

U.S. Environmental Protection Agency, Region 10

1. The draft TMDL appears written to be protective of downstream uses, such as the shellfish harvesting use that is applicable to Whatcom Creek. However, some of the information in the document is inconsistent about this- for example, p.27 states "this TMDL does not address the shellfish harvesting designated use." EPA recommends that Ecology review the document so that language is consistent in referencing the protection of downstream uses.
2. The designated use section discusses where recreation and shellfish harvesting are located. While this is helpful background information, EPA recommends that Ecology be clear that the designated uses for a particular assessment unit within a waterbody apply to the entirety of that assessment unit. For example, as indicated in Table 6102 of Ecology's water quality standards (WAC 173-201A-612), all of Bellingham Bay has shellfish harvesting as a designated use.
3. With regards to reasonable assurance, p.40 states "It was therefore assumed that the WLA is dependent upon reductions in LAs being met, and reasonable assurance must be provided that the reductions necessary to meet the LAs will be made" and p.54 similarly states, "The point sources expressed as WLAs will be met based on the assumption that the LAs will be met using similar pollution control strategies that may be voluntarily extended to address nonpoint sources expressed as LAs." With the exception of effluent-based WLAs, reductions to all other sources are equally applied based on contributing land area, so it does not appear that the WLAs being met are dependent on the LAs. However, by providing reasonable assurance that nonpoint source control measures will achieve expected load reductions, Ecology increases the probability that the pollution reduction levels specified in the TMDL will be achieved, and therefore, that applicable standards will be attained. In addition, p.52 says "To avoid more stringent requirements being placed in NPDES permits, the SWMP must provide reasonable assurance that LAs will be met." Since Stormwater Management Plans are only a required component for MS4s permitted under the NPDES program, it is unclear how they are expected to provide reasonable assurance that load allocations for nonpoint sources outside their jurisdiction will be met.
4. P.153 states "If a future Water Quality Assessment concludes that a new stream segment AU ID does not meet the WQS, then it will be placed into a Category 4a," and that is followed by calculations showing how future TMDLs will be calculated. EPA commends Ecology for being transparent about its intended process for calculating TMDLs for future bacteria impairments in the watershed but notes that this does not necessarily negate the need for submission and review of future TMDLs in the watershed by EPA in accordance with federal regulations at 40 CFR § 130.7 . EPA requests that Ecology coordinate with EPA if bacteria impairments are identified for AUs in the Whatcom Creek watershed that are not currently identified as impaired as the options for addressing the impairments may vary depending on the location of the impairments and status of implementation activities.
5. To review the TMDLs, EPA must be able to understand and evaluate the basis for the TMDLs. Therefore, EPA requests that seasonal average flows be added to the document that were used in Equation 14 for each TMDL presented in Table E-23.

6. The concentration basis for the hatchery allocation is unclear. Using a flow of 2.3 cfs and a concentration of 2 cfu/100 mL as cited as on p. 44/45 and the conversion factor in Equation 14, the resultant concentration is 0.11 b.cfu/day. Please clarify the basis for the Bellingham Hatchery WLA. Also, Table 8 indicates a concentration limit of 100 cfu/100 mL but does not indicate that concentration should be incorporated into the permit, and the narrative on p.45 indicates a concentration below 2 cfu/100 mL may be needed to avoid triggering antidegradation requirements. EPA recommends that Ecology clarify the basis and any intent for concentration-based limits for the hatchery.

7. EPA requests that Ecology clarify their intended distinction between TMDL and loading capacity, because the terms are often used interchangeably. P.37 says the TMDL can be equal to or less than the LC, but some portions of the document like Tables D-21, E-22, and E-23, use the terms interchangeably (i.e., same loads are referred to as TMDL or LC).

8. TMDL targets are typically water quality concentrations used to calculate the TMDL, however, Table E-22 has "TMDL Target Loading" values that differ from those used to calculate the TMDLs. Using the rollback method, it appears the target concentration varies based on the variability of sampling data, but that the target concentration is intended to be the implementation goal to attain the TMDL/LC. The discussion of Equation 14 indicates the water quality geometric mean-based criterion is used to calculate the TMDL, and then the allocation discussion on p.51 indicates allocations are generally aeriially based on the LC. However, the WLA tables have concentrations that it says are to be implemented as effluent limits, even where the target is based on existing conditions below the criterion. The implementation portion of the TMDL discusses the criteria will be used to assess progress towards the TMDLs. EPA recommends Ecology clarify if the concentration-based targets are intended to be water quality based effluent limits for point sources.

9. The WLA tables for Hanna Creek state "inconclusive dataset" for concentration for the wet season. Regardless of whether the concentrations are intended to be benchmarks or effluent limits, EPA recommends including a concentration as a starting point and/or denote how a value is intended to be derived.

10. Table 12 of the TMDL does not provide dry and wet season fecal coliform WLAs in billion cfu/day ("not applicable"; column 1, rows 11 and 12) for Whatcom Creek but does provide dry and wet season concentration-based fecal coliform WLAs in the adjacent column. While the assumption from p.47 for why dry and wet season fecal coliform WLAs would be listed as "not applicable" here is because the allocation is not for the city, there is some language that still seems unclear. The concentration-based values that are provided here seem to differ from a WLA, and it is not clear what their intended use is. EPA recommends Ecology further clarify why these WLAs are listed as "not applicable" and provide additional context in the TMDL narrative regarding the concentration-based values provided, or provide applicable WLAs in billion cfu/day.