

# Marie Tabata-Callerame

Thank you for the presentation and the opportunity to be heard. I appreciated hearing Lawrence's presentation - it was clear and informative and his answers were on point. :) I appreciated the additional input from the other regions as well, especially about phosphorus and Whatcom Lake (not sure who that was).

Below are my requests/suggestions/comments for the Lacamas Creek TMDL process:

1. The current Lacamas Creek TMDL (started in August 2021) should add one more month (November?) specifically to capture Total Phosphorus and/or Ortho-phosphorus. This would create a greater "bang for our buck" since Phosphorus is shown to be THE reason for Lacamas Lake and Round Lake water impairment. This is shown via:

- The 2020 year-round toxic algae blooms that occurred in Lacamas Lake. HABs are phosphorus eaters and limited by phosphorus since they can fix their own nitrogen from the air, unlike regular algae. The toxic blooms came back again in 2021, tripling the all-time Lacamas Lake record high for microcystin concentration, set the year before (2020). Phosphorus feeds all algae, but a flood of phosphorus in a warm area of the lake allows toxic algae to outcompete regular algae.

- Elevated total phosphorus levels are shown in the WQ Ambient Water Quality Monitoring Program at Lacamas Creek (Goodwin Road, 281120), compared to 15 years ago. The Ambient WQ Station is less than 2 miles upstream of the toxic blooms and shows that TP markedly increased in the winter months (Oct-Jan) since the winter of 2006-2007. See uploaded graph.

2. Also, if you DO add another month to the program, I suggest/request that a few additional sampling locations be added to the Lacamas Creek TMDL. A salmon-spawning location is (to my understanding) just two miles downstream of Lacamas and Round Lakes. Adding another point of TMDL will again utilize the funds efficiently by tying the TMDL to salmon habitat, as well as give us and understanding of what effect, if any, waterfall aeration may have on the nutrient levels.

3. RE: the Ambient WQ Monitoring Program for Lacamas Creek at Goodwin Road - I understand that it will continue for another year. This is very exciting! Please continue to support that program and let me know how I can help. This data is a very important part of getting everyone on the same page in our understanding of what is entering Lacamas Lake. Just a note - the data online was two months behind when I downloaded in May 2021 (showing March's data) but is now 5 months behind (showing up to May's data today). I understand that resources may be limited, but I am hopeful that the data is forthcoming.

Thank you so much for the important work you guys are doing!

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### Ambient WQ of Lacamas Creek at Goodwin Road Comparing Total Phosphorus from 2006-2007 and 2020-2021

