

3. WATER QUALITY OBJECTIVES

**TABLE 3-1
SPECIFIC WATER QUALITY OBJECTIVES FOR NORTH COAST REGION**

Waterbody ¹	Specific Conductance (micromhos) @ 77°F		Total Dissolved Solids (mg/L)		Dissolved Oxygen (mg/L)			Hydrogen Ion (pH)		Hardness (mg/L)	Boron (mg/L)	
	90% Upper Limit ³	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²	Min	90% Lower Limit ³	50% Lower Limit ²	Max	Min	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²
	<u>Lost River HA</u>											
Clear Lake Reservoir & Upper Lost River	300	200			5.0		8.0	9.0	7.0	60	0.5	0.1
Lower Lost River	1000	700			5.0		-	9.0	7.0	-	0.5	0.1
Other Streams	250	150			7.0		8.0	8.4	7.0	50	0.2	0.1
Tule Lake	1300	900			5.0		-	9.0	7.0	400	-	-
Lower Klamath Lake	1150	850			5.0		-	9.0	7.0	400	-	-
Groundwaters ⁴	1100	500			-		-	8.5	7.0	250	0.3	0.2
<u>Butte Valley HA</u>												
Streams	150	100			7.0		9.0	8.5	7.0	30	0.1	0.0
Meiss Lake	2000	1300			7.0		8.0	9.0	7.5	100	0.3	0.1
Groundwaters ⁴	800	400			-		-	8.5	6.5	120	0.2	0.1
<u>Shasta Valley HA</u>												
Shasta River	800	600			7.0		9.0	8.5	7.0	220	1.0	0.5
Other Streams	700	400			7.0		9.0	8.5	7.0	200	0.5	0.1
Lake Shastina	300	250			6.0		9.0	8.5	7.0	120	0.4	0.2
Groundwaters ⁴	800	500			-		-	8.5	7.0	180	1.0	0.3
<u>Scott River HA</u>												
Scott River	350	250			7.0		9.0	8.5	7.0	100	0.4	0.1
Other Streams	400	275			7.0		9.0	8.5	7.0	120	0.2	0.1
Groundwaters ⁴	500	250			-		-	8.0	7.0	120	0.1	0.1
<u>Salmon River HA</u>												
All Streams	150	125			9.0		10.0	8.5	7.0	60	0.1	0.0
<u>Middle Klamath River HA</u>												
Klamath River above Iron Gate Dam including Iron Gate & Copco Reservoirs	425	275			13		13	8.5	7.0	60	0.3	0.2
Klamath River below Iron Gate Dam	350	275			13		13	8.5	7.0	80	0.5	0.2
Other Streams	300	150			7.0		9.0	8.5	7.0	60	0.1	0.0
Groundwaters ⁴	750	600			-		-	8.5	7.5	200	0.3	0.1
<u>Applegate River HA</u>												
All Streams	250	175			7.0		9.0	8.5	7.0	60	-	-
<u>Upper Trinity River HA</u>												
Trinity River ⁵	200	175			7.0		10.0	8.5	7.0	80	0.1	0.0
Other Streams	200	150			7.0		10.0	8.5	7.0	60	0.0	0.0
Clair Engle Lake and Lewiston Reservoir	200	150			7.0		10.0	8.5	7.0	60	0.0	0.0

TABLE 3-1 (CONTINUED)
SPECIFIC WATER QUALITY OBJECTIVES FOR NORTH COAST REGION

Waterbody ¹	Specific Conductance (micromhos) @ 77°F		Total Dissolved Solids (mg/L)		Dissolved Oxygen (mg/L)			Hydrogen Ion (pH)		Hardness (mg/L)	Boron (mg/L)	
	90% Upper Limit ³	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²	Min	90% Lower Limit ³	50% Lower Limit ²	Max	Min	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²
<u>Hayfork Creek</u>												
Hayfork Creek	400	275			7.0		9.0	8.5	7.0	150	0.2	0.1
Other Streams	300	250			7.0		9.0	8.5	7.0	125	0.0	0.0
Ewing Reservoir	250	200			7.0		9.0	8.0	6.5	150	0.1	0.0
Groundwaters ⁴	350	225			-		-	8.5	7.0	100	0.2	0.1
<u>S.F. Trinity River HA</u>												
S.F. Trinity River	275	200			7.0		10.0	8.5	7.0	100	0.2	0.0
Other Streams	250	175			7.0		9.0	8.5	7.0	100	0.0	0.0
<u>Lower Trinity River HA</u>												
Trinity River	275	200			8.0		10.0	8.5	7.0	100	0.2	0.0
Other Streams	250	200			9.0		10.0	8.5	7.0	100	0.1	0.0
Groundwaters ⁴	200	150			-		-	8.5	7.0	75	0.1	0.1
<u>Lower Klamath River HA</u>												
Klamath River	300 ⁶	200 ⁶			13		13	8.5	7.0	75 ⁶	0.5 ⁶	0.2 ⁶
Other Streams	200 ⁶	125 ⁶			8.0		10.0	8.5	6.5	25 ⁶	0.1 ⁶	0.0 ⁶
Groundwaters ⁴	300	225			-		-	8.5	6.5	100	0.1	0.0
<u>Illinois River HA</u>												
All Streams	200	125			8.0		10.0	8.5	7.0	75	0.1	0.0
<u>Winchuck River HU</u>												
All Streams	200 ⁶	125 ⁶			8.0		10.0	8.5	7.0	50 ⁶	0.0 ⁶	0.0 ⁶
<u>Smith River HU</u>												
Smith River-Main Forks	200	125			8.0		11.0	8.5	7.0	60	0.1	0.1
Other Streams	150 ⁶	125 ⁶			7.0		10.0	8.5	7.0	60 ⁶	0.1 ⁶	0.0 ⁶
<u>Smith River Plain HSA</u>												
Smith River	200 ⁶	150 ⁶			8.0		11.0	8.5	7.0	60 ⁶	0.1 ⁶	0.0 ⁶
Other Streams	150 ⁶	125 ⁶			7.0		10.0	8.5	6.5	60 ⁶	0.1 ⁶	0.0 ⁶
Lakes Earl & Talawa	-	-			7.0		9.0	8.5	6.5	-	-	-
Groundwaters ⁴	350	100			-		-	8.5	6.5	75	1.0	0.0
Crescent City Harbor	-	-										
<u>Redwood Creek HU</u>												
Redwood Creek	220 ⁶	125 ⁶	115 ⁶	75 ⁶	7.0	7.5	10.0	8.5	6.5			
<u>Mad River HU</u>												
Mad River	300 ⁶	150 ⁶	160 ⁶	90 ⁶	7.0	7.5	10.0	8.5	6.5			
<u>Eureka Plain HU</u>												
Humboldt Bay	-	-	-	-	6.0	6.2	7.0	8.5	⁷			
<u>Eel River HU</u>												
Eel River	375 ⁶	225 ⁶	275 ⁶	140 ⁶	7.0	7.5	10.0	8.5	6.5			
Van Duzen River	375	175	200	100	7.0	7.5	10.0	8.5	6.5			

