	13.98	10.97
Redwood	711.03	257.07	--	--	711.03	257.07	541.59	274.62	--	--	541.59	274.62	1,252.61	376.16
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	39.73	29.02	--	--	39.73	29.02	--	--	--	--	--	--	39.73	29.02
Total	820.12	263.23	43.12	21.75	863.24	264.13	541.59	274.62	0.90	0.55	542.49	274.62	1,405.72	381.03
Hardwoods:														
Alder / maple	--	--	31.00	31.39	31.00	31.39	16.64	18.52	--	--	16.64	18.52	47.64	36.45
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	10.74	8.47	10.74	8.47	--	--	0.13	0.17	0.13	0.17	10.87	8.47
Tanoak / laurel	233.02	122.79	186.82	87.01	419.84	150.41	69.57	38.07	242.07	134.12	311.64	139.42	731.48	205.05
Western oak	65.12	37.30	1,351.91	180.89	1,417.04	184.70	47.61	29.26	508.72	155.98	556.33	158.38	1,973.36	242.17
Woodland hardwoods	--	--	--	--	--	--	--	--	8.17	7.81	8.17	7.81	8.17	7.81
Exotic hardwoods	--	--	0.03	0.03	0.03	0.03	--	--	--	--	--	--	0.03	0.03
Other hardwoods	161.33	101.58	27.45	16.73	188.79	102.28	111.23	89.61	9.05	7.04	120.28	89.86	309.06	135.43
Total	459.48	163.56	1,607.96	204.94	2,067.44	261.52	245.05	101.65	768.14	208.86	1,013.19	230.95	3,080.63	347.40
Nonstocked	2.21	2.21	1.52	1.30	3.72	2.56	6.30	5.85	2.97	2.62	9.27	6.41	12.99	6.90
All forest types	1,281.80	308.40	1,652.60	206.08	2,934.40	370.03	792.94	290.73	772.00	209.07	1,564.95	367.63	4,499.34	520.29

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D59: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total		Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	22.12	21.05	22.12	21.05	--	--	10.47	10.67	10.47	10.67	32.59	23.60
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	101.83	49.20	101.83	49.20	--	--	--	--	--	--	101.83	49.20
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	123.96	53.51	123.96	53.51	--	--	10.47	10.67	10.47	10.67	134.42	54.56
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	123.96	53.51	123.96	53.51	--	--	10.47	10.67	10.47	10.67	134.42	54.56

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D60: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
<i>thousand metric tons C</i>														
Softwoods:														
California mixed conifer	1,039.04	197.16	43.58	41.82	1,082.62	201.36	--	--	--	--	--	--	1,082.62	201.36
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	369.49	116.44	--	--	369.49	116.44	95.77	64.75	--	--	95.77	64.75	465.25	133.23
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	138.81	79.89	119.65	81.79	258.46	114.34	--	--	--	--	--	--	258.46	114.34
Pinyon / juniper	0.25	0.25	548.46	98.62	548.70	98.62	--	--	156.21	51.46	156.21	51.46	704.91	110.64
Ponderosa pine	840.37	164.51	9.98	8.02	850.36	164.68	88.83	62.85	--	--	88.83	62.85	939.19	176.16
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	136.94	47.21	538.93	85.23	675.86	97.03	--	--	0.39	0.34	0.39	0.34	676.26	97.03
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	4.26	4.37	15.31	15.33	19.57	15.94	--	--	184.21	68.19	184.21	68.19	203.79	70.03
Total	2,529.14	296.13	1,275.92	159.08	3,805.07	335.23	184.60	90.24	340.82	85.32	525.41	123.73	4,330.48	356.78
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	3.27	2.98	46.88	27.93	50.15	28.09	91.33	74.87	--	--	91.33	74.87	141.48	79.96
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	14.91	12.55	29.30	22.74	44.21	26.55	--	--	--	--	--	--	44.21	26.55
Woodland hardwoods	10.33	8.39	57.87	36.69	68.20	37.64	--	--	--	--	--	--	68.20	37.64
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	80.71	39.06	0.30	0.30	81.01	39.06	--	--	--	--	--	--	81.01	39.06
Total	109.22	41.95	134.35	51.39	243.57	66.56	91.33	74.87	--	--	91.33	74.87	334.90	100.18
Nonstocked	206.58	59.64	56.68	25.83	263.26	64.98	--	--	8.84	8.99	8.84	8.99	272.10	65.60
All forest types	2,844.94	305.64	1,466.95	168.71	4,311.90	347.79	275.93	117.76	349.66	87.52	625.58	146.16	4,937.48	376.61

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D61: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	10,453.54	697.62	4.81	4.80	10,458.35	697.64	3,355.25	439.73	2.89	2.84	3,358.13	439.72	13,816.48	822.45
Douglas-fir	2,107.72	384.51	--	--	2,107.72	384.51	572.68	203.93	13.17	7.58	585.85	204.07	2,693.57	435.04
Fir / spruce / mountain hemlock	494.76	126.63	7.18	9.58	501.94	126.81	734.07	234.20	5.63	5.87	739.70	234.27	1,241.64	266.39
Western Hemlock / Sitka spruce	--	--	--	--	--	--	2.49	2.48	--	--	2.49	2.48	2.49	2.48
Lodgepole pine	8.89	8.53	--	--	8.89	8.53	4.34	4.38	2.33	2.39	6.67	4.99	15.56	9.88
Pinyon / juniper	--	--	0.45	0.45	0.45	0.45	--	--	--	--	--	--	0.45	0.45
Ponderosa pine	338.32	86.44	--	--	338.32	86.44	56.08	28.45	18.84	15.25	74.92	32.28	413.24	92.26
Redwood	14.40	14.03	--	--	14.40	14.03	454.60	290.74	--	--	454.60	290.74	469.00	291.08
Western juniper	--	--	1.03	0.96	1.03	0.96	--	--	--	--	--	--	1.03	0.96
Western white pine	32.61	32.74	--	--	32.61	32.74	53.72	27.19	0.89	0.93	54.61	27.21	87.22	42.49
Other western softwoods	84.14	59.58	77.26	36.29	161.40	69.76	58.35	51.37	20.78	21.23	79.12	55.59	240.52	88.29
Total	13,534.37	799.00	90.73	37.85	13,625.10	799.20	5,291.58	590.93	64.52	28.64	5,356.11	591.56	18,981.20	989.59
Hardwoods:														
Alder / maple	449.66	163.57	87.99	70.74	537.66	178.21	224.46	139.32	110.33	91.97	334.79	166.93	872.45	244.18
Aspen / birch	--	--	--	--	--	--	--	--	2.55	2.56	2.55	2.56	2.55	2.56
Elm / ash / cottonwood	--	--	16.28	12.07	16.28	12.07	--	--	--	--	--	--	16.28	12.07
Tanoak / laurel	2,856.92	479.85	97.23	72.10	2,954.15	485.10	712.08	160.77	25.83	15.04	737.91	161.40	3,692.06	510.78
Western oak	3,094.16	381.03	2,653.89	314.86	5,748.05	491.14	424.92	132.42	631.21	153.63	1,056.13	203.27	6,804.18	529.86
Woodland hardwoods	--	--	2.06	1.86	2.06	1.86	--	--	2.61	1.86	2.61	1.86	4.67	2.63
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	769.96	304.65	35.51	32.40	805.47	306.33	57.85	49.01	88.12	86.67	145.97	99.57	951.44	322.10
Total	7,170.70	705.10	2,892.97	332.01	10,063.67	775.78	1,419.31	253.39	860.65	199.17	2,279.96	321.55	12,343.63	836.70
Nonstocked	447.45	137.43	21.35	20.80	468.80	139.00	564.01	189.69	2.13	1.95	566.14	189.70	1,034.94	235.17
All forest types	21,152.52	1,052.77	3,005.05	334.75	24,157.57	1,097.41	7,274.90	643.55	927.31	201.62	8,202.21	670.39	32,359.78	1,275.22

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D62: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	3,340.65	508.44	--	--	3,340.65	508.44	617.49	245.96	--	--	617.49	245.96	3,958.14	563.83
Fir / spruce / mountain hemlock	16.47	11.43	--	--	16.47	11.43	--	--	--	--	--	--	16.47	11.43
Western Hemlock / Sitka spruce	306.17	232.84	--	--	306.17	232.84	--	--	--	--	--	--	306.17	232.84
Lodgepole pine	--	--	--	--	--	--	1.57	1.60	--	--	1.57	1.60	1.57	1.60
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	4,841.34	730.38	--	--	4,841.34	730.38	850.80	416.57	--	--	850.80	416.57	5,692.14	837.48
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	104.27	107.52	--	--	104.27	107.52	4.26	5.40	8.98	7.71	13.25	9.42	117.52	107.93
Total	8,608.90	909.97	--	--	8,608.90	909.97	1,474.13	476.24	8.98	7.71	1,483.11	476.30	10,092.01	1,021.91
Hardwoods:														
Alder / maple	503.91	155.11	--	--	503.91	155.11	38.91	30.06	--	--	38.91	30.06	542.82	157.95
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	4,374.73	553.66	89.15	41.65	4,463.88	554.89	730.09	210.94	50.41	36.81	780.50	214.04	5,244.39	592.52
Western oak	430.59	130.15	190.74	46.55	621.32	138.07	--	--	16.80	9.01	16.80	9.01	638.12	138.63
Woodland hardwoods	--	--	--	--	--	--	--	--	6.48	5.88	6.48	5.88	6.48	5.88
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	168.52	64.64	--	--	168.52	64.64	19.16	15.81	--	--	19.16	15.81	187.68	66.54
Total	5,477.74	587.62	279.89	62.20	5,757.64	590.03	788.17	221.30	73.69	38.35	861.86	224.49	6,619.49	628.74
Nonstocked	33.50	24.87	--	--	33.50	24.87	--	--	--	--	--	--	33.50	24.87
All forest types	14,120.15	1,055.62	279.89	62.20	14,400.04	1,056.44	2,262.29	516.44	82.68	39.12	2,344.97	517.87	16,745.01	1,167.27

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D63: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	19,896.12	1,025.63	25.05	16.13	19,921.17	1,025.90	5,013.63	613.95	11.26	10.02	5,024.89	613.82	24,946.07	1,184.22
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	6,211.08	570.57	61.80	36.19	6,272.88	571.63	2,649.46	523.22	242.01	158.55	2,891.48	546.54	9,164.35	789.52
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,338.74	272.49	73.85	35.61	1,412.59	274.67	1,790.63	403.30	539.29	144.85	2,329.92	425.09	3,742.51	505.63
Pinyon / juniper	12.07	12.16	356.41	117.12	368.48	117.75	7.49	6.52	333.25	120.35	340.74	120.52	709.22	168.44
Ponderosa pine	3,384.32	314.67	26.59	17.51	3,410.90	314.89	563.11	217.54	15.87	14.36	578.97	218.00	3,989.88	382.42
Redwood	41.10	37.65	--	--	41.10	37.65	--	--	--	--	--	--	41.10	37.65
Western juniper	127.80	46.48	153.99	39.05	281.78	60.62	293.83	120.68	53.13	35.15	346.96	125.70	628.74	139.55
Western white pine	107.14	56.61	--	--	107.14	56.61	171.73	92.42	78.17	52.05	249.90	105.99	357.04	120.16
Other western softwoods	58.92	33.22	40.11	19.16	99.04	38.35	125.78	72.91	709.99	204.38	835.77	216.53	934.81	219.89
Total	31,177.28	1,184.93	737.79	135.66	31,915.08	1,190.10	10,615.67	907.52	1,982.96	322.65	12,598.63	954.61	44,513.71	1,505.62
Hardwoods:														
Alder / maple	61.38	50.59	--	--	61.38	50.59	--	--	--	--	--	--	61.38	50.59
Aspen / birch	15.54	11.33	21.68	15.91	37.22	19.53	2.33	2.13	105.02	83.20	107.35	83.22	144.57	85.48
Elm / ash / cottonwood	--	--	12.01	8.80	12.01	8.80	--	--	--	--	--	--	12.01	8.80
Tanoak / laurel	453.72	216.35	14.71	9.03	468.43	216.54	--	--	--	--	--	--	468.43	216.54
Western oak	2,671.15	334.76	3,122.53	264.48	5,793.67	422.20	189.52	61.74	340.90	97.53	530.42	115.34	6,324.10	436.35
Woodland hardwoods	--	--	30.76	23.38	30.76	23.38	--	--	0.02	0.02	0.02	0.02	30.78	23.38
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	373.69	139.68	173.29	64.16	546.98	153.71	--	--	--	--	--	--	546.98	153.71
Total	3,575.48	423.93	3,374.96	273.63	6,950.44	499.68	191.85	61.78	445.94	128.08	637.79	142.13	7,588.24	518.23
Nonstocked	1,484.41	286.86	72.35	38.58	1,556.75	289.40	639.45	309.85	264.22	113.72	903.67	330.03	2,460.42	438.95
All forest types	36,237.17	1,257.16	4,185.10	306.53	40,422.27	1,279.59	11,446.97	950.54	2,693.12	362.82	14,140.09	1,004.92	54,562.36	1,599.62

