

Water Quality Data for Mark West Creek 095

Date	Turbidity NTU's	Air Temp	Water Temp - B	Water Temp - T	Phosphate	Nitrate	pH	Conductivity us	Dissolved Oxygen mg/L
11/29/04	0.83	15	5.5	5.3	0	0	8	260	12.1
12/17/04	2.88	17	7.5	7.2	0	0.06	8	250	9.5
1/27/05	3.69	10	10	8.9	0	0.08	8.4	230	15.3
2/25/05	9.65	17	10.5	10.7	0	0.1	8.3	170	10.9
3/25/05	13.5	19	10	0	0	0.12	8.2	150	9.7
5/13/05	12.1	18	13	0	0.04	0.07	8	190	8.1
6/30/05	1.08	22	19	19.1	0.066	0	8.2	290	11
8/5/05	0.87	23	18	17	0.06	0	8	280	11
8/26/05	1.67	20	15.5	14.6	0.033	0.036	8	270	9.7
9/30/05	0.85	20	15	14.7	0.048	0.013	8	280	5.7
11/3/05	0.52	11	10.5	9.6	0.058	0.017	7.9	300	4.3
12/2/05	20.6	11	9	9	0	0.74	7.3	170	10.2
1/12/06	8.27	15	9.5	9.2	0	0.2	7.7	190	10.1
4/28/06	7.76	19	0	13.1	0.23	0.05	7.5	220	9.4
5/26/06	1.54	15	12	11.3	0.03	0.016	8.4	270	9.9
6/30/06	1.04	15	16.5	16.3	0.029	0.048	8.1	270	9.2
7/28/06	0.92	14	18	17.1	0.039	0.032	7.9	260	7.8
9/1/06	1.07	24	18	18	0	0	7.8	250	7
9/29/06	0.63	17	14.5	14.3	0.018	0.001	8	260	8.4
12/1/06	0.6	14	4.5	5.1	0.037	0.013	7.9	270	11.7
1/26/07	1.9	9	5			0	8.2	250	-
3/31/07	1.55	11	9	9.7	0.055	0	8.2	250	11.2
4/29/07	1.51	23	14	14.6	0.025	0.028	8.2	250	10.1
6/8/07	0.85	20	16	17.2	0.029	0.033	7.5	200	9.1
7/6/07	1.8	25	21.5	21.9	0	0	7.9	250	7.9
8/13/07	1.01	24	17.5	17.5	0	0	7.8	260	8.6
9/7/07	0.71	16	16	17.4	0.045	0.036	7.8	270	7.4
10/5/07	0.93	7	10.5	10.8	0.039	0.005	7.9	280	8.9
11/1/07	0.72	17.5	13.2	13.9	0.053	0.008	7.9	290	9.1
11/30/07	0.42	0	5	5.3	0.04	0.01	7.9	290	10.8
2/1/08	23.1	5	8	0	0	0.157	7.8	110	-
3/28/08	1.34	17	8.5	8.7	0	0	7.4	270	11.1
4/24/08	1.24	18	12.5	13	0	0	7.7	280	10.4
5/23/08	0	22	16	16.2	0.029	0.016	7.6	280	9
9/3/08	0	12	14	14.4	0	0	7.5	300	7.5

- ◆ Optimum temperatures for salmon and steelhead egg incubation as 4.4-14.4° C Reiser and Bjornn (1979)
- ◆ In northern California, both Welsh et al. (2001) and Hines and Ambrose (1998) found that coho salmon juveniles did not persist where the floating weekly

maximum temperature exceeded 18.3° C for any length of time. Optimum temperatures for rearing salmonids are generally between 10° C and 16° C.

