



TECHNICAL MEMORANDUM

Date: May 28, 2021
To: Kirvie Mesebeluu-Yobech, SMP Project Manager, Kitsap County, DCD
From: Dan Nickel, The Watershed Company
Devin Melville, The Watershed Company
Leila Willoughby-Oakes, The Watershed Company

Project Name: Kitsap County SMP Periodic Review 2020-2021

Subject: Kitsap County SMP Periodic Review – Revised No Net Loss Addendum

Introduction

Kitsap County (County) is conducting a periodic review of the County’s Shoreline Master Program (SMP). Most of the SMP amendments are to comply with current State law and to address recent legislative updates, clarify prior department interpretations, and improve development regulation usability. However, several amendments are substantive in nature and merit additional documentation to ensure that implementation of the updated SMP and future development will not result in a net loss of shoreline ecological functions. The following memorandum analyzes *how* specific SMP amendments and future development guided by the new regulations will not result in a net loss of shoreline ecological function.

The Shoreline Management Act (SMA) guidelines (Guidelines) require local shoreline master programs to regulate new development to “achieve no net loss [NNL] of ecological function.” Shoreline jurisdiction in Kitsap County includes shorelands 200 feet upland from the ordinary high-water mark, floodways, floodplains located within 200 feet of floodways, and associated wetlands. Shoreline jurisdiction covers 3,760 acres of marine shorelines, 1,554 acres of lake shorelines, and 1,628 acres of stream and river shorelines.

The County’s 2014 Comprehensive SMP update was approved under the benchmark of ‘no net loss’ and based on the analyses performed at the time of the Comprehensive SMP Update. This memorandum builds on this analyses, addressing specific amendments listed below that are more substantive in nature and require further evaluation:

- Trams – new regulations specific to allowing trams in geologically hazardous areas
- Hybrid Shoreline Stabilization
- Expansion of Development Below the Reduced Standard Buffer
- Other Uses and Modifications in Vegetation Conservation Buffers
 - Standards for Stair Platforms and Deck Landings
 - Standards for Viewing Decks and Platforms

This memo was originally prepared on March 24, 2021. In response to Washington State Department of Ecology's (Ecology) SMP initial determination dated May 18, 2021 the County incorporated all required and select recommended changes in the Draft SMP for consideration by the Board of County Commissioners.

No Net Loss Evaluation

Trams

Proposed Amendment Description: Kitsap County Code (KCC) 22.400.120(D)(1)(d) permits trams within the vegetation conservation buffer, subject to the shoreline exemption provisions in KCC 22.500.100(C)(3). Trams are not considered as accessory or appurtenant to a shoreline upland use and shall be permitted per KCC 22.500 requirements. Trams utilizing towers require a Substantial Development Permit where exemption provisions are not met and are prohibited in the Aquatic and Natural Shoreline Environment Designations.

NNL Evaluation: Vegetation conservation buffers in KCC 22.400.120 provide a means to conserve, protect, and restore shoreline vegetation essential for ecological functions, as well as human health and safety. Under the County's SMP, a vegetation conservation buffer may be modified or reduced to allow uses such as trams providing shoreline access where there otherwise would not be one, *if* consistent with the Act and this program. The County has not received many applications for trams in the past and does not expect many future trams to be built. Historically, the County's policy direction is to permit trams as use in shoreline jurisdiction, however the Department through this update may now establish specific bulk and dimensional standards for trams. A jurisdictional scan of State approved Shoreline Master Programs containing tram regulations were evaluated, compared, and contrasted. Accordingly, under the proposed development regulations, trams shall be limited to geologically hazardous areas (KCC 19.400) and subject to 'Special Studies' such as geotechnical reports outlined in KCC22.700.120. KCC 22.400.120(D)(1)(d)(ii) specifies tram clearing widths shall be a maximum

of five feet on either side of the tram car to reasonably accommodate equipment and a pathway clear of encumbering vegetation and a maximum tram corridor of fifteen feet. Understory vegetation would still be allowed to grow in such cases. Per KCC 22.400.120(D)(1)(d)(iv), mitigation sequencing must be used to avoid, minimize, and compensate for any impacts. Enhancements of shoreline buffer vegetation will be required to offset the impacts of cleared vegetation.

Hybrid Shoreline Stabilization (New/Repair and Maintenance)

Proposed Amendment Description: The County has received many proposals for soft shoreline stabilization that include hard stabilization components to connect with hard stabilization on adjoining properties. The County proposes revised language for hybrid stabilization to further promote soft shoreline stabilization techniques. Hybrid shoreline stabilization structures are defined under the definition of Shoreline Stabilization (KCC 22.150.570) as a “composite of both soft and hard elements and techniques along the length of the armoring.” KCC 22.600.175(A)(3) allows hybrid shoreline stabilization options to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as currents, flooding, tides, wind, or wave run-up action. A hybrid shoreline stabilization project may request to waive a Conditional Use Permit administratively through the Department if an applicant can demonstrate the project meets soft shore criteria in Ecology’s ‘Soft Shoreline Stabilization SMP Planning and Implementation Guidance’ (Ecology Publication No. 14-06-009). KCC 22.600.175(A)(4) further clarifies that restoration and enhancement projects that include hybrid stabilization may be considered for a substantial development permit or exemption if supported by the Shore Friendly Kitsap program and WDFW.