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D64: Aboveground Carbon Mass of Down Dead Wood, by Forest Type and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	164.37	100.82	--	--	164.37	100.82	138.33	72.88	--	--	138.33	72.88	302.70	124.41
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	44.03	40.90	--	--	44.03	40.90	--	--	--	--	--	--	44.03	40.90
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	79.51	53.11	79.51	53.11	79.51	53.11
Pinyon / juniper	--	--	267.46	70.62	267.46	70.62	--	--	210.78	93.22	210.78	93.22	478.23	116.91
Ponderosa pine	12.41	9.77	--	--	12.41	9.77	121.32	74.21	13.60	13.71	134.92	75.47	147.33	76.10
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	36.17	26.51	0.30	0.30	36.47	26.52	--	--	--	--	--	--	36.47	26.52
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	0.08	0.07	6.97	8.67	7.05	8.67	7.05	8.67
Total	256.97	112.38	267.76	70.62	524.73	132.69	259.72	103.70	310.86	108.38	570.58	150.00	1,095.31	200.24
Hardwoods:														
Alder / maple	--	--	5.79	4.05	5.79	4.05	--	--	--	--	--	--	5.79	4.05
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	1.10	1.50	1.10	1.50	1.10	1.50
Tanoak / laurel	--	--	--	--	--	--	--	--	5.29	5.19	5.29	5.19	5.29	5.19
Western oak	267.49	112.39	626.80	122.58	894.29	198.14	68.46	31.13	225.72	84.79	294.18	90.27	1,188.47	217.63
Woodland hardwoods	--	--	43.05	20.43	43.05	20.43	--	--	71.61	55.65	71.61	55.65	114.66	59.28
Exotic hardwoods	6.33	6.47	--	--	6.33	6.47	--	--	--	--	--	--	6.33	6.47
Other hardwoods	--	--	6.54	3.91	6.54	3.91	--	--	--	--	--	--	6.54	3.91
Total	273.82	112.58	682.18	124.28	956.00	199.30	68.46	31.13	303.71	101.57	372.17	106.18	1,328.18	225.71
Nonstocked	90.40	46.84	76.16	41.00	166.56	62.05	76.57	82.01	7.22	4.65	107.54	84.89	274.10	105.15
All forest types	621.19	165.61	1,026.10	148.20	1,647.29	246.84	404.75	135.72	621.78	147.68	1,050.29	200.85	2,697.58	317.64

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D65: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: All California

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	45,782.99	1,151.85	153.07	71.35	45,936.05	1,153.24	10,517.56	631.07	102.88	70.45	10,620.44	633.42	56,556.49	1,274.03
Douglas-fir	3,784.60	298.10	--	--	3,784.60	298.10	939.42	158.19	83.35	41.76	1,022.77	163.55	4,807.37	338.32
Fir / spruce / mountain hemlock	8,816.08	554.04	161.97	74.11	8,978.04	558.37	3,584.60	372.15	305.02	109.32	3,889.61	386.77	12,867.66	677.45
Western Hemlock / Sitka spruce	228.66	106.01	--	--	228.66	106.01	21.60	21.49	--	--	21.60	21.49	250.27	108.07
Lodgepole pine	1,417.44	209.96	289.55	100.73	1,706.99	231.31	2,518.25	286.80	1,071.79	189.16	3,590.03	327.63	5,297.02	398.80
Pinyon / juniper	23.15	16.84	1,672.91	137.75	1,696.07	138.74	11.78	12.31	841.87	112.85	853.65	113.49	2,549.71	176.82
Ponderosa pine	9,026.00	455.69	145.25	52.19	9,171.24	457.96	941.27	159.44	122.35	48.59	1,063.62	166.29	10,234.86	485.23
Redwood	2,569.38	233.30	--	--	2,569.38	233.30	457.67	105.07	--	--	457.67	105.07	3,027.05	254.25
Western juniper	515.58	92.73	2,526.20	180.78	3,041.79	201.50	394.73	108.60	136.26	52.78	531.00	120.36	3,572.78	234.08
Western white pine	140.11	59.91	--	--	140.11	59.91	466.94	125.99	187.15	74.94	654.09	146.45	794.19	158.17
Other western softwoods	248.86	71.54	340.05	84.32	588.91	110.58	228.41	82.25	1,490.18	198.13	1,718.59	212.37	2,307.50	239.19
Total	72,552.85	1,145.49	5,288.99	274.79	77,841.85	1,154.83	20,082.22	713.57	4,340.85	323.48	24,423.07	739.98	102,264.92	1,269.39
Hardwoods:														
Alder / maple	583.24	105.74	68.59	27.62	651.83	109.24	130.82	55.34	29.05	22.58	159.87	59.77	811.70	124.49
Aspen / birch	54.71	33.16	70.59	31.18	125.29	45.52	56.15	32.92	86.50	43.48	142.65	54.54	267.95	71.04
Elm / ash / cottonwood	--	--	66.72	29.20	66.72	29.20	1.34	1.33	19.08	14.38	20.42	14.44	87.13	32.57
Tanoak / laurel	4,968.63	325.80	564.00	110.69	5,532.62	341.76	1,150.38	163.94	358.56	91.42	1,508.93	186.38	7,041.56	386.12
Western oak	6,092.25	331.36	11,696.77	351.54	17,789.02	464.05	938.08	133.52	1,996.00	165.40	2,934.08	209.41	20,723.10	501.73
Woodland hardwoods	44.34	29.39	290.68	68.46	335.02	74.47	--	--	79.86	30.88	79.86	30.88	414.88	80.62
Exotic hardwoods	3.99	4.07	5.01	4.31	8.99	5.93	--	--	--	--	--	--	8.99	5.93
Other hardwoods	1,197.90	163.59	390.96	73.88	1,588.86	179.05	268.87	85.96	63.09	30.17	331.95	90.82	1,920.81	200.58
Total	12,945.05	477.67	13,153.31	377.09	26,098.36	571.51	2,545.64	232.18	2,632.12	198.44	5,177.77	296.19	31,276.13	627.85
Nonstocked	1,919.00	170.06	298.89	59.91	2,217.89	179.84	538.97	97.12	151.25	42.34	699.13	105.88	2,917.03	208.51
All forest types	87,416.91	1,025.12	18,741.19	453.38	106,158.10	985.40	23,166.83	700.31	7,124.23	372.88	30,299.97	714.25	136,458.07	1,018.15

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D66: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Central Coast and Interior Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	77.84	48.54	--	--	77.84	48.54	--	--	--	--	--	--	77.84	48.54
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	110.74	30.19	110.74	30.19	--	--	15.91	9.70	15.91	9.70	126.65	31.71
Ponderosa pine	--	--	29.66	21.21	29.66	21.21	--	--	15.08	14.36	15.08	14.36	44.74	25.62
Redwood	426.86	102.90	--	--	426.86	102.90	193.26	71.52	--	--	193.26	71.52	620.12	126.03
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	64.07	40.11	--	--	64.07	40.11	--	--	--	--	--	--	64.07	40.11
Total	568.77	120.30	140.40	36.89	709.17	125.83	193.26	71.52	30.99	17.33	224.25	73.59	933.42	146.39
Hardwoods:														
Alder / maple	--	--	19.44	14.96	19.44	14.96	23.10	25.71	--	--	23.10	25.71	42.54	29.75
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	9.06	5.39	9.06	5.39	--	--	0.89	1.21	0.89	1.21	9.95	5.52
Tanoak / laurel	183.19	74.03	258.43	76.65	441.63	106.30	125.02	64.89	167.09	63.76	292.11	90.97	733.73	139.89
Western oak	73.05	35.45	1,904.50	147.76	1,977.55	151.95	36.57	22.55	657.64	89.89	694.21	91.26	2,671.76	175.54
Woodland hardwoods	--	--	--	--	--	--	--	--	7.51	5.33	7.51	5.33	7.51	5.33
Exotic hardwoods	--	--	5.01	4.31	5.01	4.31	--	--	--	--	--	--	5.01	4.31
Other hardwoods	77.28	43.22	64.94	29.50	142.22	51.60	61.23	40.64	38.54	23.82	99.78	46.56	242.00	68.99
Total	333.52	92.68	2,261.38	169.69	2,594.90	192.08	245.93	81.90	871.67	113.95	1,117.59	136.17	3,712.50	232.90
Nonstocked	8.09	8.10	2.54	2.18	10.63	8.39	17.47	16.23	3.78	3.33	21.25	16.57	31.88	18.57
All forest types	910.38	151.35	2,404.33	173.45	3,314.71	228.47	456.66	107.25	906.44	115.29	1,363.10	153.39	4,677.80	272.45

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D67: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Central Valley

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	20.66	19.14	20.66	19.14	--	--	10.11	9.27	10.11	9.27	30.78	21.26
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	--	--	129.35	34.20	129.35	34.20	--	--	1.07	1.11	1.07	1.11	130.42	34.21
Woodland hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	150.01	39.18	150.01	39.18	--	--	11.19	9.33	11.19	9.33	161.20	40.28
Nonstocked	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All forest types	--	--	150.01	39.18	150.01	39.18	--	--	11.19	9.33	11.19	9.33	161.20	40.28

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D68: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Eastside

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	1,588.86	236.34	61.11	49.84	1,649.97	241.29	--	--	--	--	--	--	1,649.97	241.29
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	498.72	131.11	--	--	498.72	131.11	181.77	92.37	--	--	181.77	92.37	680.50	160.38
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	92.23	47.21	103.68	61.67	195.90	77.67	--	--	--	--	--	--	195.90	77.67
Pinyon / juniper	14.26	14.25	912.96	111.03	927.22	111.91	--	--	361.94	80.12	361.94	80.12	1,289.16	136.04
Ponderosa pine	1,454.44	182.81	23.50	15.63	1,477.94	183.42	91.42	47.32	--	--	91.42	47.32	1,569.36	189.35
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	242.29	56.00	1,832.51	153.14	2,074.80	162.20	--	--	19.11	16.39	19.11	16.39	2,093.91	162.99
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	13.30	13.64	60.89	42.93	74.19	45.05	--	--	291.77	96.36	291.77	96.36	365.96	106.37
Total	3,904.09	334.12	2,994.66	207.71	6,898.75	392.87	273.19	103.79	672.82	126.79	946.01	163.13	7,844.76	424.09
Hardwoods:														
Alder / maple	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08
Aspen / birch	26.37	24.07	52.84	29.33	79.21	37.94	33.01	25.25	0.21	0.21	33.22	25.25	112.43	45.58
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western oak	13.71	11.02	32.28	18.90	45.99	24.05	--	--	--	--	--	--	45.99	24.05
Woodland hardwoods	44.34	29.39	91.28	47.73	135.62	56.05	--	--	--	--	--	--	135.62	56.05
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	90.26	38.70	9.99	10.04	100.25	39.98	--	--	--	--	--	--	100.25	39.98
Total	174.68	55.29	186.40	59.88	361.08	82.11	33.01	25.25	0.29	0.23	33.30	25.25	394.38	85.90
Nonstocked	352.69	75.14	126.63	43.11	479.32	86.60	--	--	16.61	16.89	16.61	16.89	495.92	88.23
All forest types	4,431.46	348.17	3,307.69	218.95	7,739.15	409.90	306.20	107.98	689.71	128.87	995.91	167.18	8,735.06	440.99

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D69: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Klamath Interior Coast Ranges

