

LBWC and Other Lower Boise River Stakeholder Total Phosphorus TMDL Target Recommendations as of September 21, 2012.

<u>Total P^{TP}</u>	<u>Total N^{TN}</u>	<u>TKN^{TKN}</u>	<u>NO₂ + NO₃^{NOx}</u>	<u>Turbidity^{NTU}</u>	<u>Turbidity^{FTU}</u>	<u>Chl-a^{Chl-a Fluoro.}</u>	<u>Chl-a^{Chl-a Trichro.}</u>	<u>Chl-a^{Chl-a Peri.}</u>	<u>Rationale</u>
								100-200 mg/m ²	^{TP, Chl-a P} October 13, 2009 EPA Region 10 letter to DEQ and enclosures (particularly, Table 1). In addition, criteria for excess nutrients must be applied on a waterbody specific basis, and the criterion requires a site specific analysis to determine the levels of nutrients that will cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses.
42.5 µ/L	0.544 mg/L	0.272 mg/L	0.272 mg/L	1.538 NTU	3.25 FTU	4.85 µ/L	3.3 µ/L	43.9 mg/m ²	^{All} EPA. 2000. Ambient Water Quality Criteria Recommendations: information supporting the development of state and tribal nutrient criteria. Rivers and Streams in Nutrient Ecoregion III.
See Rationale 10-55, 20, 70, 100, 130 µ/L									^{TP} No specific targets recommended, but references for targets provided: EPA Ecoregion Nutrient Criteria 10-55 µ/L; Spokane River WDOE and EPA modeling 20 µ/L; SR-HC TMDL 70 µ/L; EPA Gold Book 100 µ/L; AQUATOX Model 130 µ/L; Mid Snake TMDL 70 µ/L.
AQUATOX & SR-HC TMDL (70 µ/L)								150-200 mg/m ²	^{TP, Chl-a P} Weight of Evidence Approach + Mechanistic Model (existing or modified AQUATOX); CH2MHill, et al. 2008. Application of the AQUATOX Model to the LBR; EPA. 1986. Gold Book; EPA. 1998. Nutrient Criteria Memo; EPA. 2000. EPA Criteria Guidance; EPA. 2002. Ecoregional Nutrients; EPA. 2008. Empirical Nutrient Criteria Approach; EPA. 2010. SAB Review of Empirical Approach; MDEQ. 2008. How Green is Too Green Public Opinion Survey; MDEQ. 2011. Lower Yellowstone River Nutrient Criteria Model; Suplee et al. 2009. How Green is Too Green? Public Opinion of What Constitutes Undesirable Algae Levels in Streams.
						See Rationale	See Rationale	See Rationale	^{All} No specific targets recommended, but 2 Snake River reference papers provided for consideration: CH2MHill. 2001. Relationship Between Chlorophyll a and Beneficial Uses (Draft Memo); Hoelscher. 2002. Evaluation of Chlorophyll a Nuisance Thresholds and Targets for the Southwest Snake River and Brownlee Reservoir.