NNL Evaluation: KCC22.600.175 Shoreline Stabilization of the existing SMP defines permit requirements for two shoreline stabilization options; an SDP for soft shoreline stabilization projects and an administrative CUP for hard shoreline stabilization projects in all environment designations. Adding a hybrid shoreline stabilization option offers a composite of both soft and hard elements and techniques along the length of the armoring and will reduce the number of hard stabilization project proposals. Hybrid proposals must include areas of restored natural shoreline, including but not limited to the removal of shoreline modifications and enhancement of natural features without the use of structural materials. Revised development standards for hybrid structural shoreline stabilization in KCC 22.600.175.D.1.e, include clarification that hybrid stabilization projects having hard elements exceeding 15 percent of the total shoreline length would be required to comply with the hard shoreline stabilization requirements.

Ecology Guidelines state that master program shoreline stabilization provisions shall be consistent with WAC 173-26-221(5), vegetation conservation, and where applicable, WAC 173-26-221(2), critical areas. Both approval requirements ensure that no net loss of ecological functions is achieved and align with assumptions made within Section 7 of the Cumulative Impact Analysis (2014).

Notably, the Kitsap County Department of Community Development requires all shoreline stabilization projects undergo a staff consultation before submitting a formal permit application per KCC 22.500.105.B.

Expansion of Development Below the Reduced Standard Buffer

Proposed Amendment Description: KCC 22.400.120(C)(2)(c)(iv) clarifies an existing allowance for single-family residence expansion below the reduced standard buffer through an administrative land use permit. Under the proposed amendment, such expansions shall be limited to 25% of the existing gross floor area or 625 square feet, whichever is less. The proposed expansion shall also be limited to an existing legally cleared area and cannot locate further waterward than the existing structure.

NNL Evaluation: The expansion of a single-family residence below the reduced standard buffer will not further impact existing hydrologic or vegetative conditions at the shoreline as the amendment does not allow the new expansion to be located further waterward than the existing structure and must be located in existing cleared areas. The development standard limitation of 25% of existing gross floor area or 625 square feet, whichever is less, will help ensure mitigation measures are attainable. Furthermore, KCC 22.400.120(C)(2)(c)(ii) already states that any expansion below the reduced standard buffer shall require a shoreline mitigation plan. Per KCC 22.700.140, the shoreline mitigation plan shall include a description of existing conditions, functions, and processes, a plan for mitigating any development impacts so that the proposed development does not result in a net loss of those identified conditions, functions, and processes, and annual progress updates until the department determines the mitigation is successful.

Other Uses and Modifications in Vegetation Conservation Buffers

Proposed Amendment Description: KCC 22.400.120(D)(1)(b) and KCC 22.400.120(D)(1)(c)(i) and (ii) allow decks and viewing platforms, stair landings, and viewing platforms associated

with beach stairs in the vegetation conservation buffer under specified requirements. Proposed amendments to these sections provide consistent size limitations (100 square feet for viewing platforms) and composition requirements (grated decking for stair landings).

NNL Evaluation: The amendment updates made in KCC 22.400.120(D)(1)(b) and (c) are clarifications to ensure the provisions align with no net loss requirements. Specifically, viewing platforms associated with beach stairs shall comply with provisions outlined in Section 22.400.120(D)(1)(b), including size limitations and demonstration of no net loss as part of a shoreline mitigation plan prepared by a qualified professional.

Stair landings in the vegetation conservation buffer or below the OHWM must be composed of grating or other materials that allows a minimum of 40 percent light transmission to reduce shading impacts on upland vegetation. These allowances provide opportunities for small viewing decks or platforms that will not result in a net loss of shoreline ecological function. In conclusion, development associated with the proposed code amendments must demonstrate no net loss. Proposals are subject to a shoreline mitigation plan when triggered by development regulations. In some situations, the proposed language proposes to reduce the size and scale of appurtenant structures (i.e., viewing platforms) within the County's shorelines.

Permit Reviews

Specifically, amendments include changes necessary for consistency with the permitting requirements of the SMA in RCW 90.58.140 and WAC 173-27. No shoreline exemptions exist for beach stairs below the OHWM and therefore future such proposals will require an SDP, except in rare cases where a proposal does not exceed the shoreline exemption cost threshold. The proposed amendments remove the pre-emptive determination in the SMP that beach stairs, stair landings and trams are exempt from a shoreline substantial development permit.

Restoration Plan Implementation

During the County's Comprehensive SMP update, the *Shoreline Restoration Plan (Plan)*, SMP Appendix C, was adopted as an element of the Kitsap County Shoreline Master Program (SMP), as required by the SMA and State guidelines (Washington Administrative Code 173-26). The Plan provides a restoration framework for all unincorporated County shorelines and serves as a valuable resource for the County and agency partners to improve impaired ecological functions. The Plan, in conjunction with required permit-level mitigation, outlines Kitsap County's strategy for achieving 'no net loss' of shoreline ecosystem-wide processes and functions.