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	14,110.16	713.25	38.33	33.99	14,148.49	714.19	3,665.57	342.57	32.03	31.44	3,697.59	343.64	17,846.08	788.07
Douglas-fir	1,564.79	196.89	--	--	1,564.79	196.89	588.22	124.85	83.35	41.76	671.57	131.58	2,236.36	236.13
Fir / spruce / mountain hemlock	665.74	145.62	39.62	31.60	705.36	148.69	727.30	146.30	22.21	23.18	749.51	147.71	1,454.87	209.59
Western Hemlock / Sitka spruce	--	--	--	--	--	--	21.60	21.49	--	--	21.60	21.49	21.60	21.49
Lodgepole pine	20.90	20.05	--	--	20.90	20.05	18.37	18.52	21.53	22.14	39.90	28.87	60.80	35.15
Pinyon / juniper	--	--	7.24	7.25	7.24	7.25	--	--	--	--	--	--	7.24	7.25
Ponderosa pine	749.29	136.64	--	--	749.29	136.64	203.10	79.10	28.91	22.00	232.01	82.10	981.30	159.34
Redwood	35.00	27.29	--	--	35.00	27.29	73.94	43.62	--	--	73.94	43.62	108.93	51.45
Western juniper	--	--	35.61	21.82	35.61	21.82	--	--	--	--	--	--	35.61	21.82
Western white pine	56.68	41.21	--	--	56.68	41.21	107.66	46.39	17.39	18.05	125.05	49.78	181.73	64.57
Other western softwoods	61.95	36.49	132.54	48.67	194.50	60.83	16.22	14.28	17.03	17.40	33.25	22.51	227.74	64.47
Total	17,264.51	753.72	253.33	71.06	17,517.84	755.76	5,421.97	373.17	222.46	71.53	5,644.43	379.17	23,162.27	835.02
Hardwoods:														
Alder / maple	273.76	74.24	26.85	17.14	300.61	76.19	80.76	43.09	28.97	22.58	109.73	48.65	410.34	90.40
Aspen / birch	--	--	--	--	--	--	--	--	15.36	15.41	15.36	15.41	15.36	15.41
Elm / ash / cottonwood	--	--	9.53	7.32	9.53	7.32	1.34	1.33	--	--	1.34	1.33	10.87	7.44
Tanoak / laurel	1,552.71	185.79	99.15	45.35	1,651.86	191.01	606.03	113.95	83.37	41.00	689.39	120.92	2,341.25	225.11
Western oak	2,825.72	232.10	3,599.86	221.84	6,425.58	318.05	482.36	99.50	645.18	104.77	1,127.53	144.70	7,553.12	347.52
Woodland hardwoods	--	--	5.88	3.50	5.88	3.50	--	--	19.74	16.61	19.74	16.61	25.62	16.98
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	462.79	107.61	26.34	18.28	489.13	109.05	141.25	58.62	19.26	17.84	160.51	61.27	649.63	125.09
Total	5,114.98	318.83	3,767.61	227.39	8,882.59	386.48	1,311.74	165.62	811.86	118.01	2,123.60	201.78	11,006.18	432.00
Nonstocked	373.19	77.46	29.56	18.17	402.75	79.57	280.07	75.26	19.41	17.78	299.48	77.33	702.23	110.89
All forest types	22,752.68	797.17	4,050.49	238.67	26,803.18	821.94	7,013.79	388.75	1,053.73	139.07	8,067.51	405.77	34,870.69	896.58

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D70: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: North Coast

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	2,141.97	224.57	--	--	2,141.97	224.57	351.20	98.86	--	--	351.20	98.86	2,493.17	244.08
Fir / spruce / mountain hemlock	53.17	36.73	--	--	53.17	36.73	--	--	--	--	--	--	53.17	36.73
Western Hemlock / Sitka spruce	228.66	106.01	--	--	228.66	106.01	--	--	--	--	--	--	228.66	106.01
Lodgepole pine	--	--	--	--	--	--	16.83	17.21	0.89	1.42	17.72	17.27	17.72	17.27
Pinyon / juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ponderosa pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Redwood	2,096.46	211.35	--	--	2,096.46	211.35	190.47	65.52	--	--	190.47	65.52	2,286.93	219.87
Western juniper	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	21.46	17.86	--	--	21.46	17.86	10.43	13.89	32.34	27.76	42.77	31.04	64.22	35.81
Total	4,541.72	318.37	--	--	4,541.72	318.37	568.93	117.34	33.22	27.80	602.16	120.75	5,143.87	336.18
Hardwoods:														
Alder / maple	267.07	70.11	2.36	2.20	269.43	70.13	26.96	23.32	--	--	26.96	23.32	296.39	73.90
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tanoak / laurel	2,967.54	255.78	141.27	57.42	3,108.81	261.53	419.33	100.08	86.87	46.65	506.21	109.92	3,615.01	281.81
Western oak	430.90	88.36	359.88	63.36	790.79	108.59	--	--	50.54	27.21	50.54	27.21	841.33	112.20
Woodland hardwoods	--	--	--	--	--	--	--	--	3.84	3.48	3.84	3.48	3.84	3.48
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	234.23	73.06	6.15	5.85	240.39	73.29	66.39	48.97	--	--	66.39	48.97	306.77	88.14
Total	3,899.75	283.92	509.66	85.59	4,409.41	294.80	512.68	112.33	141.26	54.12	653.93	123.78	5,063.34	317.44
Nonstocked	39.38	23.06	--	--	39.38	23.06	--	--	--	--	--	--	39.38	23.06
All forest types	8,480.85	403.47	509.66	85.59	8,990.51	410.06	1,081.61	154.11	174.48	60.84	1,256.09	164.76	10,246.60	432.83

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D71: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: Sierra Cascades

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	29,902.88	1,042.32	53.63	38.09	29,956.51	1,043.10	6,654.06	554.06	70.85	63.04	6,724.92	556.95	36,681.42	1,156.37
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	7,507.03	520.29	122.35	67.03	7,629.38	524.24	2,675.53	337.03	282.80	106.83	2,958.33	352.85	10,587.71	630.18
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,304.32	203.96	185.87	80.19	1,490.19	218.21	2,483.04	285.70	966.94	181.73	3,449.98	323.14	4,940.17	387.75
Pinyon / juniper	8.90	8.97	345.76	67.15	354.65	67.73	11.78	12.31	307.20	74.75	318.98	75.74	673.63	101.43
Ponderosa pine	6,767.28	407.13	92.08	45.05	6,859.36	409.14	536.25	120.20	62.53	37.63	598.79	125.77	7,458.14	427.24
Redwood	11.07	10.14	--	--	11.07	10.14	--	--	--	--	--	--	11.07	10.14
Western juniper	236.90	69.25	639.04	94.51	875.94	116.79	394.73	108.60	117.15	50.18	511.89	119.24	1,387.82	166.82
Western white pine	83.43	43.48	--	--	83.43	43.48	359.28	117.22	169.76	72.73	529.04	137.80	612.46	144.50
Other western softwoods	88.08	40.94	146.61	54.28	234.69	67.99	182.13	77.75	1,145.88	171.28	1,328.01	185.90	1,562.70	197.87
Total	45,909.87	1,134.35	1,585.34	172.98	47,495.21	1,141.80	13,296.81	672.13	3,123.12	291.47	16,419.93	703.77	63,915.13	1,294.90
Hardwoods:														
Alder / maple	42.41	29.17	--	--	42.41	29.17	--	--	--	--	--	--	42.41	29.17
Aspen / birch	28.33	22.81	17.75	10.62	46.08	25.16	23.14	21.13	70.93	40.66	94.07	45.82	140.16	52.27
Elm / ash / cottonwood	--	--	27.36	20.10	27.36	20.10	--	--	--	--	--	--	27.36	20.10
Tanoak / laurel	265.19	83.31	65.14	33.15	330.33	89.62	--	--	--	--	--	--	330.33	89.62
Western oak	2,608.38	221.50	5,015.20	239.12	7,623.58	317.95	323.27	78.50	456.90	82.21	780.17	113.64	8,403.75	334.98
Woodland hardwoods	--	--	91.03	37.16	91.03	37.16	--	--	14.52	13.13	14.52	13.13	105.54	39.41
Exotic hardwoods	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other hardwoods	333.34	81.54	237.79	59.40	571.13	100.84	--	--	5.29	4.93	5.29	4.93	576.42	100.95
Total	3,277.65	251.32	5,454.26	250.50	8,731.91	345.88	346.41	81.30	547.64	92.51	894.05	123.13	9,625.96	364.39
Nonstocked	1,082.20	128.83	92.34	31.87	1,174.54	132.56	227.65	58.98	89.39	32.76	317.04	67.43	1,491.58	148.70
All forest types	50,269.72	1,129.06	7,131.93	302.76	57,401.66	1,134.83	13,870.87	670.06	3,760.15	305.56	17,631.01	701.86	75,032.67	1,272.05

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table D72: Forest Floor by Forest Type Group and Forest Land Status, 2009-2018: South Coast Mountains and Deserts

Forest type group	Unreserved forests						Reserved forests						All forest land	
	Timberland ¹		Other forest ²		Total		Productive ¹		Other forest ²		Total			
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE
	<i>thousand metric tons C</i>													
Softwoods:														
California mixed conifer	181.09	82.92	--	--	181.09	82.92	197.93	96.63	--	--	197.93	96.63	379.02	127.33
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fir / spruce / mountain hemlock	91.42	71.32	--	--	91.42	71.32	--	--	--	--	--	--	91.42	71.32
Western Hemlock / Sitka spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	--	--	--	--	--	--	--	82.43	50.54	82.43	50.54	82.43	50.54
Pinyon / juniper	--	--	296.22	51.90	296.22	51.90	--	--	156.82	35.91	156.82	35.91	453.03	63.07
Ponderosa pine	55.00	39.83	--	--	55.00	39.83	110.49	53.73	15.83	15.96	126.32	56.05	181.32	68.76
Redwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western juniper	36.40	26.74	19.04	19.20	55.44	32.92	--	--	--	--	--	--	55.44	32.92
Western white pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other western softwoods	--	--	--	--	--	--	19.64	17.99	3.17	3.94	22.81	18.41	22.81	18.41
Total	363.90	119.31	315.26	55.34	679.16	131.42	328.05	110.77	258.25	63.86	586.30	127.86	1,265.46	183.31
Hardwoods:														
Alder / maple	--	--	19.95	15.50	19.95	15.50	--	--	--	--	--	--	19.95	15.50
Aspen / birch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm / ash / cottonwood	--	--	0.10	0.10	0.10	0.10	--	--	8.07	11.01	8.07	11.01	8.18	11.01
Tanoak / laurel	--	--	--	--	--	--	--	--	21.23	20.86	21.23	20.86	21.23	20.86
Western oak	140.49	49.20	655.70	91.70	796.19	105.87	95.88	39.49	184.66	50.16	280.54	63.43	1,076.73	122.93
Woodland hardwoods	--	--	102.50	31.96	102.50	31.96	--	--	34.26	21.56	34.26	21.56	136.76	38.54
Exotic hardwoods	3.99	4.07	--	--	3.99	4.07	--	--	--	--	--	--	3.99	4.07
Other hardwoods	--	--	45.74	24.56	45.74	24.56	--	--	--	--	--	--	45.74	24.56
Total	144.48	49.37	823.99	100.98	968.47	114.07	95.88	39.49	248.23	59.47	344.11	71.02	1,312.57	133.83
Nonstocked	63.44	27.03	47.83	20.13	111.27	33.62	13.77	10.49	22.07	10.52	44.75	16.70	156.02	37.54
All forest types	571.82	131.78	1,187.07	116.86	1,758.89	176.92	437.70	117.92	528.54	87.58	975.16	146.16	2,734.05	228.91

Note: Totals may be off because of rounding

¹Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

²Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table E1: Annual change in forest land area to/from other IPCC landuse classes in California, 2001-8 to 2011-18.

	Timberland ¹		Other forest ²		Reserved		All forest land	
	Total	SE	Total	SE	Total	SE	Total	SE
<i>Acres per year</i>								
Forest to nonforest:								
Cropland	936	740	3,071	1,347	--	--	4,007	1,536
Developed	7,589	1,872	5,257	1,352	455	272	13,301	2,324
Grassland	1,358	959	5,590	2,008	640	633	7,587	2,312
Other	20	21			8	7	28	22
Water	758	521	90	68	111	107	959	536
Total	10,661	2,293	14,007	2,777	1,214	697	25,882	3,665
Nonforest to forest:								
Cropland	206	111	--	--	--	--	206	111
Developed	4,140	941	868	302	41	31	5,048	989
Grassland	3,812	1,318	2,743	1,205	169	105	6,724	1,788
Other			124	128	--	--	124	128
Water	16	17	231	201	--	--	247	202
Total	8,174	1,623	3,966	1,264	210	110	12,349	2,055
Net change to forest land:								
Cropland	-730	747	-3,071	1,347	--	--	-3,801	1,540
Developed	-3,449	2,096	-4,389	1,374	-414	274	-8,253	2,524
Grassland	2,455	1,635	-2,847	2,341	-471	641	-863	2,926
Other	-20	21	124	128	-8	7	96	130
Water	-742	521	142	212	-111	107	-712	573
Total	-2,487	2,819	-10,042	3,048	-1,004	706	-13,533	4,211

Note: Totals may be off because of rounding

¹ Forest land that is capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

² Forest land that is not capable of producing in excess of 20 cubic feet per acre per year of wood at culmination of mean annual increment.

