Effects of Parameter Levels on Aquatic Organisms

	DO (mg/L)	Cndt. (s/cm)	Turb. (NTU)	Temp. (°C)	pHβ	E.coli (MPN)
Salmon Survival /Migration	6.0-11.0	n/q	<10φ	5-13 25 (lethal)	6.5-8.5	----------
Amphibians	5.0-12.0	n/q	n/q	n/q	4.5-?	---------
Macroinvertebrates	5.0-12.0	n/q	n/q	5-25#	6.0-?	---------
DEQ Standards	≥6.5	745 ψ	**	≤20	6.5-8.5	126
Observed on the Columbia by CRK	7.52-12.95	90.3-159.84	1.16-89.6	15.2-23.9	6.38-9.2	0-1956

n/q= not quantified
β=Upper pH limits are not as well documented since they don't occur as frequently as lower pH levels (resulting from acid rain, etc.)
*=This is the Oregon DEQ standard for the Willamette Basin
**=currently under review.
#=highly variable between types of macroinverts.
Ψ=EPA secondary drinking water standard (EC25 standard does not exist).
Φ=effect of turbidity on fish depends strongly on duration of exposure (hours, days, weeks).

Washington Department of Ecology's standards are the same or very similar to DEQ standards.

If your results violate any of the DEQ standards call CRK at 541-387-3030. Thanks.

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