

Information Item on the Status of Water Board's Actions on Grazing



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Purpose for Presentation Today

Inform and update committee members and the public on Water Board actions to address water quality impacts from grazing.

Agenda

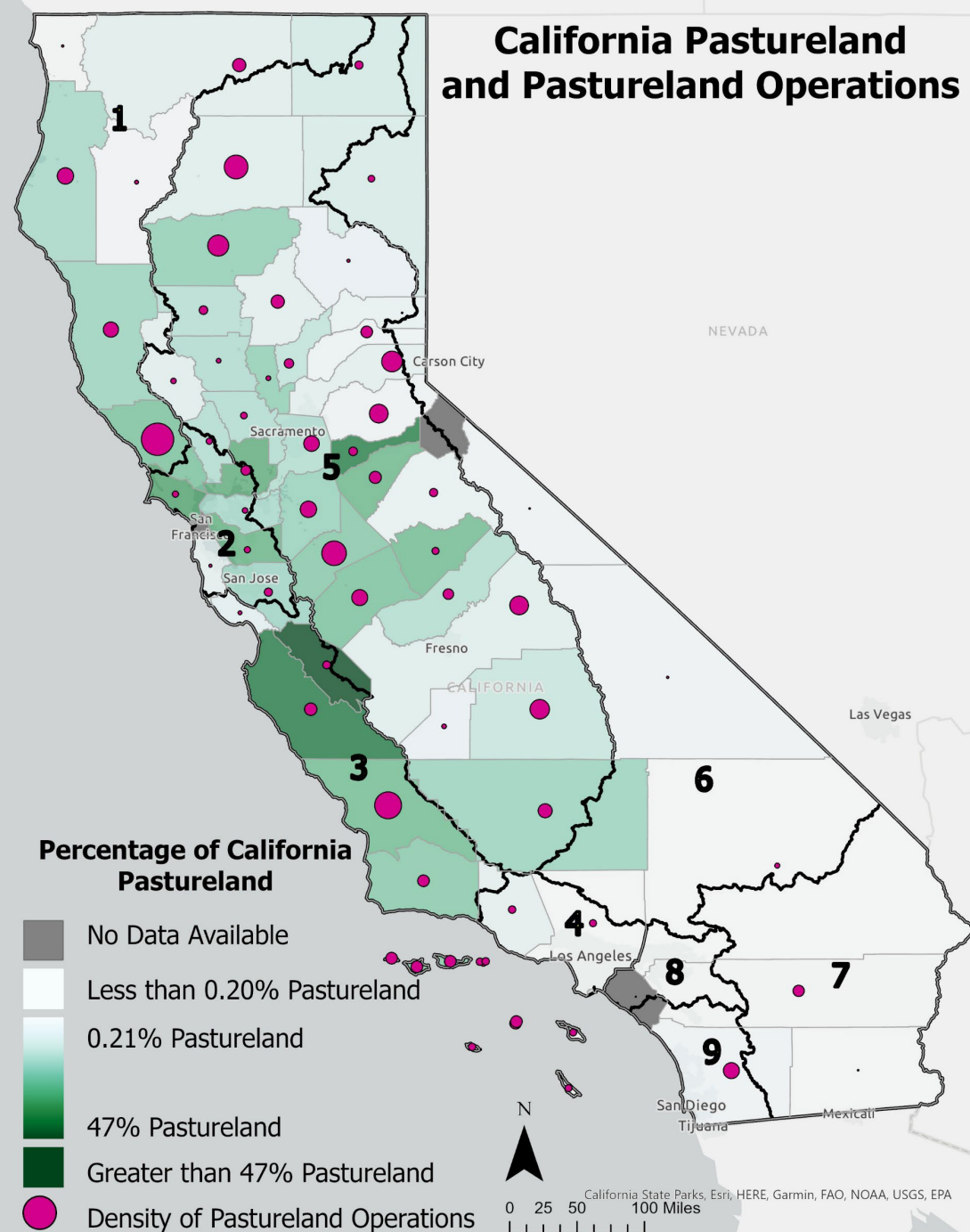
- A. Overview of Grazing in California
- B. State Water Board's Involvement in Grazing – history and current efforts
- C. Trends in Grazing Regulation
- D. Regional Water Board Involvement in Grazing – overview and specific actions

