

12/3/2012

Lower Boise Watershed Council, TAC, and others,

At the November 29, 2012 TAC meeting, DEQ presented a recommendation for benthic chlorophyll-a levels of 100-150 mg/m<sup>2</sup> (150 being the preferred measure) to be used as the response variable target for the developing Total Phosphorus TMDL. Based on comments and discussion, during and following the meeting, the TAC requested the following items be addressed at the January 3, 2013 meeting:

1. *For the Lower Boise River Phosphorus TMDL* – Discuss benthic chlorophyll-a, or other potential response variables, that can best quantify/qualify nuisance visible or other aquatic growths that may be impairing designated beneficial uses in response to phosphorus loads in the Lower Boise River.
2. *For the Lower Boise River Phosphorus TMDL* – Discuss the selection of 150 mg/m<sup>2</sup> of benthic chlorophyll-a, as an appropriate response variable and metric in the Lower Boise River.
  - a. In addition, DEQ respectfully requests the TAC discuss DEQ's proposed benthic chlorophyll-a target of 150 mg/m<sup>2</sup> for use in the Lower Boise River Phosphorus TMDL.

**Rationale:** DEQ's recommendation of a benthic chlorophyll-a target of 150 mg/m<sup>2</sup> is based on a review of scientific and technical literature, public and LBWC feedback, and particularly emphasizing similar nutrient & chlorophyll-a analyses conducted in Montana's rivers and streams. We believe this target is supportive of the beneficial uses for both Primary Contact Recreation and Cold Water Aquatic Life. Through further analysis of Lower Boise River and similar watershed data, the benthic chlorophyll target of 150 mg/m<sup>2</sup> will then be used to help develop Total Phosphorus targets that correspond to this appropriate level of algae and aquatic macrophyte growth in the Lower Boise River. Additionally, DEQ and the TAC will continue to recognize the obligation of meeting the SR-HC TMDL requirement of 0.07 mg/l of Total Phosphorus.

DEQ's November 29<sup>th</sup> presentation, scientific and technical literature used in the analysis, along with all of the written feedback DEQ has received for target recommendations, can be found on the DEQ Lower Boise River Watershed Advisory Group webpage at: <http://www.deq.idaho.gov/regional-offices-issues/boise/basin-watershed-advisory-groups/lower-boise-river-wag.aspx>

Please contact me at your convenience if you have any comments or concerns you would like to address before the upcoming January 3<sup>rd</sup> meeting. Thank you!

Troy Smith  
DEQ, Watershed Coordinator  
208-373-0434  
[Troy.smith@deq.idaho.gov](mailto:Troy.smith@deq.idaho.gov)

The following photos and data were taken from:

Suplee, M., V. Watson, M. Teply, AND M. McKee. 2009. How green is too green? Public opinion of what constitutes undesirable algae levels in streams. Journal of American Water Resources Association 45:123-140.

Chl-a  $\leq$  150 mg/m<sup>2</sup>

44



112



152



Photos and data from Suplee et al. 2009

# Chl-a $\geq 200$ mg/m<sup>2</sup>

202



1,276



299



404

235

Photos and data from Suplee et al. 2009