Table E2: Annual change in carbon pools due to change in land use between forest and nonforest in California, 2001-8 to 2011-18

	Forest to nonforest		Nonforest to forest		Net change	
	Total	SE	Total	SE	Total	SE
Carbon pool	<i>Thousand metric tons CO2 equivalent per year</i>					
Live tree	-1,890	309	1,001	194	-889	365
Standing dead	-205	112	29	8	-176	113
Down wood	-215	49	93	31	-123	58
Understory veg	-272	39	149	25	-123	47
Litter	-321	51	157	23	-164	56
Soil*	-4,347	573	1,980	314	-2,368	654
All pools	-2,903	416	1,429	234	-1,474	478

* No changes in landuse involved cultivated land so soil organic carbon change was assumed to be zero (Ogle et al. 2003)

Table F1 - Annual Net Emissions of Non-CO2 Greenhouse Gases from Fire, 2001-2008 to 2011-2018: All California

	Public						Private				Total		Total	
	National Forest		Other Federal		State and local govt.		Corporate		Non Corporate		Total	SE	Total	SE
	Total	SE	Total	SE	Total	SE	Total	SE	Total	SE				
	<i>thousand metric tons CO2 equivalent per year</i>													
Cut and Fire														
CO2	-798	305	--	--	-69	72	-1,600	499	-44	44	-1,643	501	-2,510	591
CH4	-26	10	--	--	-2	2	-51	16	-1	1	-53	16	-80	19
N2O	-17	6	--	--	-1	2	-34	11	-1	1	-35	11	-53	12
Fire														
CO2	-6,527	817	-1,153	429	-174	98	-227	129	-87	107	-314	168	-8,169	942
CH4	-209	26	-37	14	-6	3	-7	4	-3	3	-10	5	-262	30
N2O	-138	17	-24	9	-4	2	-5	3	-2	2	-7	4	-172	20
Total Fire														
CO2	-7,325	869	-1,153	429	-243	120	-1,827	512	-131	132	-1,957	529	-10,679	1,119
CH4	-235	28	-37	14	-8	4	-58	16	-4	4	-63	17	-342	36
N2O	-155	18	-24	9	-5	3	-39	11	-3	3	-41	11	-225	24

Appendix 3: Harvested wood product carbon model inputs; calculations

Table 3.1: California Harvest Data, 1952-2018 (mbf)

Year	Private	USFS	BLM	State & Other Public	Tribal	All Owners
2018	1,383,746	315,564	553	23,094	2,000	1,724,957
2017	1,363,244	309,533	470	22,434	0	1,695,681
2016	1,283,000	336,000	0	61,820	6,556	1,687,376
2015	1,386,000	288,000	1,568	18,620	9,000	1,703,188
2014	1,231,000	235,000	50	16,470	11,917	1,494,437
2013	1,423,000	303,000	2,000	30,173	8,860	1,767,033
2012	1,157,000	247,000	600	24,580	8,000	1,437,180
2011	1,130,000	300,490	3,000	19,780	11,371	1,464,641
2010	1,025,000	265,000	2,000	1,000	9,764	1,302,764
2009	745,000	163,000	2,190	1,000	3,905	915,095
2008	1,273,000	205,000	5,000	1,000	13,513	1,497,513
2007	1,439,000	308,000	9,000	1,000	19,300	1,776,300
2006	1,430,000	338,000	0	1,000	5,600	1,774,600
2005	1,496,000	381,000	890	1,000	10,564	1,889,454
2004	1,593,000	264,000	705	1,000	16,582	1,875,287
2003	1,509,000	284,000	859	1,000	17,854	1,812,713
2002	1,521,000	299,000	1,134	4,000	13,619	1,838,753
2001	1,476,000	262,000	800	3,000	10,000	1,751,800
2000	1,701,000	368,000	8,000	16,000	19,000	2,112,000
1999	1,903,000	433,000	1,000	26,000	15,000	2,378,000
1998	1,836,000	453,000	1,000	30,000	16,000	2,336,000
1997	2,042,000	548,000	5,000	48,000	15,000	2,658,000
1996	1,985,000	458,000	12,000	55,000	13,000	2,523,000
1995	1,929,000	544,000	6,000	40,000	16,000	2,535,000
1994	1,980,000	808,000	19,000	17,000	15,000	2,839,000
1993	2,263,000	739,000	8,000	34,000	13,000	3,057,000
1992	2,124,000	1,026,000	9,000	23,000	32,000	3,214,000
1991	2,065,000	1,336,000	11,000	38,000	24,000	3,474,000
1990	2,673,000	1,530,000	10,000	24,000	14,000	4,251,000
1989	2,638,000	2,024,000	12,000	37,000	11,000	4,722,000
1988	2,598,000	2,181,000	16,000	31,000	14,000	4,840,000
1987	2,582,000	1,969,000	15,000	42,000	41,000	4,649,000
1986	2,313,000	1,963,000	27,000	29,000	27,000	4,359,000
1985	2,172,000	1,826,000	17,000	36,000	5,000	4,056,000
1984	2,093,000	1,559,000	7,000	34,000	21,000	3,714,000
1983	1,890,000	1,676,000	25,000	43,000	14,000	3,648,000
1982	1,501,000	937,000	9,000	42,000	8,000	2,497,000
1981	1,722,000	1,093,000	7,000	15,000	22,000	2,859,000
1980	1,863,000	1,508,000	8,000	20,000	42,000	3,441,000
1979	2,265,000	1,727,000	18,000	26,000	48,000	4,084,000
1978	2,783,000	1,798,000	8,000	28,000	47,000	4,664,000
1977	2,964,000	1,738,000	19,000	28,000	38,000	4,787,000
1976	2,757,000	1,890,000	6,000	40,000	38,000	4,731,000
1975	2,712,000	1,523,000	46,000	35,000	18,000	4,334,000
1974	2,862,000	1,735,000	16,000	40,000	51,000	4,704,000

Table 3.1: California Harvest Data, 1952-2018 (mbf)

Year	Private	USFS	BLM	State & Other Public	Tribal	All Owners
1973	2,813,000	2,014,000	12,000	33,000	51,000	4,923,000
1972	3,220,000	2,215,000	19,000	37,000	66,000	5,557,000
1971	2,594,000	2,063,000	24,000	39,000	70,000	4,790,000
1970	2,624,000	1,841,000	39,000	34,000	28,000	4,566,000
1969	2,879,000	2,001,000	27,000	40,000	54,000	5,001,000
1968	2,945,000	2,364,000	36,000	48,000	79,000	5,472,000
1967	3,057,000	1,895,000	34,000	35,000	41,000	5,062,000
1966	2,967,000	1,931,000	33,000	32,000	45,000	5,008,000
1965	3,215,000	1,917,000	55,000	31,000	53,000	5,271,000
1964	3,504,000	1,864,000	34,000	25,000	49,000	5,476,000
1963	3,688,000	1,661,000	36,000	22,000	54,000	5,461,000
1962	4,053,000	1,376,000	29,000	34,000	47,000	5,539,000
1961	3,847,000	1,378,000	33,000	29,000	55,000	5,342,000
1960	3,699,000	1,330,000	32,000	28,000	48,000	5,137,000
1959	4,293,000	1,475,000	41,000	27,000	50,000	5,886,000
1958	4,470,000	1,114,000	23,000	30,000	38,000	5,675,000
1957	4,356,000	918,000	10,000	27,000	36,000	5,347,000
1956	4,687,000	1,096,000	26,000	24,000	29,000	5,862,000
1955	4,928,000	1,027,000	13,000	14,000	33,000	6,015,000
1954	4,789,000	757,000	13,000	16,000	25,000	5,600,000
1953	5,317,000	633,000	7,000	18,000	15,000	5,990,000
1952	4,398,000	613,000	6,000	14,000	26,000	5,057,000

Table 3.2: California Timber Product Ratios

Timber Product			1954	1953	1952
ID	TPO Code	Timber Description			
1	01	hardwood, sawtimber	0.0025	0.0025	0.0025
2	01	softwood, sawtimber	0.9960	0.9960	0.9960
3	02	hardwood, pulpwood	0.0000	0.0000	0.0000
4	02	softwood, pulpwood	0.0009	0.0009	0.0009
5	03	hardwood, poles	0.0000	0.0000	0.0000
6	03	softwood, poles	0.0000	0.0000	0.0000
7	04	hardwood, pilings	0.0000	0.0000	0.0000
8	04	softwood, pilings	0.0000	0.0000	0.0000
9	05	hardwood, mine props	0.0000	0.0000	0.0000
10	05	softwood, mine props	0.0000	0.0000	0.0000
11	06	hardwood, posts	0.0000	0.0000	0.0000
12	06	softwood, posts	0.0000	0.0000	0.0000
13	07	hardwood, fuelwood	0.0000	0.0000	0.0000
14	07	softwood, fuelwood	0.0000	0.0000	0.0000
15	08	hardwood, non-sawtimber	0.0000	0.0000	0.0000
16	08	softwood, non-sawtimber	0.0000	0.0000	0.0000
17	09	hardwood, ties	0.0000	0.0000	0.0000
18	09	softwood, ties	0.0000	0.0000	0.0000
19	10	hardwood, coop bolts	0.0000	0.0000	0.0000
20	10	softwood, coop bolts	0.0000	0.0000	0.0000
21	11	hardwood, acid/dist.	0.0000	0.0000	0.0000
22	11	softwood, acid/dist.	0.0000	0.0000	0.0000
23	12	hardwood, float logs	0.0000	0.0000	0.0000
24	12	softwood, float logs	0.0000	0.0000	0.0000
25	13	hardwood, trap float	0.0000	0.0000	0.0000
26	13	softwood, trap float	0.0000	0.0000	0.0000
27	14	hardwood, misc-conv.	0.0000	0.0000	0.0000
28	14	softwood, misc-conv.	0.0006	0.0006	0.0006
29	16	hardwood, nav stores	0.0000	0.0000	0.0000
30	16	softwood, nav stores	0.0000	0.0000	0.0000
31	18	hardwood, cull logs	0.0000	0.0000	0.0000
32	18	softwood, cull logs	0.0000	0.0000	0.0000
33	19	hardwood, sm rnd wd	0.0000	0.0000	0.0000
34	19	softwood, sm rnd wd	0.0000	0.0000	0.0000
35	20	hardwood, grn bio cv	0.0000	0.0000	0.0000
36	20	softwood, grn bio cv	0.0000	0.0000	0.0000
37	21	hardwood, dry bio cv	0.0000	0.0000	0.0000
38	21	softwood, dry bio cv	0.0000	0.0000	0.0000
39	26	hardwood, sp wood pr	0.0000	0.0000	0.0000
40	26	softwood, sp wood pr	0.0000	0.0000	0.0000

Table 3.4: End-use Product Ratios – refer to CA_HWP_C_end-use_ratios.xlsx

Table 3.5: Product end-use half-lives

End Use				End Use Half Life (yrs)
ID	Timber Product	Primary Product	End Use Product	
1	hardwood, sawtimber	fuelwood and other	fuelwood and other	0
2	hardwood, sawtimber	lumber	manufacturing, other manufacturing	12
3	hardwood, sawtimber	lumber	rail and railcar, n/a	12
4	hardwood, sawtimber	lumber	packaging and shipping, n/a	6
5	hardwood, sawtimber	lumber	manufacturing, furniture	30
6	hardwood, sawtimber	lumber	other, n/a	12
7	hardwood, sawtimber	lumber	new nonresidential, other	67
8	hardwood, sawtimber	lumber	new nonresidential, new nonres buildings	67
9	hardwood, sawtimber	lumber	residential r and r, n/a	30
10	hardwood, sawtimber	lumber	new housing, manufactured housing	12
11	hardwood, sawtimber	lumber	new housing, single family	100
12	hardwood, sawtimber	lumber	new housing, multifamily	70
13	hardwood, sawtimber	non-structural panels	manufacturing, other manufacturing	12
14	hardwood, sawtimber	non-structural panels	new housing, multifamily	70
15	hardwood, sawtimber	non-structural panels	new housing, single family	100
16	hardwood, sawtimber	non-structural panels	residential r and r, n/a	30
17	hardwood, sawtimber	non-structural panels	new nonresidential, new nonres buildings	67
18	hardwood, sawtimber	non-structural panels	new nonresidential, other	67
19	hardwood, sawtimber	non-structural panels	rail and railcar, n/a	12
20	hardwood, sawtimber	non-structural panels	manufacturing, furniture	30
21	hardwood, sawtimber	non-structural panels	new housing, manufactured housing	12
22	hardwood, sawtimber	non-structural panels	packaging and shipping, n/a	6
23	hardwood, sawtimber	non-structural panels	other, n/a	12
24	hardwood, sawtimber	oriented strandboard (OSB)	new housing, multifamily	70
25	hardwood, sawtimber	oriented strandboard (OSB)	rail and railcar, n/a	12
26	hardwood, sawtimber	oriented strandboard (OSB)	new housing, single family	100
27	hardwood, sawtimber	oriented strandboard (OSB)	new housing, manufactured housing	12
28	hardwood, sawtimber	oriented strandboard (OSB)	manufacturing, furniture	30
29	hardwood, sawtimber	oriented strandboard (OSB)	new nonresidential, new nonres buildings	67
30	hardwood, sawtimber	oriented strandboard (OSB)	manufacturing, other manufacturing	12
31	hardwood, sawtimber	oriented strandboard (OSB)	packaging and shipping, n/a	6
32	hardwood, sawtimber	oriented strandboard (OSB)	other, n/a	12
33	hardwood, sawtimber	oriented strandboard (OSB)	residential r and r, n/a	30
34	hardwood, sawtimber	oriented strandboard (OSB)	new nonresidential, other	67
35	hardwood, sawtimber	other industrial products	other industrial products	12
36	hardwood, sawtimber	plywood	new housing, manufactured housing	12
37	hardwood, sawtimber	plywood	new housing, multifamily	70
38	hardwood, sawtimber	plywood	residential r and r, n/a	30
39	hardwood, sawtimber	plywood	new nonresidential, new nonres buildings	67
40	hardwood, sawtimber	plywood	new nonresidential, other	67
41	hardwood, sawtimber	plywood	rail and railcar, n/a	12
42	hardwood, sawtimber	plywood	manufacturing, furniture	30
43	hardwood, sawtimber	plywood	manufacturing, other manufacturing	12
44	hardwood, sawtimber	plywood	packaging and shipping, n/a	6
45	hardwood, sawtimber	plywood	other, n/a	12
46	hardwood, sawtimber	plywood	new housing, single family	100
47	hardwood, sawtimber	wood pulp	wood pulp	2.6
48	softwood, sawtimber	fuelwood and other	fuelwood and other	0