Rangeland and Grazing in California

- Rangeland covers 40% of the state (40 million acres)
- Half is privately owned; half publicly owned
- Grazing occurs mainly on rangelands while some occurs on managed (irrigated) pastureland
- CA has more than 13,000 ranches on private and public lands
- Rangeland supports much of the state's surface and groundwater

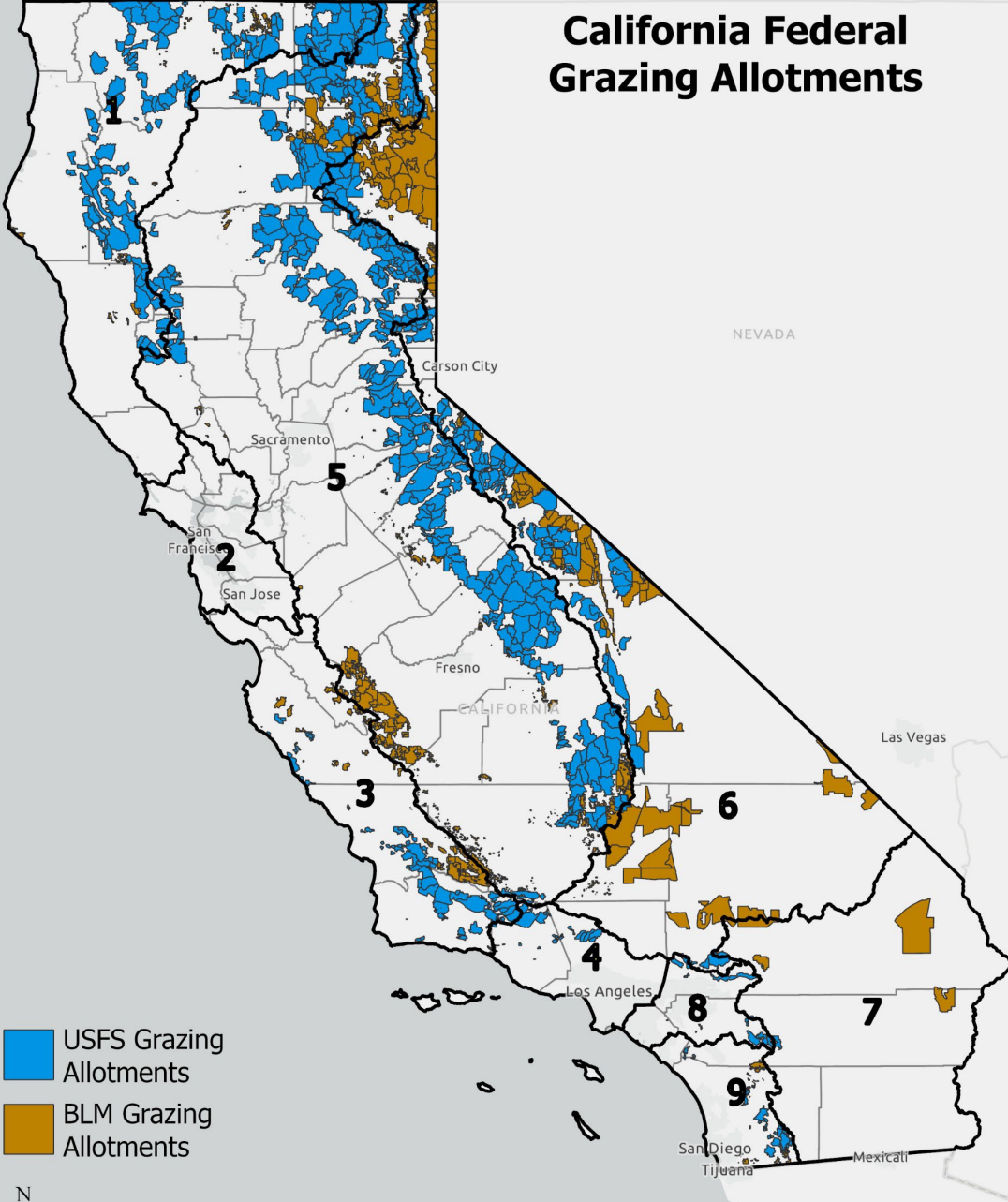


California Pastureland and Pastureland Operations



Percentage of land per county classified as pastureland by United States Department of Agriculture (2017)

- Pastureland includes range or grazing land
- Darker shades = greater percentage of land that is pastureland in the county
- Larger dots = more total number of pastureland operations in the county