◆ The National Marine Fisheries Service (1996) characterized properly functioning conditions for adult Pacific salmon as between 10-13.9° C and

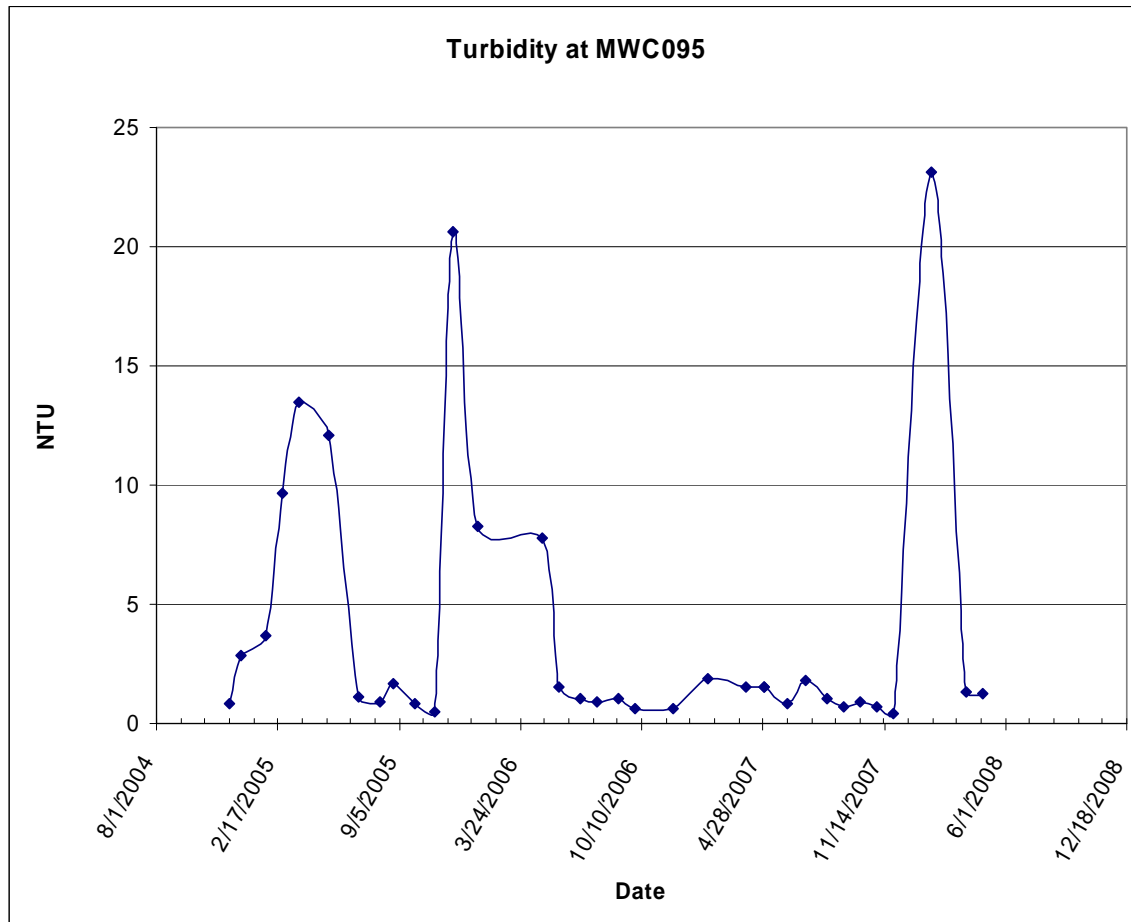
◆ USEPA recommendations for Total Phosphate:

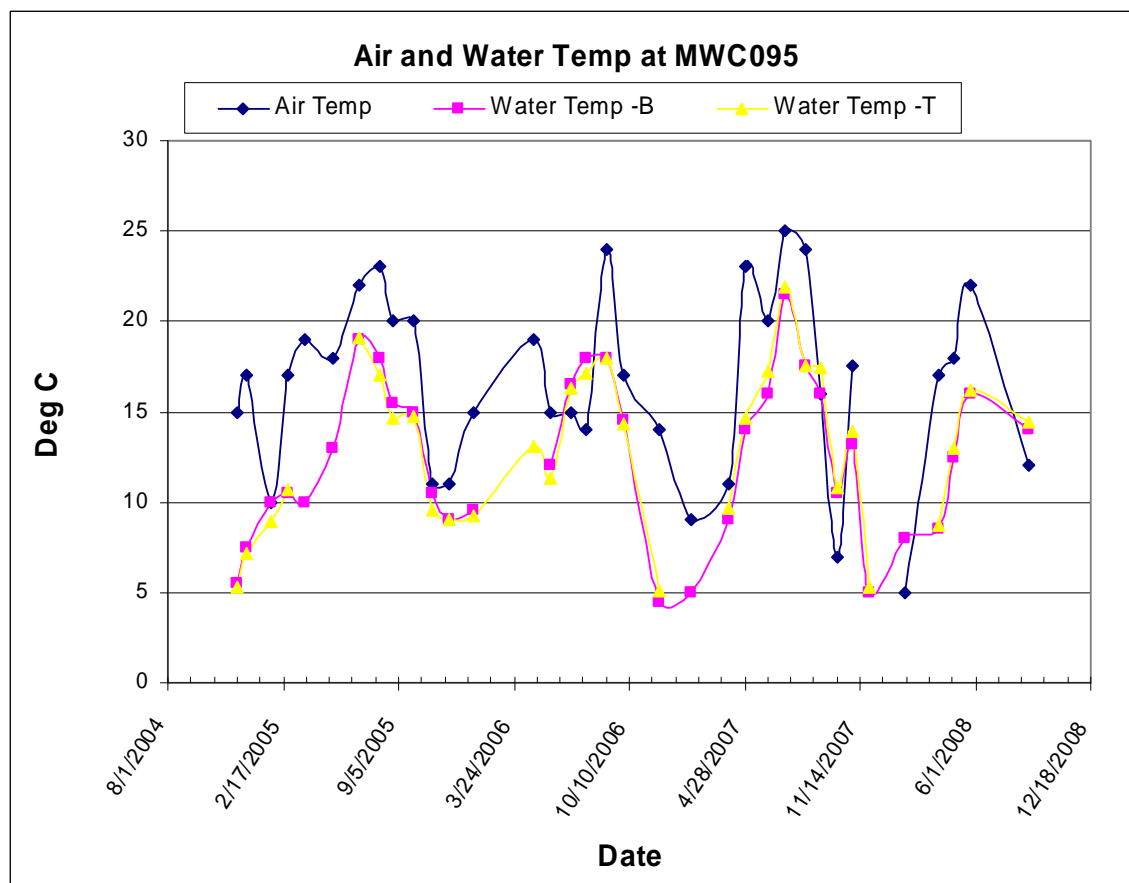
Streams: under 0.1 mg/L

Streams emptying into reservoirs: under 0.05 mg/L

