

ATTACHMENT B

WATERBODY BUFFER ZONES

Conditional Waiver of Waste Discharge Requirements from Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region

The 2024 Timber Waiver contains conditions with specific equipment operation limitations and protections near waterbodies. Areas subject to these limitations and protections are called Waterbody Buffer Zones (WBBZ). Conditions for the protection of water quality in WBBZ are contained in General- and Category-specific conditions. WBBZ are not areas of Ground Based Equipment exclusion.

One way to classify waterbodies is to categorize them as watercourses which tend to have permeable beds and connect surface waters to groundwater. A perennial stream is expected to flow throughout the year, albeit with only small dry-weather flows in some cases. An intermittent stream ceases to flow in dry periods. The flow may occur when the groundwater table is seasonally high, but there will not be flow when the groundwater table is significantly below the stream channel bed level. An ephemeral stream flows only after rain or snow-melt and has no base flow component. Because it may be difficult at times to determine when a watercourse is responding to specific groundwater conditions, this 2024 Timber Waiver classifies waterbodies by biological habitat and ability to transport sediment, as defined in the California Code of Regulations, title 14 (Forest Practice Rules) Watercourse and Lake Protection Zones (WLPZs). See Table B1, below.

WBBZ are similar to the U.S. Forest Service concept of a "Streamside Management Zone" (SMZ), which is a zone adjacent to waterbodies designated for special management controls aimed at protection and improvement of water quality. Unlike WLPZs, universal widths for SMZs are not specified, but developed on a project-specific basis considering factors such as stream class, channel aspect and stability, sideslope steepness, and slope stability. For clarity and conciseness, this 2024 Timber Waiver uses the generic term Waterbody Buffer Zone (instead of WLPZ or SMZ) to identify specific setback distances and to recognize that not all Timber Harvest and Vegetation Management Activities regulated by this 2024 Timber Waiver are subject to the Forest Practice Rules (FPRs), or are conducted by the U.S. Forest Service on U.S. Forest Service Lands.

Water Board staff will accept documents and timber waiver applications that use terminology other than "Waterbody Buffer Zones" as long as such zones or areas will not be smaller than the Waterbody Buffer Zones defined in Table B1, Waterbody Buffer Zone Widths. Such terminology may include Streamside Management Zone (SMZ), Riparian Conservation Area (RCA), and Watercourse and Lake Protection Zone (WLPZ).

Buffer Zone Designations for Class I and II Waters

Buffer Zone widths for Class I and II waters are equivalent to those in the FPRs, California Code of Regulations (CCRs), title 14, section 936.5, 956.5, Table 1, "Procedures for Determining Watercourse and Lake Protection Zone Widths and Protective Measures [All Districts]."

Buffer Zone Designations for Class III and IV Waters

This waiver specifies the Water Body Buffer Zones for Class III and IV Waters in Table B1, below.

Measuring Buffer Zone Widths

Waterbody Buffer Zones must be measured along the surface of the ground from the watercourse or lake transition line (as defined in CCR, title 14, section 895.1) or in the absence of riparian vegetation from the top edge of the watercourse bank (FPRs, CCR, title 14, section 936.4, 956.4, subdivision (b)(3)). Side slope is measured from the watercourse or lake transition line to a point 100 feet upslope from the watercourse or lake transition line, or, in the absence of riparian vegetation, from the top of the watercourse bank where slope configurations are variable, a weighted average method shall be used to determine the side slope percent (CCR, title 14, section 936.5, 956.5, subdivision (a)(3)).

Table B1. Waterbody Buffer Zone Widths

<u>TYPE OF WATERBODY:</u>	<u>DEFINITION:</u>								
Class I	Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area, and/or Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.								
<table border="1" data-bbox="527 1186 1247 1409"> <thead> <tr> <th data-bbox="527 1186 933 1262">Slope of land adjacent to watercourse or lake:</th> <th data-bbox="933 1186 1247 1262">Buffer Zone width:</th> </tr> </thead> <tbody> <tr> <td data-bbox="527 1262 933 1314">< 30%</td> <td data-bbox="933 1262 1247 1314">75 feet</td> </tr> <tr> <td data-bbox="527 1314 933 1367">30 – 50 %</td> <td data-bbox="933 1314 1247 1367">100 feet</td> </tr> <tr> <td data-bbox="527 1367 933 1409">> 50 %</td> <td data-bbox="933 1367 1247 1409">150 feet¹</td> </tr> </tbody> </table> <p data-bbox="188 1413 792 1444">¹ Subtract 50 feet width for cable yarding operations</p> <p data-bbox="168 1482 1409 1535">Reference: California Forest Practice Rules, California Code of Regulations, title 14, section 936.5, 956.5, Table 1</p>		Slope of land adjacent to watercourse or lake:	Buffer Zone width:	< 30%	75 feet	30 – 50 %	100 feet	> 50 %	150 feet ¹
Slope of land adjacent to watercourse or lake:	Buffer Zone width:								
< 30%	75 feet								
30 – 50 %	100 feet								
> 50 %	150 feet ¹								