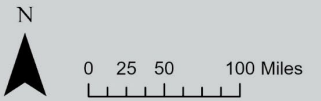
California Federal Grazing Allotments

United States Forest Service
grazing allotments (blue)

Bureau of Land Management
grazing allotments (brown)

Not all are active allotments

- USFS Grazing Allotments
- BLM Grazing Allotments



History

1995

Developed Rangeland Water Quality Management Plan (1995 Plan)

1999

Developed Plan for California's Nonpoint Source Pollution Control Program

2014

Began statewide regulatory effort to develop strategy for water quality impacts related to grazing

University of California Cooperative Extension starts short course education program to help ranchers complete water quality plans and meet 1995 Plan objectives

1995–1996

Adopted Policy for Implementation and Enforcement of the Nonpoint Source Program (California Code of Regulations, Title 23, section 2915)

2004

Discontinued statewide regulatory effort

2015

Discontinuation of Statewide Grazing Regulatory Effort in 2015 (Resolution No. 2015-0062)

- Resolved that grazing regulation should occur at regional scale due to differences in hydrology, topography, climate, and land use
- Directed Regional Water Boards to work with interested parties on actions to protect water quality and beneficial uses
- Encouraged prioritizing actions on operations with higher likelihood of impairing water quality
- Directed State Water Board staff to update the 1995 Rangeland Water Quality Management Plan

State Board Actions Overview

- Completed a technical assistance grant from US Environmental Protection Agency to analyze the Water Boards' grazing actions
- Adopted a statewide General Order for Vegetation Treatment Activities that includes prescribed herbivory
- Awarded about \$9 million to projects statewide that implement management practices on grazed lands since 2010
- Completed a draft update of the 1995 Rangeland Water Quality Management Plan

1995 Rangeland Water Quality Management Plan Summary of Proposed Changes

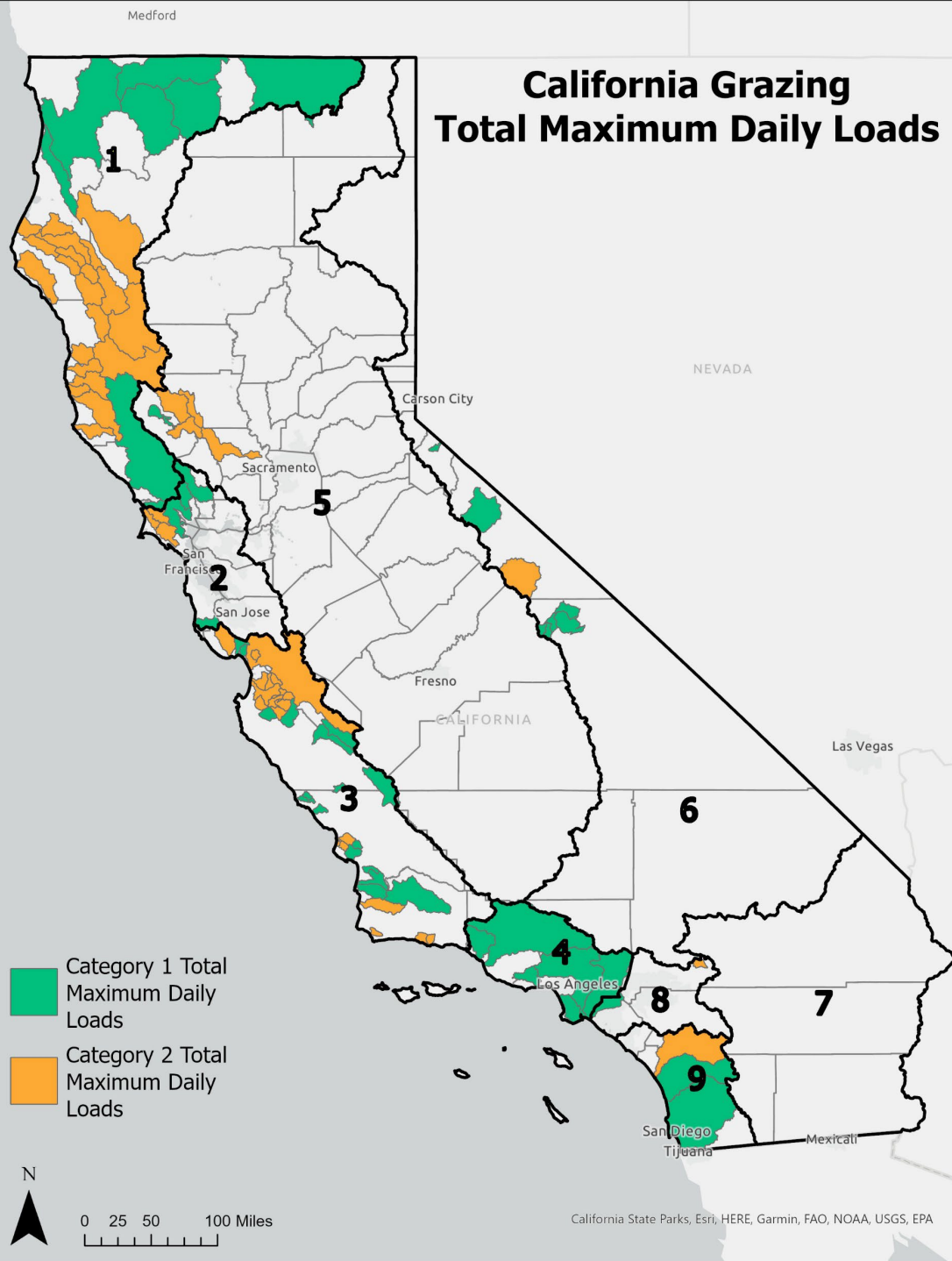
- Remove tiered regulatory approach
- Align document with Nonpoint Source Implementation and Enforcement Policy (23 CCR section 2915)
- Add list of current Regional Water Board regulatory orders
- Add potential effects of grazing on water quality and human health
- Improve and update list of grazing management practices, including Natural Resource Conservation Service (NRCS) codes and links to the NRCS Field Office Technical Guides
- Retain information such as focus on Ranch Water Quality Plans, recognition of environmental benefits of targeted grazing, and coordination with University of California Cooperative Extension (UCCE)