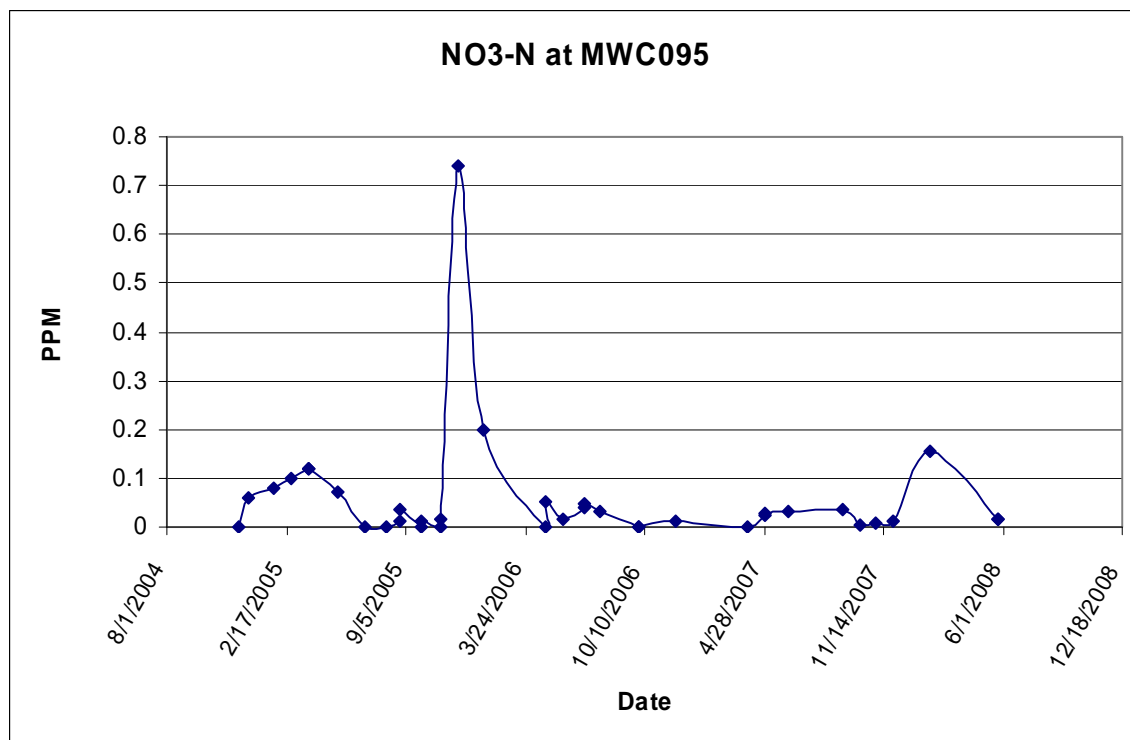
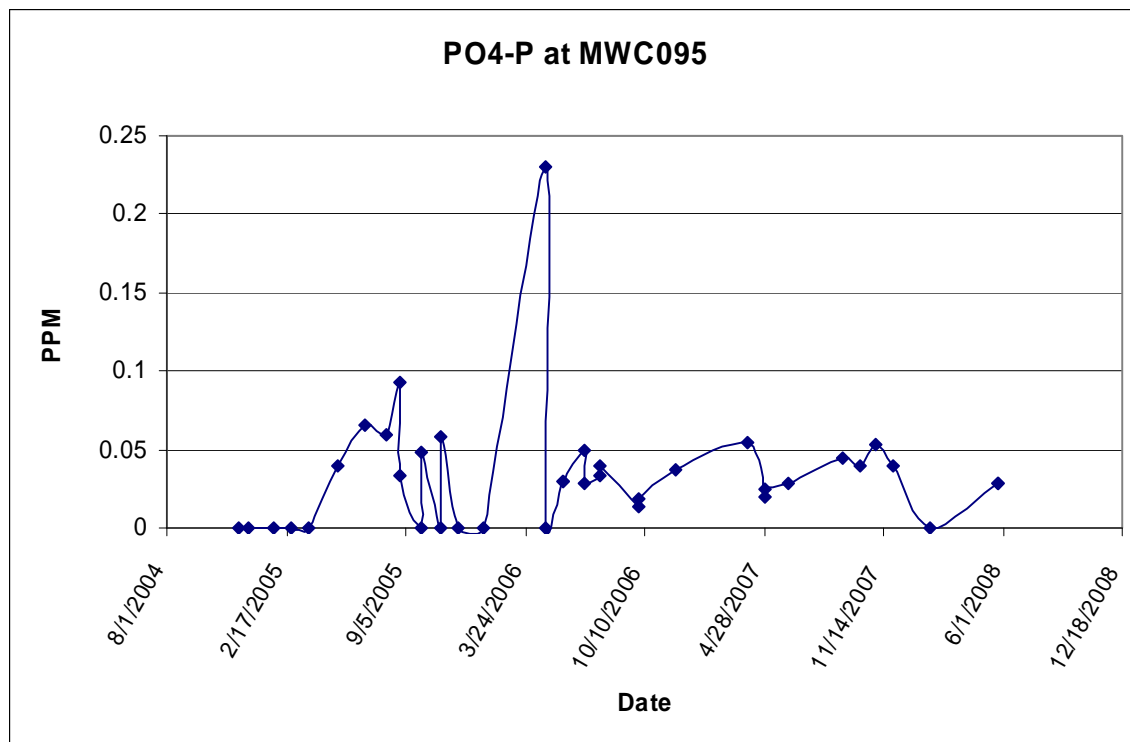
Reservoirs: under 0.025 mg/L