The list of restoration projects was updated during the Comprehensive SMP review. The Restoration Plan focuses on projects that are likely to occur. Restoration opportunities were identified based on recommendations in existing restoration planning documents, as well as input from County staff and restoration partners. The plan lists restoration and protection strategies, including opportunities for specific projects, for each of the County's watersheds.

The plan provides an implementation framework by identifying existing and ongoing plans and programs, as well as potential restoration partners at the federal, state, regional, and local levels. The framework builds on local and regional planning coordination among these programs and partners, identifying mechanisms for implementation including development incentives for restoration; landowner outreach and engagement; maximizing mitigation outcomes; and monitoring the effectiveness of restoration actions.

Cumulative Impacts

The Cumulative Impacts Analysis during the 2014 comprehensive SMP update evaluated the proposed policies and regulations in relation to current shoreline conditions documented in the *Shoreline Inventory and Characterization* report (Kitsap County 2010) to assess if future development approved under the proposed SMP could achieve no net loss of ecological function. Updated SMPs shall contain goals, policies, and regulations that prevent degradation of ecological functions relative to the existing conditions as documented in the inventory and characterization report. SMP regulations fundamentally rely on the concept of mitigation sequencing to avoid, minimize, and mitigate for any unavoidable losses of function. The *Restoration Plan* is an accompanying component of the SMP process that can bring environmental conditions to an improved level.

The Cumulative Impacts Analysis indicates that future growth is likely to be targeted in specific environment designations, waterbodies, and marine shoreline reaches. The Analysis determined that Kitsap County's marine shorelines are projected to see the most population growth and additional single-family home development in the County. Similarly, development on lake shorelines will likely be driven by new residential development. In every lake where new residential development is anticipated, this development would occur as infill of existing residential development.

However, the proposed SMP is expected to maintain existing shoreline functions within the County while accommodating the foreseeable future shoreline development. Through establishment of Environment Designations and implementation of SMP policies and regulations that protect the shoreline, Kitsap County should maintain shoreline ecological

functions while allowing appropriate development. However, regulation and mitigation alone may not be able to prevent all cumulative impacts to the shoreline environment. This is primarily due to on-going degradation from existing development or past actions. Potential impacts from development would be minimized by shoreline buffer standards and stormwater management standards. Impacts from overwater structures and shoreline stabilization measures would follow mitigation sequencing to avoid, minimize, and mitigate impacts. Other local, state, and federal regulations, acting in concert with this SMP, will provide further assurances of maintaining shoreline ecological functions over time.

Emphasis is placed on achieving no net loss of ecological function throughout the SMP, with all uses and modifications subject to general and/or specific standards addressing the preservation of water quality, water quantity, and habitat function in the shoreline, as well as region-wide ecological processes. The following are some of the key features that protect and enhance shoreline ecological functions to ensure that the no net loss standard is met.

- Shoreline environment designations are assigned to shorelines to minimize use conflicts and designate appropriate areas for specific uses and modifications.
- The SMP contains a number of goals and policies pertaining to the protection and restoration of ecological functions. These regulations include provisions that provide the basis for achieving no net loss of shoreline ecological functions, such as mitigation sequencing, vegetation conservation standards, and critical areas regulations.
- The SMP contains shoreline modification regulations that emphasize minimum size of structures and use of designs that do not degrade and may even enhance shoreline functions. Use regulations prohibit uses that are incompatible with existing land use and ecological conditions, and emphasize appropriate location and design of the various uses. The most uses and modifications are allowed in areas with the highest level of existing disturbance.
- The critical area protection standards ensure that vegetated buffers are retained on wetlands, fish and wildlife habitat conservation areas, and geologically hazardous areas.
- The County's Shoreline Restoration Plan identifies several project-specific opportunities for restoration inside and outside of shoreline jurisdiction, and also identifies ongoing county programs and activities, restoration partners, and recommended strategies and actions consistent with a variety of watershed-level planning efforts.

Conclusion

The proposed amendments to the SMP described above are not anticipated to have adverse effects on shoreline ecological functions at the planning level. Further, the updated SMP includes a variety of other amendments which are insignificant in relation to evaluating impacts to ecological function or anticipated to strengthen the shoreline ecological protections already provided by the SMP. Given the above provisions of the SMP, including key amendments listed above, the Kitsap County Periodic Review is anticipated to achieve no net loss of ecological functions. Future voluntary actions identified in the *Shoreline Restoration Plan* will provide opportunities on public and private properties for the enhancement and restoration of shoreline functions over time.

Finally, monitoring key indicators through best practices is an effective way to measure and quantify that no net loss of ecological shoreline function is achieved. This can best be implemented by requiring the submission of short-term and long-term monitoring reports as part of permit approvals for development applications and maintaining consistency throughout the permitting process in evaluating mitigation sequencing. Ongoing efforts by state agencies to monitor land cover change detection, specifically work generated by the Washington Department of Fish and Wildlife, will continue to offer a valuable resource to ensure compliance with no net loss standards.