

Policy Group members in attendance: Hannah Stone, Skip Williams (Bellingham City Council); Kaylee Galloway, Todd Donovan (Whatcom County Council); Bruce Ford (Lake Whatcom Water and Sewer District Commission); Nancy Alyanak (Sudden Valley Community Association).

1. Silver Beach Moratorium Update

City staff provided an update on the Silver Beach moratorium. On June 3rd, City Council approved moving forward with a zoning density ordinance instead of extending the moratorium. A public hearing was held on May 20th where City Council reviewed city staff's suggestion for a medium-density rezone. There was strong opinion to consider low density, so the City Council held an additional work session. City staff proposed a low-density rezone with an allowance for the possibility for property owners to increase to a medium density subject to a negotiated development agreement, which the City Council would review and approve. A property owner would need to bring forward a benefit to the city, which would be negotiated in the development agreement. On June 17th, City Council will hold a third reading of the proposed ordinance with this added allowance.

2. TMDL Modeling Presentation

Overview

County staff gave an overview of the Lake Whatcom Total Maximum Daily Load (TMDL) reassessment update. It is an update to the scientific analysis on the load capacity of Lake Whatcom. It estimates the amount of phosphorus that can be in the lake and still meet water quality standards. The reassessment considers phosphorus inputs from the entire watershed. It does not separate the loading from different land use types, nor assigns allocations per jurisdiction or subbasin. The reassessment update does not change the TMDL. It is a submittal to the Washington Department of Ecology (Ecology) to evaluate and Ecology may adjust phosphorus reduction targets based on the results. This reassessment update was a requirement of the current TMDL and Appendix 2.

Summary Results

Brown and Caldwell staff and county staff provided a summary of the TMDL reassessment update results.

Watershed Model

The reassessment used the Hydrolyzed Forecast and Analysis Model (HFAM) watershed model, while the original TMDL model used the Hydrologic Simulation Program-Fortran (HSPF) watershed model. For the reassessment update, the city had requested if HFAM could include phosphorus loads. This was added and the new model was reviewed by a third party before implementation.

<u>Lake Response Model</u>

The reassessment used the CE-QUAUL-W2 ver. 4.5 lake response model to simulate water circulation and water quality within lake. The code for this lake response model was more efficient and could simulate a much longer period of time. It also included the relationship between lake sediment and dissolved oxygen.

Simulation Period

The reassessment used a simulation period of 2002-2015, while the original TMDL model used only a period of 2003. The longer simulation period added much accuracy, as water molecules reside in the lake for an average of 5.5-6 years. The original TMDL model was not ideal for forested locations and didn't have much data to calibrate the model.

Dissolved Oxygen Deficit Approach

The reassessment used a load reduction dissolved oxygen deficit approach. This started with existing phosphorus loads and incrementally reduced by 10% until reaching the mandated water quality requirement. The reassessment calculated a 0.2 mg/L human phosphorus allowance on top of phosphorus from natural conditions.

- Existing Conditions- The reassessment calculated 9,821 lbs phosphorus/year from existing conditions, while the original TMDL calculated 8,710 lbs phosphorus/year.
- Forested Scenario- The reassessment calculated 8,074 lbs phosphorus/year from forested conditions, while the original TMDL calculated 5,298 lbs phosphorus/year. This is considerably higher.
- Net Increase- The reassessment calculated a net increase of 1,747 lbs phosphorus/year between existing and forested conditions. The original TMDL calculated 3,412 lbs phosphorus/year between existing and forested conditions. The net increase is the difference in modeled values between the existing condition with human development and the natural forested condition.
- Target Watershed Total Phosphorus Load Reduction- The reassessment calculated that a 1,518 lbs phosphorus/year reduction (15%) is needed to meet water quality standards. The original TMDL calculated that a 3,144 lbs phosphorus/year reduction (36%) to meet water quality standards. This is considerably less.

