Existing definition in 14 CCR 895.1

**Ford** means a Logging Road Watercourse crossing where the road grade dips through the Watercourse channel.

Definitions from *Designing Watercourse Crossings for Passage of 100-Year Flood Flows, Wood, and Sediment (Updated 2017),* page 100:

**Ford crossing**: A watercourse crossing where the road surface crosses at the natural grade of the channel. Thus, in ford crossings, no fill is placed within the channel to elevate the road grade and to make the crossing passible by vehicle traffic. If water is present at the time of use, the crossing is a “wet ford” and if water is not present at the time of use, the crossing is a “dry ford” (Figure B-1). In some cases a small amount of rock may be placed in the ford crossing to provide additional stability and a more suitable running surface for vehicle traffic or to ease the transition from the channel banks to the natural grade of the channel.

**Rock-fill crossing**: A watercourse crossing where rock that is free of fines is placed as fill in the channel to establish a usable road grade through the crossing to accommodate traffic (Figure B-2). Often a thin layer of sacrificial small-diameter rock is placed on top of the rock fill to provide a running surface that can accommodate truck traffic. Streamflow will typically pass through the rock fill during periods of low flow, but will pass over the rock fill during periods of high flow.

**Rock-armored crossing**: A watercourse crossing where fill, often composed of native earth material, is placed in the channel to establish a usable road grade through the crossing to accommodate traffic. The outfall of the crossing and road surface are protected against scour by revetment composed of rock (Figure B-3). Streamflow will typically pass over, rather than through, the crossing fill.

**Vented crossing**: A watercourse crossing structure designed to allow low water flow in the stream channel to pass through the structure (e.g., culverts) below a hardened (usually rock or concrete) roadway (Figure B-4). During periods of high water or flooding, streamflow passes over the roadway.

Excerpt from TRA #5, section IV (2022 FPR page 147):

“Overall, fords (including native surface, rock, armored fill, and vented) are more apt to effectively transport flows, sediment, and debris in unstable landscapes and areas with poor access for emergency monitoring and repairs than culvert crossings.”

Option 1 (definitions based on the 100-Year Crossing Manual):

14 CCR 895.1

**Ford** means a Logging Road Watercourse crossing where the road grade dips through the natural grade of the Watercourse channel where no fill is placed within the channel.

**Rock-armored crossing** means a Logging Road Watercourse crossing where fill is placed in the channel to establish a usable road grade and the outfall of the crossing and road surface are protected against scour by revetment composed of rock.

**Rock-fill crossing** means a Logging Road Watercourse crossing where rock that is free of fines is placed as fill in the channel to establish a usable road grade through the crossing.

**Vented crossing** means a Logging Road Watercourse crossing designed to allow low water flow in the stream channel to pass through the structure, usually through a culvert, below a hardened roadway, and high water flow to pass over the roadway.

Option 2 (using wording from TRA #5):

14 CCR 895.1

**Ford** means a Logging Road Watercourse crossing where the road grade dips through the Watercourse channel, including native surface, rock, armored fill, and vented.