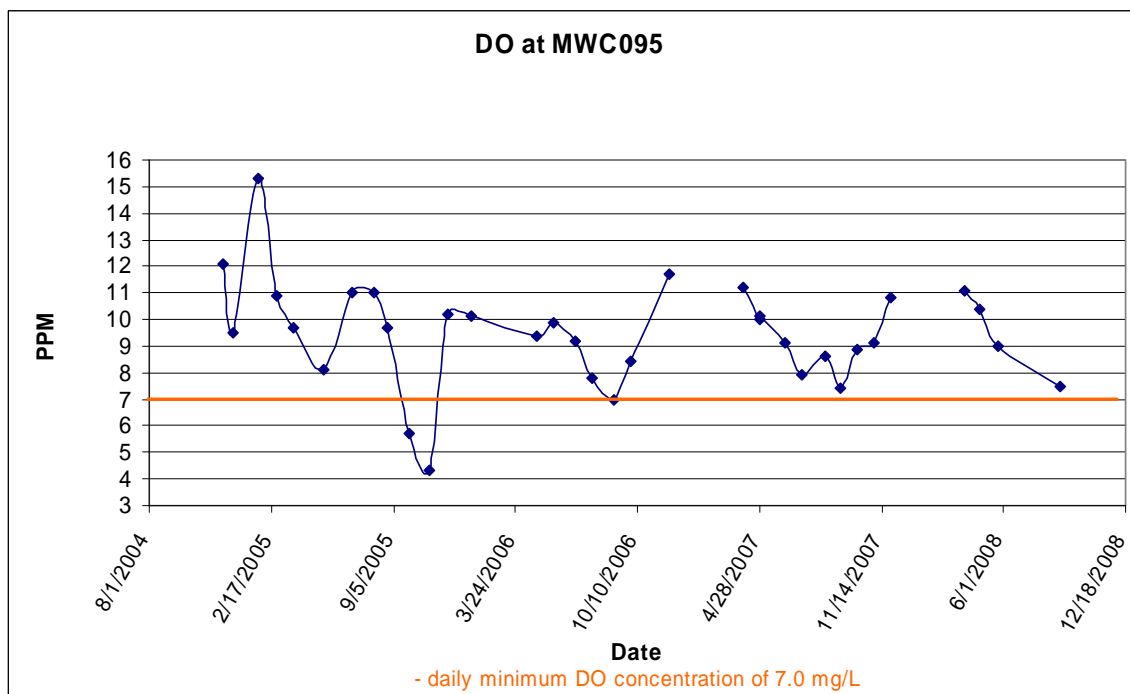
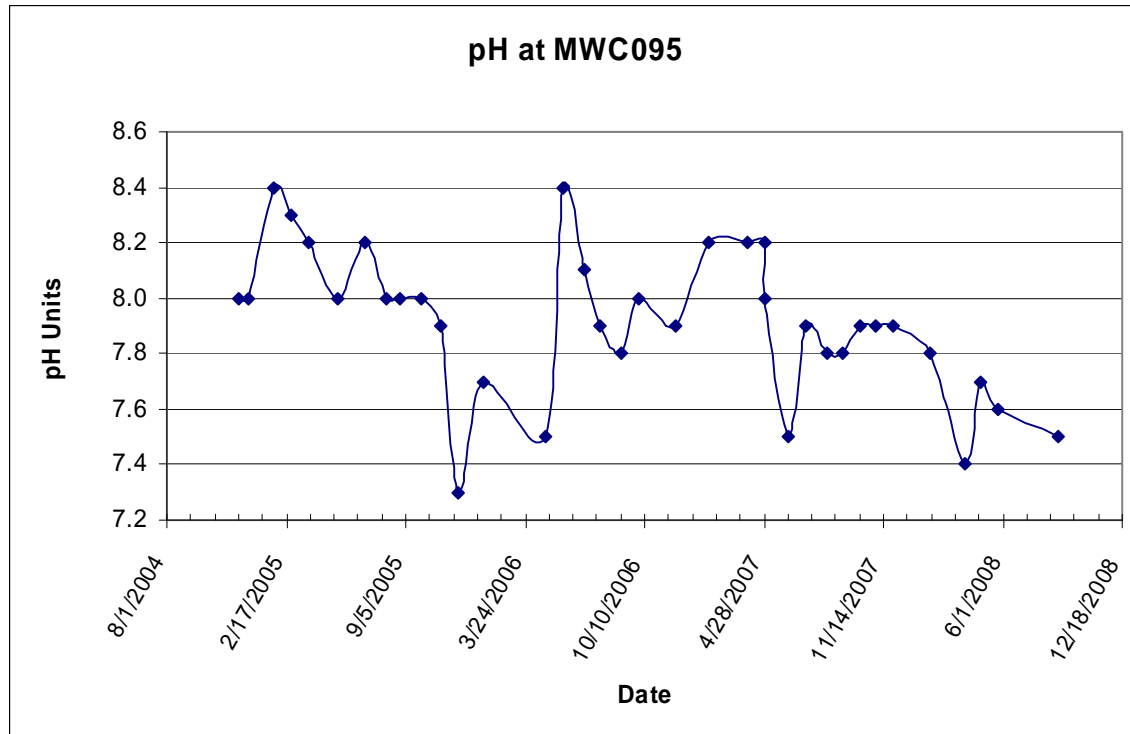
◆ To support fish species: Dissolved oxygen should be above 7 mg/l according to the SWRCB Basin Plan.