Table 3.5: Product end-use half-lives

End Use				End Use Half Life (yrs)
ID	Timber Product	Primary Product	End Use Product	
49	softwood, sawtimber	lumber	residential r and r, n/a	30
50	softwood, sawtimber	lumber	packaging and shipping, n/a	6
51	softwood, sawtimber	lumber	manufacturing, other manufacturing	12
52	softwood, sawtimber	lumber	manufacturing, furniture	30
53	softwood, sawtimber	lumber	rail and railcar, n/a	12
54	softwood, sawtimber	lumber	new nonresidential, new nonres buildings	67
55	softwood, sawtimber	lumber	other, n/a	12
56	softwood, sawtimber	lumber	new housing, multifamily	70
57	softwood, sawtimber	lumber	new housing, manufactured housing	12
58	softwood, sawtimber	lumber	new housing, single family	100
59	softwood, sawtimber	lumber	new nonresidential, other	67
60	softwood, sawtimber	non-structural panels	manufacturing, other manufacturing	12
61	softwood, sawtimber	non-structural panels	other, n/a	12
62	softwood, sawtimber	non-structural panels	new housing, single family	100
63	softwood, sawtimber	non-structural panels	rail and railcar, n/a	12
64	softwood, sawtimber	non-structural panels	packaging and shipping, n/a	6
65	softwood, sawtimber	non-structural panels	new housing, manufactured housing	12
66	softwood, sawtimber	non-structural panels	residential r and r, n/a	30
67	softwood, sawtimber	non-structural panels	new nonresidential, other	67
68	softwood, sawtimber	non-structural panels	manufacturing, furniture	30
69	softwood, sawtimber	non-structural panels	new housing, multifamily	70
70	softwood, sawtimber	non-structural panels	new nonresidential, new nonres buildings	67
71	softwood, sawtimber	oriented strandboard (OSB)	rail and railcar, n/a	12
72	softwood, sawtimber	oriented strandboard (OSB)	new nonresidential, other	67
73	softwood, sawtimber	oriented strandboard (OSB)	new housing, manufactured housing	12
74	softwood, sawtimber	oriented strandboard (OSB)	residential r and r, n/a	30
75	softwood, sawtimber	oriented strandboard (OSB)	new nonresidential, new nonres buildings	67
76	softwood, sawtimber	oriented strandboard (OSB)	other, n/a	12
77	softwood, sawtimber	oriented strandboard (OSB)	packaging and shipping, n/a	6
78	softwood, sawtimber	oriented strandboard (OSB)	new housing, multifamily	70
79	softwood, sawtimber	oriented strandboard (OSB)	new housing, single family	100
80	softwood, sawtimber	oriented strandboard (OSB)	manufacturing, other manufacturing	12
81	softwood, sawtimber	oriented strandboard (OSB)	manufacturing, furniture	30
82	softwood, sawtimber	other industrial products	other industrial products	12
83	softwood, sawtimber	plywood	residential r and r, n/a	30
84	softwood, sawtimber	plywood	manufacturing, furniture	30
85	softwood, sawtimber	plywood	new housing, single family	100
86	softwood, sawtimber	plywood	new housing, multifamily	70
87	softwood, sawtimber	plywood	manufacturing, other manufacturing	12
88	softwood, sawtimber	plywood	other, n/a	12
89	softwood, sawtimber	plywood	rail and railcar, n/a	12
90	softwood, sawtimber	plywood	new nonresidential, new nonres buildings	67
91	softwood, sawtimber	plywood	new housing, manufactured housing	12
92	softwood, sawtimber	plywood	packaging and shipping, n/a	6
93	softwood, sawtimber	plywood	new nonresidential, other	67
94	softwood, sawtimber	wood pulp	wood pulp	2.6
95	hardwood, pulpwood	fuelwood and other	fuelwood and other	0
96	hardwood, pulpwood	lumber	rail and railcar, n/a	12

Table 3.5: Product end-use half-lives

End Use				End Use Half Life (yrs)
ID	Timber Product	Primary Product	End Use Product	
97	hardwood, pulpwood	lumber	packaging and shipping, n/a	6
98	hardwood, pulpwood	lumber	other, n/a	12
99	hardwood, pulpwood	lumber	manufacturing, furniture	30
100	hardwood, pulpwood	lumber	new housing, multifamily	70
101	hardwood, pulpwood	lumber	new nonresidential, other	67
102	hardwood, pulpwood	lumber	new housing, single family	100
103	hardwood, pulpwood	lumber	new nonresidential, new nonres buildings	67
104	hardwood, pulpwood	lumber	new housing, manufactured housing	12
105	hardwood, pulpwood	lumber	residential r and r, n/a	30
106	hardwood, pulpwood	lumber	manufacturing, other manufacturing	12
107	hardwood, pulpwood	non-structural panels	manufacturing, other manufacturing	12
108	hardwood, pulpwood	non-structural panels	new housing, multifamily	70
109	hardwood, pulpwood	non-structural panels	other, n/a	12
110	hardwood, pulpwood	non-structural panels	residential r and r, n/a	30
111	hardwood, pulpwood	non-structural panels	new nonresidential, new nonres buildings	67
112	hardwood, pulpwood	non-structural panels	packaging and shipping, n/a	6
113	hardwood, pulpwood	non-structural panels	new nonresidential, other	67
114	hardwood, pulpwood	non-structural panels	new housing, single family	100
115	hardwood, pulpwood	non-structural panels	new housing, manufactured housing	12
116	hardwood, pulpwood	non-structural panels	manufacturing, furniture	30
117	hardwood, pulpwood	non-structural panels	rail and railcar, n/a	12
118	hardwood, pulpwood	oriented strandboard (OSB)	manufacturing, other manufacturing	12
119	hardwood, pulpwood	oriented strandboard (OSB)	packaging and shipping, n/a	6
120	hardwood, pulpwood	oriented strandboard (OSB)	other, n/a	12
121	hardwood, pulpwood	oriented strandboard (OSB)	manufacturing, furniture	30
122	hardwood, pulpwood	oriented strandboard (OSB)	rail and railcar, n/a	12
123	hardwood, pulpwood	oriented strandboard (OSB)	new nonresidential, new nonres buildings	67
124	hardwood, pulpwood	oriented strandboard (OSB)	new housing, single family	100
125	hardwood, pulpwood	oriented strandboard (OSB)	new housing, manufactured housing	12
126	hardwood, pulpwood	oriented strandboard (OSB)	residential r and r, n/a	30
127	hardwood, pulpwood	oriented strandboard (OSB)	new nonresidential, other	67
128	hardwood, pulpwood	oriented strandboard (OSB)	new housing, multifamily	70
129	hardwood, pulpwood	other industrial products	other industrial products	12
130	hardwood, pulpwood	plywood	residential r and r, n/a	30
131	hardwood, pulpwood	plywood	packaging and shipping, n/a	6
132	hardwood, pulpwood	plywood	new housing, manufactured housing	12
133	hardwood, pulpwood	plywood	new housing, single family	100
134	hardwood, pulpwood	plywood	new housing, multifamily	70
135	hardwood, pulpwood	plywood	other, n/a	12
136	hardwood, pulpwood	plywood	manufacturing, other manufacturing	12
137	hardwood, pulpwood	plywood	rail and railcar, n/a	12
138	hardwood, pulpwood	plywood	new nonresidential, new nonres buildings	67
139	hardwood, pulpwood	plywood	manufacturing, furniture	30
140	hardwood, pulpwood	plywood	new nonresidential, other	67
141	hardwood, pulpwood	wood pulp	wood pulp	2.6
142	softwood, pulpwood	fuelwood and other	fuelwood and other	0
143	softwood, pulpwood	lumber	residential r and r, n/a	30
144	softwood, pulpwood	lumber	manufacturing, furniture	30

Table 3.5: Product end-use half-lives

End Use				End Use Half Life (yrs)
ID	Timber Product	Primary Product	End Use Product	
145	softwood, pulpwood	lumber	new housing, manufactured housing	12
146	softwood, pulpwood	lumber	new housing, multifamily	70
147	softwood, pulpwood	lumber	new nonresidential, new nonres buildings	67
148	softwood, pulpwood	lumber	new nonresidential, other	67
149	softwood, pulpwood	lumber	manufacturing, other manufacturing	12
150	softwood, pulpwood	lumber	packaging and shipping, n/a	6
151	softwood, pulpwood	lumber	other, n/a	12
152	softwood, pulpwood	lumber	new housing, single family	100
153	softwood, pulpwood	lumber	rail and railcar, n/a	12
154	softwood, pulpwood	non-structural panels	new housing, single family	100
155	softwood, pulpwood	non-structural panels	manufacturing, furniture	30
156	softwood, pulpwood	non-structural panels	other, n/a	12
157	softwood, pulpwood	non-structural panels	packaging and shipping, n/a	6
158	softwood, pulpwood	non-structural panels	new nonresidential, new nonres buildings	67
159	softwood, pulpwood	non-structural panels	manufacturing, other manufacturing	12
160	softwood, pulpwood	non-structural panels	new nonresidential, other	67
161	softwood, pulpwood	non-structural panels	residential r and r, n/a	30
162	softwood, pulpwood	non-structural panels	new housing, multifamily	70
163	softwood, pulpwood	non-structural panels	rail and railcar, n/a	12
164	softwood, pulpwood	non-structural panels	new housing, manufactured housing	12
165	softwood, pulpwood	oriented strandboard (OSB)	manufacturing, furniture	30
166	softwood, pulpwood	oriented strandboard (OSB)	manufacturing, other manufacturing	12
167	softwood, pulpwood	oriented strandboard (OSB)	new nonresidential, other	67
168	softwood, pulpwood	oriented strandboard (OSB)	new housing, single family	100
169	softwood, pulpwood	oriented strandboard (OSB)	new housing, multifamily	70
170	softwood, pulpwood	oriented strandboard (OSB)	new housing, manufactured housing	12
171	softwood, pulpwood	oriented strandboard (OSB)	residential r and r, n/a	30
172	softwood, pulpwood	oriented strandboard (OSB)	rail and railcar, n/a	12
173	softwood, pulpwood	oriented strandboard (OSB)	packaging and shipping, n/a	6
174	softwood, pulpwood	oriented strandboard (OSB)	other, n/a	12
175	softwood, pulpwood	oriented strandboard (OSB)	new nonresidential, new nonres buildings	67
176	softwood, pulpwood	other industrial products	other industrial products	12
177	softwood, pulpwood	plywood	rail and railcar, n/a	12
178	softwood, pulpwood	plywood	new nonresidential, other	67
179	softwood, pulpwood	plywood	other, n/a	12
180	softwood, pulpwood	plywood	manufacturing, other manufacturing	12
181	softwood, pulpwood	plywood	new nonresidential, new nonres buildings	67
182	softwood, pulpwood	plywood	packaging and shipping, n/a	6
183	softwood, pulpwood	plywood	new housing, manufactured housing	12
184	softwood, pulpwood	plywood	new housing, multifamily	70
185	softwood, pulpwood	plywood	new housing, single family	100
186	softwood, pulpwood	plywood	manufacturing, furniture	30
187	softwood, pulpwood	plywood	residential r and r, n/a	30
188	softwood, pulpwood	wood pulp	wood pulp	2.6
189	hardwood, poles	hardwood, poles	hardwood, poles	12
190	softwood, poles	softwood, poles	softwood, poles	12
191	hardwood, pilings	hardwood, pilings	hardwood, pilings	12
192	softwood, pilings	softwood, pilings	softwood, pilings	12

