

June 30, 2025  
Project No. 23011

Lee Burton and Sara Lavenhar  
5440 Leary Avenue, Unit 220  
Seattle, Washington 98107

**Regarding: Critical Area Report: Wetlands & Aquatic Areas**  
Proposed Burton/Lavenhar Private Well and Waterline  
King County Clearing and Grading Permit No. GRDE25-0044

Lee and Sara,

## INTRODUCTION

This critical area report has been prepared for your proposed well and waterline project located at approximately 25XXX SE Tiger Mountain Road in unincorporated King County near Issaquah, Washington. The project includes the installation of a private water well and waterline within overlapping wetland and aquatic area buffers. On May 29, 2025, King County requested additional information regarding the proposed project to support review and approval of the related clearing and grading permit. This report provides the impact analysis requested by King County and should be reviewed in combination with the related critical area mitigation plan entitled “Burton/Lavenhar Well and Waterline” and the associated critical area bond worksheet, both of which are dated June 30, 2025.

## REPORT AUTHOR QUALIFICATIONS

The qualifications I maintain to prepare this report include a Bachelor of Science degree in Environmental Science, certification as a Professional Wetland Scientist (PWS), and nearly 26 years of environmental consulting experience in the Puget Sound area of Washington State. I work frequently within unincorporated King County. In 2005, I was one of the very first consultants accepted into King County’s “Preferred Wetland Consultant” program and remained in good standing in the until the program was ended in 2020.

## PROJECT SITE

The project site is an undeveloped residential property located at approximately 25XXX SE Tiger Mountain Road in the southeast quarter of Section 14, Township 23 North, Range 6 East, W.M. The King County tax parcel number for the site is 142306-9157. The site is irregular in shape and measures approximately 64,572 square feet (1.48 acres) in total area. The site comprises largely forested sloping land located on the southern flank of Tiger Mountain. Access to the site is via a gravel surfaced private road that extends north from SE Tiger Mountain Road. Land use surrounding the site includes developed residential properties of various shapes and sizes.

## CRITICAL AREAS

On November 20, 2024, King County issued a critical area designation (CAD) for the project site under CADS24-0246. A Category III wetland, a Type O aquatic area (stream), and steep slopes exist within the site and several wetlands and aquatic areas (streams) surround the site to the north and west. The on-site wetland requires a 110 foot standard width buffer, the Type O aquatic area requires a 25 foot standard width buffer, and the steep slopes require a 50 foot standard width buffer. An additional 15 foot setback is required from all buffers for buildings and other structures.

## PROPOSED PROJECT

The proposed project includes the installation of a private water well and related waterline to support the future construction of a single-family residence within the project site. The well is proposed for installation in the northern portion of the project site approximately 7 feet north of an existing gravel road. The waterline will extend southwest from the well along the northern side of the gravel road. The waterline will end at a future building site located roughly in the west-central portion of the site. All proposed work will occur within overlapping wetland and aquatic area buffers. King County Code (KCC) 21A.24.045 allows for the installation of a new private water well and waterline within wetland and aquatic area buffers when there is no less impactful alternative location for the proposed work, impacts are minimized, and mitigation is provided.

## IMPACT AND ALTERNATIVES ANALYSIS

The project site is a small irregularly shaped parcel that includes several critical areas as well as a private road. Alternatives to the proposed well location are limited and include areas north and east of the Category III wetland as well as in the west-central portion of the site. The area located north and east of the wetland would require construction of an access road and drill pad across sloping topography that contains native vegetation. The west-central portion of the site is reserved for a future septic system approved by Public Health – Seattle & King County. There are no Group B waters systems within the local area that have available water shares or rights that could be used in lieu of the proposed project. Proposed unavoidable wetland and aquatic area buffer impacts are described in Table 1.

**Table 1 – Project Impacts**

Impact Description	Impact Type	Impact Area	Proposed Mitigation	Mitigation Ratio
<b>Well and waterline</b>	Permanent	394 sf of overlapping wetland and aquatic area buffer.	394 sf of overlapping wetland and aquatic area buffer enhancement	1:1
<b>Drill pad, waterline excavation, material storage</b>	Temporary	2,240 sf of overlapping wetland and aquatic area buffer.	2,240 sf of overlapping wetland and aquatic area buffer restoration	1:1

## MITIGATION SEQUENCING

KCC 21A.24.125 requires the application of sequential measures (mitigation sequencing) to any development proposal or alteration that will impact critical areas and/or critical area buffers. Mitigation sequencing establishes a specific framework and order of preference for impact avoidance, minimization, and finally mitigation. In all cases, mitigation sequencing does not require mitigation in excess of that necessary to ensure that the overall level of critical area functions remain unchanged or improves over time. The proposed project conforms to mitigation sequencing requirements per the following:

1. **Avoidance:** The project is not located within an aquatic area or wetland and is not located within a mapped channel migration hazard area. The project also avoids areas of conifer forest located within the project site.
2. **Minimization:** The project is located adjacent to an existing gravel road. Unavoidable buffer impacts will occur within areas that have been previously impacted by road construction and maintenance. The project includes temporary erosion and sediment control measures.
3. **Restoration:** The project includes restoration of temporary impacts related to construction. There is no other known restoration required for the proposed project established in KCC 21A.24 or otherwise required by King County to approve the project.
4. **Impact Reduction Over Time:** The proposed project will be constructed using durable modern materials that have a considerable expected lifespan. Future maintenance would be limited to standard well operational and repair activities. These are expected to be infrequent and small in scale.
5. **Compensation (Mitigation):** A mitigation plan has been prepared for the project. The purpose of the plan is to detail the specific work required to offset unavoidable buffer alterations. Mitigation will occur on-site at a ratio of 1:1 (area of mitigation:area of impact) and includes native plant installation in an area of degraded buffer for permanent impacts as well as restoration of temporary impacts.
6. **Monitoring:** Once completed, the mitigation will be maintained and monitored for three years. Mitigation maintenance, monitoring, and contingency plans are included on the mitigation plan prepared for the project.

## NO NET LOSS ANALYSIS

The proposed project results in a no net loss of critical area functions by conforming to the development conditions established in KCC 21A.24 (*Critical Areas*). The proposed mitigation provides the vegetative structure required to filter toxics and sediments, stabilize soils, and increase organic matter generation within the local area. The mitigation also provides wildlife forage and escape habitat that either currently does not exist within the local area or would otherwise be displaced by the proposed project.

## REPORT LIMITATIONS

Within the limitations of scope, schedule, and budget, the critical area consulting services summarized in this report conform to the generally accepted standard of care in effect at the time the work was conducted. No other warranty, express or implied, is made. The general purpose of this report is to describe wetland and aquatic area buffer impacts per King County critical area regulations in effect at

the time of report preparation. All opinions presented in this report should be considered preliminary until reviewed and confirmed by King County.

## **CLOSURE**

I trust that this report meets your present needs. If you have any questions regarding the information presented in this report or require additional assistance with this project, please do not hesitate to call me at (425) 864-3244 or email me at [psuper@evergreenarc.com](mailto:psuper@evergreenarc.com).

Sincerely,

**EVERGREEN AQUATIC RESOURCE CONSULTANTS, LLC**  
Issaquah, Washington



Peter P. Super  
Professional Wetland Scientist

