Criteria Exceeded

Water Quality Monitoring Station	DO	pH	conductivity (field)	conductivity (lab)	alkalinity	turbidity	secchi	phosphorus	sodium	aluminum T	aluminum D	arsenic T	arsenic D	cadmium T	cadmium D	copper T	copper D	iron T	iron D	mercury T	mercury D	manganese T	manganese D	nickel T	nickel D	lead T	lead D
1. West Branch Feather River near Paradise					5	1,2,6		6		1, 2, 5, 15		4, 16				18		2				2		15			
2. West Branch Feather River upstream from Lake Oroville								6				4, 16														18	
3. Concow Creek at Jordan Hill Road					5	1,2,6		6		2, 5		4, 16															
4. North Fork Feather River upstream from Poe Power						1,2,6		6		1, 2, 5, 15		4, 16				18		2,5				2, 3				15	
5. Poe Power House Discharge						1,2,6		6		1, 2, 5, 15		4, 16				18		2,3,5				2, 3				15	
6. Middle Fork Feather River near Merrimac			7	7		1,2,6		6		1, 2, 5, 15		4, 16						2,5				2					
7. Fall River upstream from Feather Falls						1,2,6		6		1, 2, 5, 15		4, 16						2,5				2					
8. South Fork Feather River upstream from Ponderosa Reservoir						1,2,6		6		1, 2, 5, 15		4, 16				18	18	2,5				2		15			
9. South Fork Feather River downstream from Ponderosa Reservoir						1,2,6		6		2, 5		4, 16				18	18	2				2					
10. Miners Ranch Canal						1,2,6		6		2, 5		4, 16				18	18	2				2					
11. Sucker Run near Forbestown						1,2,6		6		1, 2, 5, 15		4, 16						2,5				2		18			

Upper Tributaries
Project Waters
Ponds and Minor Tributaries
Waters downstream from project boundary

Water Quality Limit Numbers

Physicals
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
4 NAWQC[3] Humans
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
7 Basin Plan for the Feather River[5]

Nutrients
8 Tastes and Odors[6]
1 Primary MCL
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
9 USEPA Draft Health Advisory[7]
10 California Public Health Goal[8]

Minerals
8 USEPA - Taste and odor threshold[2]
2 Secondary MCL[1]
3 Agricultural Goal[2]
5 NAWQC[3] Aquatic Life
11 USEPA IRIS Reference Dose[9]
12 California DHS Action Level for drinking water[10]
13 USEPA draft Drinking Water Advisory[7]
14 USEPA Proposed MCL Goal[7]

Metals
15 Public Health Goal[11]
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
16 Cal/EPA Cancer Potency Factor[12]
17 CTR Humans[13]
18 CTR Aquatic Life[13]
19 NTR[14]
4 NAWQC Humans[3]
5 NAWQC Aquatic Life[3]
11 USEPA IRIS Reference Dose[9]

Criteria Exceeded

Water Quality Monitoring Station	DO	pH	conductivity (field)	conductivity (lab)	alkalinity	turbidity	secchi	phosphorus	sodium	aluminum T	aluminum D	arsenic T	arsenic D	cadmium T	cadmium D	copper T	copper D	iron T	iron D	mercury T	mercury D	manganese T	manganese D	nickel T	nickel D	lead T	lead D
12. North Fork Arm Lake Oroville Sfc	7						6	6		5		4, 16															
12. North Fork Arm Lake Oroville Btm	7					1,2		6		2, 5, 15		4, 16						2				2					
13. Middle Fork Arm Lake Oroville Sfc	7					1,2	6	6		2, 5		4, 16						2									
13. Middle Fork Arm Lake Oroville Btm	7					1,2				5		4, 16				18		2, 5				2				18	
14. South Fork Arm Lake Oroville Sfc	7					1,2	6	6		2, 5, 15		4, 16						2				2					
14. South Fork Arm Lake Oroville Btm	7					1,2		6		2, 5, 15		4, 16				18		2				2					
15. Lake Oroville Main Body Sfc							6			5		4, 16															
15. Lake Oroville Main Body Btm	7							6		2, 5		4, 16						2, 5				2					
16. Lake Oroville near Dam Sfc	7						6	6		5		4, 16															
16. Lake Oroville near Dam Mid								6		5		4, 16															
16. Lake Oroville near Dam Btm	7									5		4, 16						2									

- Upper Tributaries
- Project Waters
- Ponds and Minor Tributaries
- Waters downstream from project boundary