Table 3.5: Product end-use half-lives

End Use				End Use Half Life (yrs)
ID	Timber Product	Primary Product	End Use Product	
193	hardwood, mine props	hardwood, mine props	hardwood, mine props	12
194	softwood, mine props	softwood, mine props	softwood, mine props	12
195	hardwood, posts	hardwood, posts	hardwood, posts	12
196	softwood, posts	softwood, posts	softwood, posts	12
197	hardwood, fuelwood	hardwood, fuelwood	hardwood, fuelwood	0
198	softwood, fuelwood	softwood, fuelwood	softwood, fuelwood	0
199	hardwood, non-sawtimber	hardwood, non-sawtimber	hardwood, non-sawtimber	12
200	softwood, non-sawtimber	softwood, non-sawtimber	softwood, non-sawtimber	12
201	hardwood, ties	hardwood, ties	hardwood, ties	12
202	softwood, ties	softwood, ties	softwood, ties	12
203	hardwood, coop bolts	hardwood, coop bolts	hardwood, coop bolts	12
204	softwood, coop bolts	softwood, coop bolts	softwood, coop bolts	12
205	hardwood, acid/dist.	hardwood, acid/dist.	hardwood, acid/dist.	12
206	softwood, acid/dist.	softwood, acid/dist.	softwood, acid/dist.	12
207	hardwood, float logs	hardwood, float logs	hardwood, float logs	12
208	softwood, float logs	softwood, float logs	softwood, float logs	12
209	hardwood, trap float	hardwood, trap float	hardwood, trap float	12
210	softwood, trap float	softwood, trap float	softwood, trap float	12
211	hardwood, misc-conv.	hardwood, misc-conv.	hardwood, misc-conv.	12
212	softwood, misc-conv.	softwood, misc-conv.	softwood, misc-conv.	12
213	hardwood, nav stores	hardwood, nav stores	hardwood, nav stores	12
214	softwood, nav stores	softwood, nav stores	softwood, nav stores	12
215	hardwood, cull logs	hardwood, cull logs	hardwood, cull logs	12
216	softwood, cull logs	softwood, cull logs	softwood, cull logs	12
217	hardwood, sm rnd wd	hardwood, sm rnd wd	hardwood, sm rnd wd	12
218	softwood, sm rnd wd	softwood, sm rnd wd	softwood, sm rnd wd	12
219	hardwood, grn bio cv	hardwood, grn bio cv	hardwood, grn bio cv	12
220	softwood, grn bio cv	softwood, grn bio cv	softwood, grn bio cv	12
221	hardwood, dry bio cv	hardwood, dry bio cv	hardwood, dry bio cv	12
222	softwood, dry bio cv	softwood, dry bio cv	softwood, dry bio cv	12
223	hardwood, sp wood pr	hardwood, sp wood pr	hardwood, sp wood pr	12
224	softwood, sp wood pr	softwood, sp wood pr	softwood, sp wood pr	12

Table 3.6: Discarded disposition ratios

Disposition ID	Discard Type	Discard Destination	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
1	paper	Burned	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16
2	paper	Recycled	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.49	0.48	0.46	0.46	0.42	0.28	0.28	0.28
3	paper	Composted	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.02	0.02	0.02
4	paper	Landfills	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.31	0.32	0.34	0.33	0.37	0.53	0.53	0.53
5	paper	Dumps	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
6	wood	Burned	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16
7	wood	Recycled	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.07	0.07	0.07
8	wood	Composted	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.02	0.02	0.02
9	wood	Landfills	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.68	0.67	0.67	0.73	0.73	0.73
10	wood	Dumps	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Table 3.6: Discarded disposition ratio:

Disposition ID	Discard Type	Discard Destination	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976
1	paper	Burned	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.21	0.21	0.21	0.21
2	paper	Recycled	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.15	0.15	0.15	0.15
3	paper	Composted	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	paper	Landfills	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.21	0.21	0.21	0.21
5	paper	Dumps	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.43	0.43	0.43	0.43
6	wood	Burned	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.21	0.21	0.21	0.21
7	wood	Recycled	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	wood	Composted	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	wood	Landfills	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.26	0.26	0.26	0.26
10	wood	Dumps	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.53	0.53	0.53	0.53

Table 3.6: Discarded disposition ratio:

Disposition ID	Discard Type	Discard Destination	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955
1	paper	Burned	0.21	0.21	0.21	0.21	0.21	0.21	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.3	0.3	0.3	0.3	0.3
2	paper	Recycled	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0	0	0	0	0
3	paper	Composted	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	paper	Landfills	0.21	0.21	0.21	0.21	0.21	0.21	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.07	0.07	0.07	0.07	0.07
5	paper	Dumps	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.63	0.63	0.63	0.63	0.63
6	wood	Burned	0.21	0.21	0.21	0.21	0.21	0.21	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.3	0.3	0.3	0.3	0.3
7	wood	Recycled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	wood	Composted	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	wood	Landfills	0.26	0.26	0.26	0.26	0.26	0.26	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.07	0.07	0.07	0.07	0.07
10	wood	Dumps	0.53	0.53	0.53	0.53	0.53	0.53	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.63	0.63	0.63	0.63	0.63

Table 3.6: Discarded disposition ratio:

Disposition ID	Discard Type	Discard Destination	1954	1953	1952
1	paper	Burned	0.3	0.3	0.3
2	paper	Recycled	0	0	0
3	paper	Composted	0	0	0
4	paper	Landfills	0.07	0.07	0.07
5	paper	Dumps	0.63	0.63	0.63
6	wood	Burned	0.3	0.3	0.3
7	wood	Recycled	0	0	0
8	wood	Composted	0	0	0
9	wood	Landfills	0.07	0.07	0.07
10	wood	Dumps	0.63	0.63	0.63

Table 3.7: Discarded product half-lives; landfill fixed ratios

Type ID	Discard Type	Landfill Fixed Ratio	Landfill Half Life	Dump Half Life	Recycled Half Life
0	paper	0.44	14.5	8.25	2.6
1	wood	0.77	29	16.5	2.6

Table 3.8: HWP C model distribution parameters for Monte Carlo Analysis (*note: no Monte Carlo Analysis completed for 2018 data update due to pending revisions in model code*)

Parameter ID	Parameter Name	First Year	Last Year	Min Value	Peak Value	Max Value
0	CCF to MgC conversion factors	n/a	n/a	0.95	1	1.05
1	Harvest	1906	1945	0.7	1	1.3
1		1946	1979	0.8	1	1.2
1		1980	2100	0.85	1	1.15
2	Timber product ratios	1906	1945	0.7	1	1.3
2		1946	1979	0.8	1	1.2
2		1980	2100	0.85	1	1.15
3	Primary product ratios	1906	1949	0.7	1	1.3
3		1950	1979	0.8	1	1.2
3		1980	2100	0.85	1	1.15
4	End use product ratios	n/a	n/a	0.85	1	1.15
5	Product half lives	n/a	n/a	0.85	1	1.15
6	Discarded disposition ratios (paper)	n/a	n/a	0.85	1	1.15
7	Discarded disposition ratios (wood)	n/a	n/a	0.85	1	1.15
8	Landfill decay limits (paper)	n/a	n/a	0.85	1	1.15
9	Landfill decay limits (wood)	n/a	n/a	0.85	1	1.15
10	Landfill half lives (paper)	n/a	n/a	0.85	1	1.15
11	Landfill half lives (wood)	n/a	n/a	0.85	1	1.15
12	Dump half lives (paper)	n/a	n/a	0.85	1	1.15
13	Dump half lives (wood)	n/a	n/a	0.85	1	1.15
14	Recovered half lives (paper)	n/a	n/a	0.85	1	1.15
15	Recovered half lives (wood)	n/a	n/a	0.85	1	1.15
16	Burned with energy capture ratio	n/a	n/a	0.85	1	1.15

Table 3.9: Primary Product CCF to Metric Tons C conversion

Metric Tons C conversion	Timber Product	Primary Product	Conversion Factor
1	hardwood, sawtimber	fuelwood and other	0.91
2	hardwood, sawtimber	lumber	0.91
3	hardwood, sawtimber	non-structural panels	0.87
4	hardwood, sawtimber	oriented strandboard (OSB)	0.87
5	hardwood, sawtimber	other industrial products	0.91
6	hardwood, sawtimber	plywood	0.91
7	hardwood, sawtimber	wood pulp	0.91
8	softwood, sawtimber	fuelwood and other	0.74
9	softwood, sawtimber	lumber	0.74
10	softwood, sawtimber	non-structural panels	0.71
11	softwood, sawtimber	oriented strandboard (OSB)	0.87
12	softwood, sawtimber	other industrial products	0.74
13	softwood, sawtimber	plywood	0.75
14	softwood, sawtimber	wood pulp	0.74
15	hardwood, pulpwood	fuelwood and other	0.91
16	hardwood, pulpwood	lumber	0.91
17	hardwood, pulpwood	non-structural panels	0.91
18	hardwood, pulpwood	oriented strandboard (OSB)	0.87
19	hardwood, pulpwood	other industrial products	0.91
20	hardwood, pulpwood	plywood	0.91
21	hardwood, pulpwood	wood pulp	0.74
22	softwood, pulpwood	fuelwood and other	0.74
23	softwood, pulpwood	lumber	0.74
24	softwood, pulpwood	non-structural panels	0.71
25	softwood, pulpwood	oriented strandboard (OSB)	0.87
26	softwood, pulpwood	other industrial products	0.74
27	softwood, pulpwood	plywood	0.74
28	softwood, pulpwood	wood pulp	0.74
29	hardwood, poles	hardwood, poles	0.91
30	softwood, poles	softwood, poles	0.74
31	hardwood, pilings	hardwood, pilings	0.91
32	softwood, pilings	softwood, pilings	0.74
33	hardwood, mine props	hardwood, mine props	0.91
34	softwood, mine props	softwood, mine props	0.74
35	hardwood, posts	hardwood, posts	0.91
36	softwood, posts	softwood, posts	0.74
37	hardwood, fuelwood	hardwood, fuelwood	0.91
38	softwood, fuelwood	softwood, fuelwood	0.74
39	hardwood, non-sawtimber	hardwood, non-sawtimber	0.91
40	softwood, non-sawtimber	softwood, non-sawtimber	0.74
41	hardwood, ties	hardwood, ties	0.91
42	softwood, ties	softwood, ties	0.74
43	hardwood, coop bolts	hardwood, coop bolts	0.91
44	softwood, coop bolts	softwood, coop bolts	0.74
45	hardwood, acid/dist.	hardwood, acid/dist.	0.91

Table 3.9: Primary Product CCF to Metric Tons C conversion

Metric Tons C conversion	Timber Product	Primary Product	Conversion Factor
46	softwood, acid/dist.	softwood, acid/dist.	0.74
47	hardwood, float logs	hardwood, float logs	0.91
48	softwood, float logs	softwood, float logs	0.74
49	hardwood, trap float	hardwood, trap float	0.91
50	softwood, trap float	softwood, trap float	0.74
51	hardwood, misc-conv.	hardwood, misc-conv.	0.91
52	softwood, misc-conv.	softwood, misc-conv.	0.74
53	hardwood, nav stores	hardwood, nav stores	0.91
54	softwood, nav stores	softwood, nav stores	0.74
55	hardwood, cull logs	hardwood, cull logs	0.91
56	softwood, cull logs	softwood, cull logs	0.74
57	hardwood, sm rnd wd	hardwood, sm rnd wd	0.91
58	softwood, sm rnd wd	softwood, sm rnd wd	0.74
59	hardwood, grn bio cv	hardwood, grn bio cv	0.91
60	softwood, grn bio cv	softwood, grn bio cv	0.74
61	hardwood, dry bio cv	hardwood, dry bio cv	0.91
62	softwood, dry bio cv	softwood, dry bio cv	0.74
63	hardwood, sp wood pr	hardwood, sp wood pr	0.91
64	softwood, sp wood pr	softwood, sp wood pr	0.74

Table 3.10: This table shows primary products for each timber product.

