

## TECHNICAL MEMORANDUM

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Date: March 13, 2020  
To: Melissa Place, Senior Planner, City of Lake Stevens  
From: Ryan Kahlo, PWS, Senior Ecologist  
Project Name: On-call Review, Lake Stevens Costco Site  
Project Number: 170232

**Subject: Lake Stevens Costco 2<sup>nd</sup> Peer Review of Wetland Mitigation**

### Introduction

This technical memorandum provides peer review comments related to wetland and buffer impacts and mitigation for the proposed Costco development in Lake Stevens. Proposed impacts and mitigation were reviewed for consistency with best available science and for consistency with the Lake Stevens Municipal Code (LSMC) Chapter 14.88.

Preparation of this technical memorandum included review of the following key environmental support documents submitted by the applicant:

- *Costco Wholesale Lake Stevens – Revised Avoidance, Impacts and Mitigation Report CW #17-0230, SWC Job #18-105* (Sewall Wetland Consulting, Inc. 2/10/2020) (referred to in this technical memorandum as “Mitigation Report”).
- *Critical Area Mitigation Project Proposed Lake Stevens Costco Wholesale Lake Stevens, Washington* (Sewall Wetland Consulting, Inc. 1/20/2020) (referred to in this technical memorandum as “Mitigation Plan”).
- *Revised Mitigation Bank Use Plan Costco Lake Stevens and City of Lake Stevens 24<sup>th</sup> Street Extension Project* (Sewall Wetland Consulting, Inc. 2/05/2020) (referred to in this technical memorandum as “Bank Use Plan”).
- *Revised Alternatives Analysis for Costco Wholesale, Lake Stevens Reference Number NWS-2019-175* (Sewall Wetland Consulting, Inc. 2/10/2020) (referred to in this technical memorandum as “Alternatives Analysis”).

## Summary

The applicant is proposing the filling of between 1.72 and 1.84 acres of wetland for the construction of a retail store, its associated parking lot, and a City-mandated access road connecting S. Lake Stevens Road to the new SE 24<sup>th</sup> Street. In order to maintain required wetland buffers around the remaining wetland areas, the applicant proposes converting 2.24 acres of wetland to buffer for regulatory purposes (paper fill). As mitigation for the unavoidable impacts, the applicant proposes purchasing 3.06 mitigation credits from the Snohomish Basin Wetland Mitigation Bank (SBMB). The required credits were calculated using SBMB approved credit ratios of 1.2:1 for Category II wetland impacts and 1:1 for Category III wetland impacts. Paper fill impacts are being mitigated at a ratio of 0.5:1.

Additionally, the applicant is proposing to create 0.45 acres of wetland by connecting two lobes of Wetland D. This will provide additional wetland habitat and, in combination with several proposed downstream culvert replacements and riparian buffer enhancements, may provide improved salmonid rearing habitat. The applicant is not proposing to use the wetland creation as part of the required compensatory mitigation for the wetland impacts. All compensatory mitigation will be satisfied through the SBMB.

The proposed site plan has been revised to reduce wetland impacts by reconfiguring the parking lot to avoid impacts to Wetland F.

## Peer Review Comments

The use of SBMB is appropriate for the proposed impacts and allowed under LSMC 14.88.840(a)(5). The proposed credit ratios identified in the Bank Use Plan for each wetland impacts are correct. However, there are inconsistencies between the “Wetland Fill Summary” on Sheet 2 of 11 of Mitigation Plan and the Table 6 of the Bank Use Plan as to the total area of proposed wetland impacts:

- Wetland A
  - Bank Use Plan identifies 0.328 acres of impact.
  - Mitigation Plan identifies 0.454 acres of impact.
- Wetland D
  - Bank Use Plan identifies 0.741 acres of impact.

- Mitigation Plan identifies 0.729 acres
- Impact Totals
  - Bank Use Plan identifies 1.719 acres of wetland impacts, but the summary of individual impacts totals 1.729 acres.
  - Mitigation Plan identifies 1.72 acres of wetland impacts, but the summary of individual impacts totals 1.84 acres of wetland impacts.

The impact areas should be consistent across all project documents. We recommend that applicant revise the areas on each document as necessary and adjust the proposed mitigation bank credits accordingly.

The on-site wetland creation is not necessary to satisfy the compensatory mitigation requirements of LSMC 14.88, since all the permanent and indirect wetland and buffer impacts will be mitigated using SBMB credits. The on-site wetland creation has been proposed to satisfy a request from the Tulalip Tribes. Despite not being a permit requirement, the wetland creation will impact existing wetland buffers. The wetland creation will likely provide improved water quality and hydrology functions for the surrounding sub-basin, but a temporal loss of habitat function can be anticipated as the tree and shrub plantings are becoming established. Therefore, in order to lower the risk of failure and better ensure no-net-loss of ecological function, we recommend the following performance standard clarifications.

- The Mitigation Plan includes an area of emergent plantings only. The plan should incorporate performance standards applicable to emergent plant communities. We recommend a standard of 90 percent areal cover of native emergent vegetation by Year 5.
- The Mitigation Plan monitoring schedule (Table 1, Sheet 1 of 11) states that monitoring is conducted in Years 1, 2 and 3 for the native plant and noxious weed performance standards. At the end of three years, most mitigation plants are only just starting to put on significant growth and is, therefore, not enough time to evaluate the ultimate success of a mitigation plan. Additionally, establishing weed-free emergent wetlands (as proposed) is more difficult than areas planted with woody-vegetation. Therefore, we recommend the monitoring also include Years 4 and 5.

- The proposed wetland creation risks the spread of noxious weeds, particularly reed canarygrass, for which there is a substantial seed source in the vicinity. We recommend a contingency specific to reed canarygrass control, particularly in the proposed emergent plant communities.
- We recommend the wetland creation areas be re-delineated in Years 3 and 5 to ensure minimum wetland sizes criteria. If, by Year 3, wetland criteria have not been satisfied in all or part of the wetland creation area, contingencies can be initiated.