Water Quality Limit Numbers

#	Physicals	#	Nutrients	#	Minerals	#	Metals
1	Primary MCL[1]	8	Tastes and Odors[6]	8	USEPA - Taste and odor threshold[7]	15	Public Health Goal[11]
2	Secondary MCL[1]	1	Primary MCL	2	Secondary MCL[1]	1	Primary MCL[1]
3	Agricultural Goal[2]	5	NAWQC[3] Aquatic Life	3	Agricultural Goal[2]	2	Secondary MCL[1]
4	NAWQC[3] Humans	6	USEPA Recommended Ecoregional Nutrient Criteria[4]	5	NAWQC[3] Aquatic Life	3	Agricultural Goal[2]
5	NAWQC[3] Aquatic Life	9	USEPA Draft Health Advisory[7]	11	USEPA IRIS Reference Dose[9]	16	Cal/EPA Cancer Potency Factor[12]
6	USEPA Recommended Ecoregional Nutrient Criteria[4]	10	California Public Health Goal[8]	12	California DHS Action Level for drinking water[10]	17	CTR Humans[13]
7	Basin Plan for the Feather River[5]			13	USEPA draft Drinking Water Advisory[7]	18	CTR Aquatic Life[13]
				14	USEPA Proposed MCL Goal[7]	19	NTR[14]
						4	NAWQC Humans[3]
						5	NAWQC Aquatic Life[3]
						11	USEPA IRIS Reference Dose[9]

Criteria Exceeded

Water Quality Monitoring Station	DO	pH	conductivity (field)	conductivity (lab)	alkalinity	turbidity	secchi	phosphorus	sodium	aluminum T	aluminum D	arsenic T	arsenic D	cadmium T	cadmium D	copper T	copper D	iron T	iron D	mercury T	mercury D	manganese T	manganese D	nickel T	nickel D	lead T	lead D
17. Thermalito Diversion Pool upstream from Kelly Ridge PH Sfc (US of Power Plant)										5		4, 16															
17. Thermalito Diversion Pool upstream from Kelly Ridge PH Btm (US of Power Plant)																											
18. Thermalito Diversion Pool downstream from Kelly Ridge PH Sfc (DS of Power Plant)						1,2				2, 5		4, 16						2									
18. Thermalito Diversion Pool downstream from Kelly Ridge PH Btm (DS of Power Plant)																											
19. Glen Creek upstream from Glen Pond						1,2				2, 5		4, 16		15		18	18	2				2					
20. Glen Pond						1,2				1, 2, 5, 15		4, 16				18	18	2				2					
21. Morris Ravine						1,2				1, 2, 5, 15		4, 16						2				2, 3					
22. Thermalito Diversion Pool upstream of Dam Sfc						1,2				2, 5		4, 16						2									
22. Thermalito Diversion Pool upstream of Dam Btm						1,2				5		4, 16															
23. Feather River at Oroville			7			1,2, 6				2, 5, 15		4, 16						2									
24. Feather River upstream from Hatchery						1,2, 6				2, 5		4, 16						2		17							
25. Feather River Hatchery Settling Pond			7	7		1,2, 6			8,3,13	2, 5, 15		4, 16				18		2, 3									
26. Feather River downstream from Hatchery	7		7			1,2, 6				2, 5		4, 16				18		2									
27. Feather River downstream from Hwy 162						1,2, 6				5		4, 16		15				2									
28. Oroville Fishing Pond						1,2				5		4, 16						2				2					
30. Feather River at Robinson	7					1,2, 6				2, 5		4, 16		15				2									
30. Robinson Riffle Pond						1,2				5		4, 16						2, 3				2, 3, 15					
31. Upper Pacific Heights Pond						7				5		4, 16															
32. Feather River upstream from Afterbay Outlet						1,2, 6				2, 5		4, 16		15				2									

Upper Tributaries
Project Waters
Ponds and Minor Tributaries
Waters downstream from project boundary

Water Quality Limit Numbers

Physicals
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
4 NAWQC[3] Humans
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
7 Basin Plan for the Feather River[5]

Nutrients
8 Tastes and Odors[1]
1 Primary MCL
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
9 USEPA Draft Health Advisory[7]
10 California Public Health Goal[8]