It is important to note that there are many factors to the differences between the original TMDL and the reassessment models and the two don't relate linearly. Some of these factors include:

- The original model assigned development differently and had different components.
- The reassessment results show more phosphorus loading from the forest, but also the roll back is different and the change in dissolved oxygen levels are different between the original and current models. The new loading data will also lower our previously calculated progress line due to the reassessment model showing that we weren't removing as much phosphorus as previously thought, because not as much phosphorus was coming through.
- Data changes a lot from year to year. The reassessment model covered 14 years while the original model only covered one year. There was also little storm data from 2003, which impacted the forested model value, causing it to appear lower

than it actually was.

This reassessment update is the science piece. Next comes the regulatory piece through Ecology's review, then the policy piece to be decided by elected officials. As Ecology reviews the reassessment, we will better understand the reductions in place.

Ecology's Next Steps

Ecology staff gave an overview of Ecology's next steps in reviewing the TMDL reassessment update. TMDL reassessments do not occur often and there is no history in Washington of a reassessment of this complexity.

The county anticipates to submit the reassessment results to Ecology in July 2024. Ecology will complete their technical review between July 2024 and July 2025 and will work with Brown and Caldwell to revise the reassessment as necessary. Ecology will then draft a new addendum to the TMDL with involvement from the city and county. Once complete, the addendum will be sent to the United States Environmental Protection Agency (EPA) for acceptance and establishment of a new TMDL. It is unknown how long the revision through the new EPA-approved TMDL process will take. The new TMDL will set new requirements for the percent of effective developed acres to be reduced and the annual pounds of phosphorus reduction.

Questions

Policy Group members asked how the modeling showed phosphorus loading from the Middle Fork Nooksack River diversion, but this didn't negatively impact water quality. Brown and Caldwell staff explained that even though the diversion was bringing phosphorus loading in, it was also bringing cool water in the summer which spread to basins 2 and 1 and brought dissolved oxygen.

Policy Group members asked why the Whatcom Falls dam was not looked at as part of reassessment. It was not included because it is not subject to TMDL restrictions since it is associated with a water right.

Policy Group members asked what we know about the change in forest activities and forestland amounts during that time, and if we are taking that into account. The model does not go to that degree. We would need to follow up with on the ground data collection for staff to assess.

Policy Group members asked how climate impacts are incorporated. They are not. Ecology would need to have that as a modeled scenario to consider and stated they will want to include that in any future reassessment.

3. Forest Management Plan Update

County staff provided an update on the hiring of a firm to complete a Forest Management Plan for county and city-owned lands in the Lake Whatcom Watershed. There has been a delay on awarding the contract due to a change in scope. The original Request For Proposals (RFP) only included county-owned lands, so another RFP is required to update the scope to include both city and

	county-owned lands. This RFP is expected to go out the end of next week. An interlocal agreement between the city and county for this work will go to both councils for approval in July. The county has already re-appropriated funding, however, the additional acreage may exceed the original appropriated value.
4. 2025-2029 Work Plan Status and Proposed July Meeting	
	County staff explained the timeline for developing the 2025-2029 Lake Whatcom Management Program Work Plan. City and county staff are working to incorporate the input received from councilmembers and commissioners and will share a draft with the Policy Group at the July meeting. Staff will also calculate budget, identify funding sources and any shortfalls, and present those at the July meeting. Staff expect to share a draft plan for public comment later this summer. Policy Group members should give additional items to incorporate in the plan to Gary and Renee as soon as possible.
5. Additional Discussion	
	Policy Group members asked what role they have in reviewing and commenting on the Lake Whatcom portions of the city and county comprehensive plan updates. Staff stated that an appropriate avenue would be for the Policy Group members to bring up input through their respective councils.
	Policy Group members asked about short-term vacation rental regulations. County Council passed an ordinance on July 25, 2023 to adopt amendments to Whatcom County Code Title 20 to regulate short-term vacation rentals. Implementation is waiting on the Department of Ecology's approval of the Shoreline Management Plan.

The next Policy Group meeting is July 10, 2024 at 3:00PM (extra meeting)