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Waterbody ¹	Specific Conductance (micromhos) @ 77°F		Total Dissolved Solids (mg/L)		Dissolved Oxygen (mg/L)			Hydrogen Ion (pH)		Hardness (mg/L)	Boron (mg/L)	
	90% Upper Limit ³	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²	Min	90% Lower Limit ³	50% Lower Limit ²	Max	Min	50% Upper Limit ²	90% Upper Limit ³	50% Upper Limit ²
	South Fork Eel River	350	200	200	120	7.0	7.5	0.0	8.5	6.5		
Middle Fork Eel River	450	200	230	130	7.0	7.5	10.0	8.5	6.5			
Outlet Creek	400	200	230	125	7.0	7.5	10.0	8.5	6.5			
<u>Cape Mendocino HU</u>												
Bear River	390 ⁶	255 ⁶	240 ⁶	150 ⁶	7.0	7.5	10.0	8.5	6.5			
Mattole River	300 ⁶	170 ⁶	170 ⁶	105 ⁶	7.0	7.5	10.0	8.5	6.5			
<u>Mendocino Coast HU</u>												
Ten Mile River	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
Noyo River	185 ⁶	150 ⁶	120 ⁶	105 ⁶	7.0	7.5	10.0	8.5	6.5			
Jug Handle Creek	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
Big River	300 ⁶	195 ⁶	190 ⁶	130 ⁶	7.0	7.5	10.0	8.5	6.5			
Albion River	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
Navarro River	285 ⁶	250 ⁶	170 ⁶	150 ⁶	7.0	7.5	10.0	8.5	6.5			
Garcia River	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
Gualala River	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
<u>Russian River HU</u>												
(upstream) ⁸	320	250	170	150	7.0	7.5	10.0	8.5	6.5			
(downstream) ⁹	375 ⁶	285 ⁶	200 ⁶	170 ⁶	7.0	7.5	10.0	8.5	6.5			
Laguna de Santa Rosa	-	-	-	-	7.0	7.5	10.0	8.5	6.5			
Bodega Bay	-	-	-	-	6.0	6.2	7.0	8.5	7			
Coastal Waters ¹⁰	-	-	-	-	11	11	11	12	12			

¹ Water bodies are grouped by hydrologic unit (HU), hydrologic area (HA), or hydrologic subarea (HSA).

² 50% upper and lower limits represent the 50 percentile values of the monthly means for a calendar year. 50% or more of the monthly means must be less than or equal to an upper limit and greater than or equal to a lower limit.

³ 90% upper and lower limits represent the 90 percentile values for a calendar year. 90% or more of the values must be less than or equal to an upper limit and greater than or equal to a lower limit.

⁴ Value may vary depending on the aquifer being sampled. This value is the result of sampling over time, and as pumped, from more than one aquifer.

⁵ Daily Average Not to Exceed Period River Reach
 60°F July 1 - Sept. 14 Lewiston Dam to Douglas City Bridge
 56°F Sept. 15 - Oct. 1 Lewiston Dam to Douglas City Bridge
 56°F Oct. 1 - Dec. 31 Lewiston Dam to confluence of North Fork Trinity River

⁶ Does not apply to estuarine areas.

⁷ pH shall not be depressed below natural background levels.

⁸ Russian River (upstream) refers to the mainstem river upstream of its confluence with Laguna de Santa Rosa.

⁹ Russian River (downstream) refers to the mainstem river downstream of its confluence with Laguna de Santa Rosa.

¹⁰ The State's Ocean Plan applies to all North Coast Region coastal waters.

¹¹ Dissolved oxygen concentrations shall not at any time be depressed more than 10 percent from that which occurs naturally.

¹² pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

¹³ The Site Specific Objectives (SSOs) for dissolved oxygen (DO) have been recalculated for the mainstem Klamath River and are presented separately in Table 3-1a.

- no water body specific objective available