Minerals
8 USEPA - Taste and odor threshold[7]
2 Secondary MCL[1]
3 Agricultural Goal[2]
5 NAWQC[3] Aquatic Life
11 USEPA IRIS Reference Dose[9]
12 California DHS Action Level for drinking water[10]
13 USEPA draft Drinking Water Advisory[7]
14 USEPA Proposed MCL Goal[1]

Metals
15 Public Health Goal[11]
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
16 CalEPA Cancer Potency Factor[12]
17 CTR Humans[13]
18 CTR Aquatic Life[13]
19 NTR[14]
4 NAWQC Humans[3]
5 NAWQC Aquatic Life[3]
11 USEPA IRIS Reference Dose[9]

Criteria Exceeded

Water Quality Monitoring Station	DO	pH	conductivity (field)	conductivity (lab)	alkalinity	turbidity	secchi	phosphorus	sodium	aluminum T	aluminum D	arsenic T	arsenic D	cadmium T	cadmium D	copper T	copper D	iron T	iron D	mercury T	mercury D	manganese T	manganese D	nickel T	nickel D	lead T	lead D
33. North Thermalito Forebay Creek						1,2				1, 2, 5, 15		4, 16				18		2				2, 3				18	
34. Thermalito Forebay (north) Sfc						1,2				5		4, 16															
34. Thermalito Forebay (north) Btm						1,2				5		4, 16				18	18	2									
35. Thermalito Forebay (south) Sfc										5		4, 16															
35. Thermalito Forebay (south) Btm						1,2				2, 5		4, 16		15				2									
36. Thermalito Afterbay (north) Sfc						1,2				5		4, 16										2					
36. Thermalito Afterbay (north) Btm	7									2, 5		4, 16						2									
37. Thermalito Afterbay (south) Sfc						1,2				5		4, 16										2				18	
37. Thermalito Afterbay (south) Btm						1,2				2, 5		4, 16															
38. Afterbay Outlet Canal to Feather River		2,3,5,7				1,2,6				2, 5		4, 16						2									
39. Feather River downstream from Afterbay Outlet						1,2,6				2, 5, 15		4, 16		15		18		2									
40. Feather River downstream from SCOR Outfall						1,2,6				2, 5		4, 16						2									
41. Mile Long Pond Sfc						1,2,6						4, 16						2				2, 3					
41. Mile Long Pond Btm						1,2,6						4, 16				18		2				2, 3, 15					
42. Feather River near Mile Long Pond						1,2,6				5		4, 16															
43. Lower Pacific Heights Pond						1,2,6				2, 5		4, 16						2				2					

Upper Tributaries
Project Waters
Ponds and Minor Tributaries
Waters downstream from project boundary

Water Quality Limit Numbers

Physicals
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
4 NAWQC[3] Humans
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
7 Basin Plan for the Feather River[5]

Nutrients
8 Tastes and Odors[6]
1 Primary MCL
5 NAWQC[3] Aquatic Life
6 USEPA Recommended Ecoregional Nutrient Criteria[4]
9 USEPA Draft Health Advisory[7]
10 California Public Health Goal[8]

Minerals
8 USEPA - Taste and odor threshold[7]
2 Secondary MCL[1]
3 Agricultural Goal[2]
5 NAWQC[3] Aquatic Life
11 USEPA IRIS Reference Dose[9]
12 California DHS Action Level for drinking water[10]
13 USEPA draft Drinking Water Advisory[7]
14 USEPA Proposed MCL Goal[7]

Metals
15 Public Health Goal[11]
1 Primary MCL[1]
2 Secondary MCL[1]
3 Agricultural Goal[2]
16 Cal/EPA Cancer Potency Factor[12]
17 CTR Humans[13]
18 CTR Aquatic Life[13]
19 NTR[14]
4 NAWQC Humans[3]
5 NAWQC Aquatic Life[3]
11 USEPA IRIS Reference Dose[9]