Summary of Water Board Grazing Regulation (from Tetra Tech analysis)

- California has a mature, well-developed program to manage nonpoint source pollution, including impacts from livestock grazing
- Regional Water Boards tailor regulatory approach to unique conditions of each region
- Nearly all Regional Water Boards have taken regulatory and/or non-regulatory action for grazing since 2015
- Permitting mechanisms mainly include Waivers of Waste Discharge Requirements (Waivers)
- Waste Discharge Requirements (WDRs), when used, are narrowly applied and focus on specific and significant water quality threats, more sensitive waters, or where livestock concentrations are higher

Comparison of Regional Approaches to Grazing Regulation (from Tetra Tech analysis)

- Nearly all orders require water quality management plan
- Requirements to implement specific management practices vary
- Regulation focuses on larger, higher risk operations
- Little to no regulation of small, low-risk operations
- Orders adopted in last 10 years, adopted for federal lands and individual operations are more robust, specific and measurable
- Monitoring requirements have evolved in specificity, detail, and rigor
- Some Regions have included requirements for stocking rates and temporal/spatial controls, especially involving federal lands



This map shows the location of watersheds with TMDLs that include grazing as a source of pollution in California.

- Category 1 TMDLs (green) note grazing as a significant TMDL pollutant source and contain specific pollutant reduction requirements.
- Category 2 TMDLs (orange) mention grazing as a TMDL pollutant source, but with no specific pollutant reduction requirements.

North Coast (Region 1) Grazing-Related Orders and TMDLs



Orders

- Scott and Shasta River watersheds (both renewed 2023)
- Dairies (adopted 2019)
- Federal land management activities on National Forest System Land (First adopted 2015; renewed 2020; new order in development)

Total Maximum Daily Loads

- Scott River Sediment and Temperature (2006)
- Shasta River Dissolved Oxygen and Temperature (2007)
- Russian River Pathogens (2021)



North Coast (Region 1) General Regulatory Approach

- Grazing and Riparian Management Plans (riparian zone protection, grazing timing and duration)
- Ranch Management Plans (nutrient and pesticide management, erosion control, road construction and maintenance)
- Monitoring and Reporting



San Francisco Bay (Region 2) Grazing-Related Orders and TMDLs

Orders

- Napa River and Sonoma Creek; Tomales Bay watersheds (adopted 2017 and 2018 respectively)
- Confined Animal Facilities (adopted 2016)
- Waiver combining all watersheds regulated by the Grazing Waiver Program, expanding to Petaluma River watershed and west side of Point Reyes National Seashore (In Development)