Timber Product ID	Timber Product	Primary Product ID	Primary Product
1	hardwood, sawtimber	1	fuelwood and other
1	hardwood, sawtimber	2	lumber
1	hardwood, sawtimber	3	non-structural panels
1	hardwood, sawtimber	4	oriented strandboard (OSB)
1	hardwood, sawtimber	5	other industrial products
1	hardwood, sawtimber	6	plywood
1	hardwood, sawtimber	7	wood pulp
2	softwood, sawtimber	8	fuelwood and other
2	softwood, sawtimber	9	lumber
2	softwood, sawtimber	10	non-structural panels
2	softwood, sawtimber	11	oriented strandboard (OSB)
2	softwood, sawtimber	12	other industrial products
2	softwood, sawtimber	13	plywood
2	softwood, sawtimber	14	wood pulp
3	hardwood, pulpwood	15	fuelwood and other
3	hardwood, pulpwood	16	lumber
3	hardwood, pulpwood	17	non-structural panels
3	hardwood, pulpwood	18	oriented strandboard (OSB)
3	hardwood, pulpwood	19	other industrial products
3	hardwood, pulpwood	20	plywood
3	hardwood, pulpwood	21	wood pulp
4	softwood, pulpwood	22	fuelwood and other
4	softwood, pulpwood	23	lumber
4	softwood, pulpwood	24	non-structural panels
4	softwood, pulpwood	25	oriented strandboard (OSB)
4	softwood, pulpwood	26	other industrial products
4	softwood, pulpwood	27	plywood
4	softwood, pulpwood	28	wood pulp
5	hardwood, poles	29	hardwood, poles
6	softwood, poles	30	softwood, poles
7	hardwood, pilings	31	hardwood, pilings
8	softwood, pilings	32	softwood, pilings
9	hardwood, mine props	33	hardwood, mine props
10	softwood, mine props	34	softwood, mine props
11	hardwood, posts	35	hardwood, posts
12	softwood, posts	36	softwood, posts
13	hardwood, fuelwood	37	hardwood, fuelwood
14	softwood, fuelwood	38	softwood, fuelwood
15	hardwood, non-sawtimber	39	hardwood, non-sawtimber
16	softwood, non-sawtimber	40	softwood, non-sawtimber
17	hardwood, ties	41	hardwood, ties
18	softwood, ties	42	softwood, ties

19	hardwood, coop bolts	43	hardwood, coop bolts
20	softwood, coop bolts	44	softwood, coop bolts
21	hardwood, acid/dist.	45	hardwood, acid/dist.
22	softwood, acid/dist.	46	softwood, acid/dist.
23	hardwood, float logs	47	hardwood, float logs
24	softwood, float logs	48	softwood, float logs
25	hardwood, trap float	49	hardwood, trap float
26	softwood, trap float	50	softwood, trap float
27	hardwood, misc-conv.	51	hardwood, misc-conv.
28	softwood, misc-conv.	52	softwood, misc-conv.
29	hardwood, nav stores	53	hardwood, nav stores
30	softwood, nav stores	54	softwood, nav stores
31	hardwood, cull logs	55	hardwood, cull logs
32	softwood, cull logs	56	softwood, cull logs
33	hardwood, sm rnd wd	57	hardwood, sm rnd wd
34	softwood, sm rnd wd	58	softwood, sm rnd wd
35	hardwood, grn bio cv	59	hardwood, grn bio cv
36	softwood, grn bio cv	60	softwood, grn bio cv
37	hardwood, dry bio cv	61	hardwood, dry bio cv
38	softwood, dry bio cv	62	softwood, dry bio cv
39	hardwood, sp wood pr	63	hardwood, sp wood pr
40	softwood, sp wood pr	64	softwood, sp wood pr

Table 3.11: This table shows end use products for each primary product.

Primary Product ID	Primary Product	End Use ID	End Use Product
1	fuelwood and other	1	fuelwood and other
2	lumber	2	manufacturing, other manufacturing
2	lumber	3	rail and railcar, n/a
2	lumber	4	packaging and shipping, n/a
2	lumber	5	manufacturing, furniture
2	lumber	6	other, n/a
2	lumber	7	new nonresidential, other
2	lumber	8	new nonresidential, new nonres buildings
2	lumber	9	residential r and r, n/a
2	lumber	10	new housing, manufactured housing
2	lumber	11	new housing, single family
2	lumber	12	new housing, multifamily
3	non-structural panels	13	manufacturing, other manufacturing
3	non-structural panels	14	new housing, multifamily
3	non-structural panels	15	new housing, single family
3	non-structural panels	16	residential r and r, n/a
3	non-structural panels	17	new nonresidential, new nonres buildings
3	non-structural panels	18	new nonresidential, other
3	non-structural panels	19	rail and railcar, n/a
3	non-structural panels	20	manufacturing, furniture
3	non-structural panels	21	new housing, manufactured housing
3	non-structural panels	22	packaging and shipping, n/a
3	non-structural panels	23	other, n/a
4	oriented strandboard (OSB)	24	new housing, multifamily
4	oriented strandboard (OSB)	25	rail and railcar, n/a
4	oriented strandboard (OSB)	26	new housing, single family
4	oriented strandboard (OSB)	27	new housing, manufactured housing
4	oriented strandboard (OSB)	28	manufacturing, furniture
4	oriented strandboard (OSB)	29	new nonresidential, new nonres buildings
4	oriented strandboard (OSB)	30	manufacturing, other manufacturing
4	oriented strandboard (OSB)	31	packaging and shipping, n/a
4	oriented strandboard (OSB)	32	other, n/a
4	oriented strandboard (OSB)	33	residential r and r, n/a
4	oriented strandboard (OSB)	34	new nonresidential, other
5	other industrial products	35	other industrial products
6	plywood	36	new housing, manufactured housing
6	plywood	37	new housing, multifamily
6	plywood	38	residential r and r, n/a
6	plywood	39	new nonresidential, new nonres buildings
6	plywood	40	new nonresidential, other
6	plywood	41	rail and railcar, n/a
6	plywood	42	manufacturing, furniture
6	plywood	43	manufacturing, other manufacturing
6	plywood	44	packaging and shipping, n/a
6	plywood	45	other, n/a

6	plywood	46	new housing, single family
7	wood pulp	47	wood pulp
8	fuelwood and other	48	fuelwood and other
9	lumber	49	residential r and r, n/a
9	lumber	50	packaging and shipping, n/a
9	lumber	51	manufacturing, other manufacturing
9	lumber	52	manufacturing, furniture
9	lumber	53	rail and railcar, n/a
9	lumber	54	new nonresidential, new nonres buildings
9	lumber	55	other, n/a
9	lumber	56	new housing, multifamily
9	lumber	57	new housing, manufactured housing
9	lumber	58	new housing, single family
9	lumber	59	new nonresidential, other
10	non-structural panels	60	manufacturing, other manufacturing
10	non-structural panels	61	other, n/a
10	non-structural panels	62	new housing, single family
10	non-structural panels	63	rail and railcar, n/a
10	non-structural panels	64	packaging and shipping, n/a
10	non-structural panels	65	new housing, manufactured housing
10	non-structural panels	66	residential r and r, n/a
10	non-structural panels	67	new nonresidential, other
10	non-structural panels	68	manufacturing, furniture
10	non-structural panels	69	new housing, multifamily
10	non-structural panels	70	new nonresidential, new nonres buildings
11	oriented strandboard (OSB)	71	rail and railcar, n/a
11	oriented strandboard (OSB)	72	new nonresidential, other
11	oriented strandboard (OSB)	73	new housing, manufactured housing
11	oriented strandboard (OSB)	74	residential r and r, n/a
11	oriented strandboard (OSB)	75	new nonresidential, new nonres buildings
11	oriented strandboard (OSB)	76	other, n/a
11	oriented strandboard (OSB)	77	packaging and shipping, n/a
11	oriented strandboard (OSB)	78	new housing, multifamily
11	oriented strandboard (OSB)	79	new housing, single family
11	oriented strandboard (OSB)	80	manufacturing, other manufacturing
11	oriented strandboard (OSB)	81	manufacturing, furniture
12	other industrial products	82	other industrial products
13	plywood	83	residential r and r, n/a
13	plywood	84	manufacturing, furniture
13	plywood	85	new housing, single family
13	plywood	86	new housing, multifamily
13	plywood	87	manufacturing, other manufacturing
13	plywood	88	other, n/a
13	plywood	89	rail and railcar, n/a
13	plywood	90	new nonresidential, new nonres buildings
13	plywood	91	new housing, manufactured housing
13	plywood	92	packaging and shipping, n/a

13	plywood	93	new nonresidential, other
14	wood pulp	94	wood pulp
15	fuelwood and other	95	fuelwood and other
16	lumber	96	rail and railcar, n/a
16	lumber	97	packaging and shipping, n/a
16	lumber	98	other, n/a
16	lumber	99	manufacturing, furniture
16	lumber	100	new housing, multifamily
16	lumber	101	new nonresidential, other
16	lumber	102	new housing, single family
16	lumber	103	new nonresidential, new nonres buildings
16	lumber	104	new housing, manufactured housing
16	lumber	105	residential r and r, n/a
16	lumber	106	manufacturing, other manufacturing
17	non-structural panels	107	manufacturing, other manufacturing
17	non-structural panels	108	new housing, multifamily
17	non-structural panels	109	other, n/a
17	non-structural panels	110	residential r and r, n/a
17	non-structural panels	111	new nonresidential, new nonres buildings
17	non-structural panels	112	packaging and shipping, n/a
17	non-structural panels	113	new nonresidential, other
17	non-structural panels	114	new housing, single family
17	non-structural panels	115	new housing, manufactured housing
17	non-structural panels	116	manufacturing, furniture
17	non-structural panels	117	rail and railcar, n/a
18	oriented strandboard (OSB)	118	manufacturing, other manufacturing
18	oriented strandboard (OSB)	119	packaging and shipping, n/a
18	oriented strandboard (OSB)	120	other, n/a
18	oriented strandboard (OSB)	121	manufacturing, furniture
18	oriented strandboard (OSB)	122	rail and railcar, n/a
18	oriented strandboard (OSB)	123	new nonresidential, new nonres buildings
18	oriented strandboard (OSB)	124	new housing, single family
18	oriented strandboard (OSB)	125	new housing, manufactured housing
18	oriented strandboard (OSB)	126	residential r and r, n/a
18	oriented strandboard (OSB)	127	new nonresidential, other
18	oriented strandboard (OSB)	128	new housing, multifamily
19	other industrial products	129	other industrial products
20	plywood	130	residential r and r, n/a
20	plywood	131	packaging and shipping, n/a
20	plywood	132	new housing, manufactured housing
20	plywood	133	new housing, single family
20	plywood	134	new housing, multifamily
20	plywood	135	other, n/a
20	plywood	136	manufacturing, other manufacturing
20	plywood	137	rail and railcar, n/a
20	plywood	138	new nonresidential, new nonres buildings
20	plywood	139	manufacturing, furniture

20	plywood	140	new nonresidential, other
21	wood pulp	141	wood pulp
22	fuelwood and other	142	fuelwood and other
23	lumber	143	residential r and r, n/a
23	lumber	144	manufacturing, furniture
23	lumber	145	new housing, manufactured housing
23	lumber	146	new housing, multifamily
23	lumber	147	new nonresidential, new nonres buildings
23	lumber	148	new nonresidential, other
23	lumber	149	manufacturing, other manufacturing
23	lumber	150	packaging and shipping, n/a
23	lumber	151	other, n/a
23	lumber	152	new housing, single family
23	lumber	153	rail and railcar, n/a
24	non-structural panels	154	new housing, single family
24	non-structural panels	155	manufacturing, furniture
24	non-structural panels	156	other, n/a
24	non-structural panels	157	packaging and shipping, n/a
24	non-structural panels	158	new nonresidential, new nonres buildings
24	non-structural panels	159	manufacturing, other manufacturing
24	non-structural panels	160	new nonresidential, other
24	non-structural panels	161	residential r and r, n/a
24	non-structural panels	162	new housing, multifamily
24	non-structural panels	163	rail and railcar, n/a
24	non-structural panels	164	new housing, manufactured housing
25	oriented strandboard (OSB)	165	manufacturing, furniture
25	oriented strandboard (OSB)	166	manufacturing, other manufacturing
25	oriented strandboard (OSB)	167	new nonresidential, other
25	oriented strandboard (OSB)	168	new housing, single family
25	oriented strandboard (OSB)	169	new housing, multifamily
25	oriented strandboard (OSB)	170	new housing, manufactured housing
25	oriented strandboard (OSB)	171	residential r and r, n/a
25	oriented strandboard (OSB)	172	rail and railcar, n/a
25	oriented strandboard (OSB)	173	packaging and shipping, n/a
25	oriented strandboard (OSB)	174	other, n/a
25	oriented strandboard (OSB)	175	new nonresidential, new nonres buildings
26	other industrial products	176	other industrial products
27	plywood	177	rail and railcar, n/a
27	plywood	178	new nonresidential, other
27	plywood	179	other, n/a
27	plywood	180	manufacturing, other manufacturing
27	plywood	181	new nonresidential, new nonres buildings
27	plywood	182	packaging and shipping, n/a
27	plywood	183	new housing, manufactured housing
27	plywood	184	new housing, multifamily
27	plywood	185	new housing, single family
27	plywood	186	manufacturing, furniture