Criteria Exceeded

Water Quality Monitoring Station	DO	pH	conductivity (field)	conductivity (lab)	alkalinity	turbidity	secchi	phosphorus	sodium	aluminum T	aluminum D	arsenic T	arsenic D	cadmium T	cadmium D	copper T	copper D	iron T	iron D	mercury T	mercury D	manganese T	manganese D	nickel T	nickel D	lead T	lead D
44. Feather River downstream from Project boundary	7					1,2,6				1, 2, 5, 15		4, 16						2, 5									
45. Feather River at Singh AB Riviera Rd.	7					1,2,6				2, 5		4, 16						2						15			
46. Honcut Creek at Pacific Ranch near Palermo						1,2,6				1, 2, 5, 15		4, 16				18		2, 5				2, 3, 15				18	
47. Feather River at Archer Ave (near Live Oak)						1,2,6				2, 5, 15		4, 16				18		2, 5									
48. Feather River upstream from Yuba River						1,2,6				1, 2, 5, 15		4, 16		15		18	18	2, 5				2				18	
49. Yuba River at Mouth						1,2,6				2, 5, 15		4, 16						2									
50. Feather River at Shanghai						1,2,6				1, 2, 5, 15		4, 16				18	18	2, 5				2				18	18
51. Bear River near Mouth						1,2,6				1, 2, 5, 15		4, 16				18	18	2, 5				2, 3				18	18
52. Feather River near Verona						1,2,6				1, 2, 5, 15		4, 16				18	18	2, 5				2				18	
53. Sacramento River upstream from Feather River						1,2,6				1, 2, 5, 15		4, 16		15		18	18	2, 3, 5				2, 3		15		18	
54. Sacramento River at Verona																											

Upper Tributaries
Project Waters
Ponds and Minor Tributaries
Waters downstream from project boundary

Water Quality Limit Numbers

#	Physicals
1	Primary MCL[1]
2	Secondary MCL[1]
3	Agricultural Goal[2]
4	NAWQC[3] Humans
5	NAWQC[3] Aquatic Life
6	USEPA Recommended Ecoregional Nutrient Criteria[4]
7	Basin Plan for the Feather River[5]

#	Nutrients
8	Tastes and Odors[6]
1	Primary MCL
5	NAWQC[3] Aquatic Life
6	USEPA Recommended Ecoregional Nutrient Criteria[4]
9	USEPA Draft Health Advisory[7]
10	California Public Health Goal[1]

#	Minerals
8	USEPA - Taste and odor threshold[7]
2	Secondary MCL[1]
3	Agricultural Goal[2]
5	NAWQC[3] Aquatic Life
11	USEPA IRIS Reference Dose[8]
12	California DHS Action Level for drinking water[10]
13	USEPA draft Drinking Water Advisory[9]
14	USEPA Proposed MCL Goal[7]

#	Metals
15	Public Health Goal[11]
1	Primary MCL[1]
2	Secondary MCL[1]
3	Agricultural Goal[2]
16	CalEPA Cancer Potency Factor[12]
17	CTR Humans[13]
18	CTR Aquatic Life[13]
19	NTR[14]
4	NAWQC Humans[3]
5	NAWQC Aquatic Life[3]
11	USEPA IRIS Reference Dose[8]

Footnotes

1. California Department of Health Services, California Code of Regulations, Title 22, Division 4, Chapter 15, Domestic Water Quality and Monitoring
2. Food and Agriculture Organization of the United Nations, 1985. Water Quality for Agriculture.
3. U.S. Environmental Protection Agency, Quality Criteria for Water, 1986 (May 1986) [The Gold Book] plus updates (various dates)
4. U.S. Environmental Protection Agency, Ambient Water Quality Criteria Recommendations for both Rivers and Streams in Ecoregion 1. 2001. EPA 822-B-01-012
5. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region, Fourth edition. The Sacramento River Basin and the San Joaquin River Basin. Central Valley Regional Water Quality Control Board. Sacramento, California.
6. J.E. Amoore and E. Hautala. Odor as an aid to chemical safety: Odor thresholds compared with threshold limit values and volatilities for 214 industrial chemicals in air and water dilution. Journal of Applied Toxicology, 3(6):272-290. 1983
7. U.S. Environmental Protection Agency, Office of Water, 2004 Edition of the Drinking Water Standards and Health Advisories. (Winter 2004). EPA 822-R-04-005.
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9. U.S. Environmental Protection Agency, Integrated Risk Information System [IRIS] database
10. California Department of Health Services, Division of Drinking Water and Environmental Management, Drinking Water Action Levels (6 June 2003), http://www.dhs.cahwnet.gov/ps/ddwem.
11. California Environmental Protection Agency (Cal/EPA), Office of Environmental Health Hazard Assessment, *Public Health Goals for Chemicals in Drinking Water*
12. Cal/EPA, Office of Environmental Health Hazard Assessment, Cal/EPA Toxicity Criteria Database
13. California State Water Resources Control Board, Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2 March 2003)
14. U.S. Environmental Protection Agency, Federal Register, Volume 64, No. 216 (Tuesday, 9 November 1999) [National Toxics Rule revisions]