<u>TYPE OF WATERBODY:</u>	<u>DEFINITION:</u>								
Class II	Fish always or seasonally present offsite within 1000 feet downstream, and/or Aquatic habitat for nonfish aquatic species. Excludes Class III waters that are tributary to Class I waters.								
<table border="1" data-bbox="527 600 1247 915"> <thead> <tr> <th data-bbox="527 600 935 701">Slope of land adjacent to watercourse or lake:</th> <th data-bbox="935 600 1247 701">Buffer Zone width:</th> </tr> </thead> <tbody> <tr> <td data-bbox="527 701 935 768"> < 30%</td> <td data-bbox="935 701 1247 768"> 50 feet</td> </tr> <tr> <td data-bbox="527 768 935 835"> 30 – 50 %</td> <td data-bbox="935 768 1247 835"> 75 feet</td> </tr> <tr> <td data-bbox="527 835 935 915"> > 50 %</td> <td data-bbox="935 835 1247 915"> 100 feet²</td> </tr> </tbody> </table> <p data-bbox="170 915 784 947">² Subtract 25 feet width for cable yarding operations</p> <p data-bbox="170 978 1409 1037">Reference: California Forest Practice Rules, California Code of Regulations, title 14, section 936.5, 956.5, Table 1</p>		Slope of land adjacent to watercourse or lake:	Buffer Zone width:	< 30%	50 feet	30 – 50 %	75 feet	> 50 %	100 feet ²
Slope of land adjacent to watercourse or lake:	Buffer Zone width:								
< 30%	50 feet								
30 – 50 %	75 feet								
> 50 %	100 feet ²								
Class III	No aquatic life present, waterbody showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of timber operations.								
<table border="1" data-bbox="527 1190 1247 1425"> <thead> <tr> <th data-bbox="527 1190 935 1291">Slope of land adjacent to watercourse or lake:</th> <th data-bbox="935 1190 1247 1291">Buffer Zone width:</th> </tr> </thead> <tbody> <tr> <td data-bbox="527 1291 935 1358"> < 30 %</td> <td data-bbox="935 1291 1247 1358"> 25 feet</td> </tr> <tr> <td data-bbox="527 1358 935 1425"> ≥ 30 %</td> <td data-bbox="935 1358 1247 1425"> 50 feet</td> </tr> </tbody> </table> <p data-bbox="170 1430 1409 1488">Reference: California Forest Practice Rules, California Code of Regulations, title 14, section 936.5, 956.5 Table 1</p>		Slope of land adjacent to watercourse or lake:	Buffer Zone width:	< 30 %	25 feet	≥ 30 %	50 feet		
Slope of land adjacent to watercourse or lake:	Buffer Zone width:								
< 30 %	25 feet								
≥ 30 %	50 feet								

<u>TYPE OF WATERBODY:</u>	<u>DEFINITION:</u>						
Class IV	Man-made waterbodies, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.						
<table border="1" data-bbox="527 527 1247 762"> <thead> <tr> <th data-bbox="527 527 935 632">Slope of land adjacent to watercourse or lake:</th> <th data-bbox="935 527 1247 632">Buffer Zone width:</th> </tr> </thead> <tbody> <tr> <td data-bbox="527 632 935 695" style="text-align: center;">< 30 %</td> <td data-bbox="935 632 1247 695" style="text-align: center;">25 feet</td> </tr> <tr> <td data-bbox="527 695 935 762" style="text-align: center;">≥ 30 %</td> <td data-bbox="935 695 1247 762" style="text-align: center;">50 feet</td> </tr> </tbody> </table> <p data-bbox="168 827 1409 884">Reference: California Forest Practice Rules, California Code of Regulations, title 14, section 936.5, 956.5, Table 1</p>		Slope of land adjacent to watercourse or lake:	Buffer Zone width:	< 30 %	25 feet	≥ 30 %	50 feet
Slope of land adjacent to watercourse or lake:	Buffer Zone width:						
< 30 %	25 feet						
≥ 30 %	50 feet						
Unclassified	<p data-bbox="469 890 1419 1066">Has channel with evidence of having concentrated flowing water indicated by deposit of rock, sand, gravel, or soil. No aquatic life is present, shows no evidence of being capable of sediment transport to a higher order waterbody (Class I, II, or III). These features may have riparian plant communities present.</p> <p data-bbox="469 1108 1377 1249">No standard buffer zone width is designated. However timber harvest and vegetation management activities must be excluded from within the Watercourse, except for use and maintenance of existing roads and crossings.</p>						