Total Maximum Daily Loads

- Tomales Bay Mercury (2012), Pathogens (2005)
- Napa River Sediment (2009), Pathogens (2006)
- Sonoma Creek Sediment (2008), Pathogens (2006)
- Pescadero-Butano Creek Sediment (2018)
- Petaluma River Pathogens (2020)



San Francisco Bay (Region 2)

General Approaches

- Regulatory Approach for Grazing Waiver Program
 - Ranch Water Quality Plan (to be kept onsite)
 - Ranch visits
 - Compliance and Monitoring Annual Certification
- Non-regulatory Approaches
 - Collaboration with North Bay Agricultural Support Organizations to provide compliance assistance and landowner education
 - Regularly manage one to four 319(h) grants each year that assist landowners with implementing water quality improvements on lands enrolled in the Grazing Waiver and Confined Animal Facilities programs

Central Coast (Region 3) Grazing-Related TMDLs



Total Maximum Daily Loads

- Pajaro River Sediment (2005)
- San Lorenzo River Pathogen (2009)
- Lower Salinas River Fecal Coliform (2010)
- Cholame Creek Fecal Indicator Bacteria (2011)
- Arroyo de la Cruz Fecal Indicator Bacteria (2011)
- Tularcitos Fecal Indicator Bacterial (2011)
- Santa Maria Watershed Fecal Indicator Bacteria (2012)

Los Angeles (Region 4) Grazing-Related Activities and TMDLs



Total Maximum Daily Loads

- Ventura River Algae, Eutrophic Conditions, and Nutrients (2012)
- San Gabriel River, Estuary and Tributaries Indicator Bacteria (2015)
- Malibu Creek Watershed Nutrients and Sedimentation (2016)

Database Creation

- A geodatabase is in development for ranches and grazing activities in the region to support future actions to implement TMDLs

Central Valley (Region 5) Grazing-Related Orders



Orders

- Irrigated pasture included in Irrigated Lands Regulatory Program (ILRP) WDRs
- Non-irrigated pasture and rangeland not included in WDRs
- Program prioritized pollutants are pesticides, toxicity, and nitrate water quality issues for the Board's ILRP
- Irrigated pasture in two upper watersheds were recently exempted from the ILRP after 15+ years of program participation as water quality monitoring did not show cultivating pasture hay was causing impacts to water quality

Lahontan (Region 6) Grazing-Related Orders and TMDLs



Orders

- Grazing Operations in the East Walker River Watershed, Bridgeport Valley (Waiver, first adopted 2007, renewed 2023)
- Eagle Lake 13267 Letters (Investigative, 2019)

Total Maximum Daily Loads

- Bishop Creek Fecal Indicator Bacteria Vision Plan (2022)
- West Fork Carson River Multiple Pollutants Vision Plan (In Development)



Lahontan (Region 6)

General Approaches

- Bridgeport Valley Regulatory Approach
 - Submit a Rangeland Water Quality Management Plan or NRCS Conservation Plan
 - Submit collective Interim Progress Report
 - Regional Water Board may conduct ranch visits to ascertain progress toward management practice implementation and maintenance
- Vision Plan Approach
 - Promote and facilitate voluntary implementation of grazing best management practices through Ranch Water Quality Planning

Colorado River (Region 7) Grazing-Related Orders



Orders

- Big Bear Area Regional Recycled Wastewater (WDR, 2021)
- Imperial Valley Agricultural General Waste (WDR, 2021)

General Regulatory Approach for Big Bear Area

- Restricts the grazing season and times that grazing animals can be on the land
- Requires temporary fencing to contain animals to a certain acreage
- Restricts types of grazing animals

Santa Ana (Region 8) Grazing-Related Orders



Orders

- Irrigated Lands order in the San Jacinto River Watershed regulates lands irrigated to produce pasture for commercial purposes (WDR, 2023)
- USFS grazing allotments with low animal density where no pesticides, herbicides, nutrients or irrigation are applied are exempt from the General Order

San Diego (Region 9) Grazing-Related Orders



Orders

- Order No. R9-2019-0005, Conditional Waivers of Waste Discharge Requirements for Low Threat Discharges in the San Diego Region (Waiver, 2019) – *Waiver No. 6 – Discharges from Animal Operations*

General Regulatory Approach

- Implement BMPs to prevent the discharge of pollutants
- Prevent direct contact between animals and surface water bodies
- Manage grazing fields to allow revegetation and minimize erosion