B- Temperature reading measured by dissolved oxygen meter.
T- Temperature reading measured by thermometer.





To support fish species: Dissolved oxygen should be above 7 mg/l according to the SWRCB Basin Plan.

References:

[Welsh, H.H., G.R. Hodgson, M.F. Roche, B.C. Harvey. \(2001\).](#) Distribution of Juvenile Coho Salmon (*Oncorhynchus kisutch*) in Relation to Water Temperature in Tributaries of a Northern California Watershed Determining Management Thresholds for an Impaired Cold-water Adapted Fauna. In review for publication in the North American Journal of Fisheries Management. 21:464-470, 2001.
<http://www.rsl.psw.fs.fed.us/projects/wild/welsh/welsh5.pdf>

Reiser, D. and T. Bjornn. 1979. Habitat Requirements of Anadromous Salmonids. In the series Influence of Forest and Range Management on Anadromous Fish Habitat in Western North America. U.S. Forest Service Forest and Range Experiment Station, Portland, OR. Gen. Tech. Rep. PNW-96. 54 p.

National Marine Fisheries Service. 1996 . Coastal Salmon Conservation: Working Guidance for Comprehensive Salmon Restoration Initiatives on the Pacific Coast. NMFS, Northwest Region, Seattle, WA. 6 p.

[Hines, D.H. and J.M. Ambrose. 1998.](#) Evaluation of Stream Temperature Thresholds Based on Coho Salmon (*Oncorhynchus kisutch*) Presence and Absence in Managed Forest Lands in Coastal Mendocino County, California. Georgia Pacific Corporation, Ft. Bragg, CA. 14 p plus Appendices.