27	plywood	187	residential r and r, n/a
28	wood pulp	188	wood pulp
29	hardwood, poles	189	hardwood, poles
30	softwood, poles	190	softwood, poles
31	hardwood, pilings	191	hardwood, pilings
32	softwood, pilings	192	softwood, pilings
33	hardwood, mine props	193	hardwood, mine props
34	softwood, mine props	194	softwood, mine props
35	hardwood, posts	195	hardwood, posts
36	softwood, posts	196	softwood, posts
37	hardwood, fuelwood	197	hardwood, fuelwood
38	softwood, fuelwood	198	softwood, fuelwood
39	hardwood, non-sawtimber	199	hardwood, non-sawtimber
40	softwood, non-sawtimber	200	softwood, non-sawtimber
41	hardwood, ties	201	hardwood, ties
42	softwood, ties	202	softwood, ties
43	hardwood, coop bolts	203	hardwood, coop bolts
44	softwood, coop bolts	204	softwood, coop bolts
45	hardwood, acid/dist.	205	hardwood, acid/dist.
46	softwood, acid/dist.	206	softwood, acid/dist.
47	hardwood, float logs	207	hardwood, float logs
48	softwood, float logs	208	softwood, float logs
49	hardwood, trap float	209	hardwood, trap float
50	softwood, trap float	210	softwood, trap float
51	hardwood, misc-conv.	211	hardwood, misc-conv.
52	softwood, misc-conv.	212	softwood, misc-conv.
53	hardwood, nav stores	213	hardwood, nav stores
54	softwood, nav stores	214	softwood, nav stores
55	hardwood, cull logs	215	hardwood, cull logs
56	softwood, cull logs	216	softwood, cull logs
57	hardwood, sm rnd wd	217	hardwood, sm rnd wd
58	softwood, sm rnd wd	218	softwood, sm rnd wd
59	hardwood, grn bio cv	219	hardwood, grn bio cv
60	softwood, grn bio cv	220	softwood, grn bio cv
61	hardwood, dry bio cv	221	hardwood, dry bio cv
62	softwood, dry bio cv	222	softwood, dry bio cv
63	hardwood, sp wood pr	223	hardwood, sp wood pr
64	softwood, sp wood pr	224	softwood, sp wood pr

Table 3.12: Disposition of HWP C for all years. This table shows the fate of all carbon removed from the ecosystem by harvesting.

Inventory year	Emitted with energy capture ^a (metric ton CO ₂ e)	Emitted without energy capture ^a (metric ton CO ₂ e)	Products in use (metric ton)	SWDS (metric ton) ^d	Total in HWP pool ^b (metric ton)
1953	6,891,031	273,669	4,082,670	174,153	4,256,823
1954	15,053,434	1,051,893	8,527,602	647,578	9,175,180
1955	22,684,395	2,330,436	12,267,929	1,355,112	13,623,041
1956	30,880,865	4,089,680	16,061,917	2,233,344	18,295,260
1957	38,868,846	6,313,918	19,470,968	3,238,646	22,709,615
1958	46,155,052	8,960,070	22,249,512	4,318,278	26,567,790
1959	53,888,213	12,007,054	25,152,491	5,445,097	30,597,588
1960	61,908,899	15,456,377	28,083,244	6,615,140	34,698,385
1961	68,908,943	19,339,671	30,476,403	7,562,884	38,039,287
1962	76,188,335	23,646,750	32,924,462	8,515,737	41,440,199
1963	83,736,173	28,343,512	35,424,775	9,478,795	44,903,570
1964	91,177,723	33,391,140	37,757,803	10,446,638	48,204,442
1965	98,639,713	38,753,118	40,019,110	11,413,319	51,432,429
1966	105,822,355	44,395,962	42,035,837	12,372,392	54,408,228
1967	112,646,615	50,272,767	43,785,306	13,309,647	57,094,953
1968	119,544,459	56,365,673	45,538,932	14,230,062	59,768,994
1969	127,000,998	62,677,627	47,587,359	15,147,112	62,734,471
1970	132,479,288	69,192,814	49,549,702	16,055,183	65,604,885
1971	137,481,062	74,903,161	51,033,318	17,257,251	68,290,569
1972	142,728,215	80,779,096	52,686,952	18,452,296	71,139,248
1973	148,815,569	86,844,681	54,981,773	19,667,183	74,648,956
1974	153,430,435	93,097,232	56,837,890	20,889,088	77,726,978
1975	157,840,009	99,528,973	58,439,770	22,103,577	80,543,347
1976	161,902,741	106,117,037	59,666,272	23,291,313	82,957,585
1977	166,337,625	112,856,738	61,255,419	24,460,779	85,716,198
1978	171,671,989	119,748,784	62,631,390	25,621,481	88,252,871
1979	176,869,288	126,741,454	63,917,879	26,730,745	90,648,625
1980	181,420,269	133,799,370	64,718,902	27,772,594	92,491,496
1981	185,734,929	139,622,937	65,461,476	29,013,883	94,475,359
1982	189,319,821	145,432,907	65,664,220	30,194,535	95,858,755
1983	192,450,802	151,196,279	65,577,159	31,301,907	96,879,066
1984	198,171,223	156,905,582	66,399,863	32,394,197	98,794,060
1985	203,995,137	162,555,323	67,290,841	33,497,274	100,788,115
1986	210,355,342	168,155,980	68,493,821	34,627,243	103,121,064
1987	216,666,465	173,726,546	70,081,996	35,813,097	105,895,093
1988	223,397,462	179,280,760	71,906,600	37,052,608	108,959,208
1989	230,404,995	184,838,437	73,853,749	38,356,749	112,210,499
1990	237,574,946	190,415,212	75,520,876	39,722,556	115,243,431
1991	244,895,926	196,959,966	77,473,338	40,634,954	118,108,293
1992	250,878,774	203,542,350	78,562,093	41,550,907	120,112,999
1993	256,413,854	210,108,459	79,375,258	42,462,496	121,837,754
1994	260,304,742	216,613,008	80,421,062	43,362,771	123,783,832
1995	263,918,164	223,094,689	81,164,766	44,306,099	125,470,865
1996	268,124,172	229,553,192	81,247,339	45,285,479	126,532,818
1997	272,310,269	235,877,602	81,410,881	46,207,096	127,617,977
1998	276,720,356	242,049,732	81,797,320	47,097,703	128,895,023
1999	280,596,188	248,045,757	81,908,178	47,953,291	129,861,470

2000	284,541,705	253,869,331	82,130,799	48,790,927	130,921,726
2001	288,045,882	259,808,778	82,241,234	49,412,888	131,654,122
2002	291,831,032	265,641,053	81,819,797	49,999,510	131,819,307
2003	295,804,063	271,249,385	81,545,276	50,587,444	132,132,719
2004	299,720,828	276,741,695	81,314,720	51,136,954	132,451,674
2005	303,772,799	282,050,821	81,201,884	51,681,421	132,883,306
2006	307,855,381	287,175,842	81,152,769	52,226,577	133,379,346
2007	311,689,795	292,114,144	81,040,800	52,770,394	133,811,194
2008	318,040,086	296,867,228	80,791,611	53,309,501	134,101,112
2009	323,393,711	301,441,131	80,349,089	53,841,855	134,190,944
2010	326,665,185	305,825,332	79,462,483	54,349,938	133,812,421
2011	331,322,580	310,071,852	78,946,397	54,871,235	133,817,631
2012	336,558,687	314,192,400	78,598,005	55,403,746	134,001,752
2013	341,696,621	318,193,150	78,252,143	55,941,878	134,194,021
2014	347,532,813	322,097,173	78,090,983	56,496,104	134,587,087
2015	352,468,670	325,894,689	77,735,969	57,048,339	134,784,308
2016	358,093,994	329,612,449	77,560,493	57,615,008	135,175,501
2017	363,667,094	333,252,273	77,385,155	58,189,749	135,574,903
2018	369,268,532	336,821,972	77,227,502	58,773,007	136,000,509
2019 ^c	374,965,755	340,328,994	77,101,619	59,365,516	136,467,135

^a HWP C emissions were converted to reporting units in CO2 equivalents.

^b Sum of Products in use and SWDS.

^c Although no records are entered for 2018, the cumulative dispositions from prior year harvests are estimated for 2018.

^d Previous report did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified in this data update to allow for better quality assurance of calculations.

Table 3.13: Average annual HWP C flux by owner and pool for 2018 California AB 1504 ten-year reporting intervals and the 2018 reporting period.

	2002-2012	2003-2013	2004-2014	2005-2015	2006-2016	2007-2017	2008-2018	2009-2019	2018 reporting period average
	<i>Metric tons CO2e</i>								
Private:									
Products in use	-130,536	-203,029	-233,230	-355,857	-407,942	-473,977	-473,251	-422,768	-337,574
SWDS	1,490,550	1,482,637	1,488,310	1,493,463	1,503,615	1,514,333	1,529,147	1,547,245	1,506,162
Total	1,360,014	1,279,608	1,255,080	1,137,605	1,095,672	1,040,356	1,055,896	1,124,477	1,168,589
USFS:									
Products in use	-990,855	-952,454	-905,258	-876,258	-877,111	-853,459	-819,595	-756,479	-878,934
SWDS	459,847	450,119	446,222	443,826	441,161	440,429	441,142	444,273	445,877
Total	-531,008	-502,334	-459,036	-432,432	-435,951	-413,031	-378,453	-312,206	-433,056
BLM:									
Products in use	-13,810	-13,235	-12,257	-11,849	-11,130	-10,608	-12,732	-13,578	-12,400
SWDS	3,799	3,714	3,713	3,712	3,745	3,783	3,672	3,580	3,715
Total	-10,012	-9,521	-8,544	-8,136	-7,386	-6,825	-9,060	-9,999	-8,685
State and other public:									
Products in use	-41,041	-32,381	-22,163	-16,278	-10,117	7,842	14,072	20,195	-9,984
SWDS	14,625	14,093	14,062	14,116	14,384	15,534	16,468	17,546	15,104
Total	-26,416	-18,289	-8,101	-2,162	4,267	23,376	30,541	37,741	5,120
Tribal:									
Products in use	-5,081	-6,382	-9,129	-10,593	-10,867	-10,202	-15,411	-18,183	-10,731
SWDS	12,732	12,729	12,714	12,752	12,854	13,019	12,852	12,692	12,793
Total	7,651	6,346	3,585	2,159	1,987	2,817	-2,560	-5,491	2,062
All owners:									
Products in use	-1,181,323	-1,207,482	-1,182,037	-1,270,835	-1,317,168	-1,340,403	-1,306,917	-1,190,813	-1,249,622
SWDS	1,981,553	1,963,293	1,965,021	1,967,870	1,975,758	1,987,097	2,003,281	2,025,336	1,983,651
Total	800,230	755,811	782,985	697,034	658,590	646,693	696,364	834,522	734,029

Note that HWP 2002-2012 through 2009-2019 correspond with FIA re-measurement cycles of plots initially measured in 2001 and re-measured in 2011 through plots initially measured in 2008 and re-measured in 2018; all time periods recalculated to reflect revisions in end-use ratios, board foot to cubic foot conversions for 2013-2018, and model code to correct previous errors that resulted in approximately 1% of harvested carbon to disappear from HWP pools. Previous reports also did not move harvested carbon to SWDS pool until 2 years following harvest, rather than 1 year following harvest in this report. Lag times built into the original model were modified allow for better quality assurance of calculations.

Table 3.14: Average annual timber harvest between 2001 to 2018 weighted by the proportion of FIA plots remeasured each year.

Harvest year	Harvest (mbf Scribner)	Timber product output (MT C)	Weight value	Weight value	Weighted harvest values	
					mbf Scribner	MT C
2001	1,751,800	2,788,119	1/88	0.011	19,907	31,683
2002	1,838,753	2,926,511	2/88	0.023	41,790	66,512
2003	1,812,713	2,885,066	3/88	0.034	61,797	98,355
2004	1,875,287	2,984,658	4/88	0.045	85,240	135,666
2005	1,889,454	3,007,205	5/88	0.057	107,355	170,864
2006	1,774,600	2,824,407	6/88	0.068	120,995	192,573
2007	1,776,300	3,318,111	7/88	0.080	141,297	263,941
2008	1,497,513	2,797,340	8/88	0.091	136,138	254,304
2009	915,095	1,709,389	8/88	0.091	83,190	155,399
2010	1,302,764	2,433,550	8/88	0.091	118,433	221,232
2011	1,464,641	2,735,935	8/88	0.091	133,149	248,721
2012	1,437,180	2,684,638	7/88	0.080	114,321	213,551
2013	1,767,033	3,049,488	6/88	0.068	120,480	207,920
2014	1,494,437	2,579,050	5/88	0.057	84,911	146,537
2015	1,703,188	2,939,306	4/88	0.045	77,418	133,605
2016	1,687,376	2,912,018	3/88	0.034	57,524	99,273
2017	1,695,956	2,926,825	2/88	0.023	38,544	66,519
2018	1,724,957	2,976,874	1/88	0.011	19,602	33,828
					Weighted average (sum of weighted values)	
					1,562,092	2,740,482