



June 22, 2021

Skagit Land Trust
P.O. Box 1017
1020 S. Third Street
Mount Vernon, WA 98273

Skagit County Shoreline Master Program
Comprehensive Update & Periodic Review
Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273

Re: Skagit County Shoreline Master Program Comprehensive Update and Periodic Review

Dear Director Hart:

I am writing on behalf of Skagit Land Trust to offer comments on the *Skagit County Shoreline Master Program Comprehensive Update and Periodic Review*. We appreciate the care and attention you and your staff have devoted to the long-needed revision of this plan, and we appreciate the lengths to which you went to provide information to the public as the work proceeded.

Among the properties Skagit Land Trust has conserved are many subject to the Shoreline Master Program (SMP). These include lands the Trust owns in fee and manages, others the Trust purchased and transferred to agencies, and properties owned by other private parties on which the Trust holds conservation easements. The provisions of the Shoreline Management Act and the Shoreline Master Program are among the tools essential in carrying out our organization's mission to "conserve wildlife habitat, agricultural and forest lands, scenic open space, wetlands, and shorelines for the benefit of our community and as a legacy for future generations." By protecting the environmental resources of shorelines and providing public access and enjoyment opportunities, Skagit Land Trust contributes significantly to accomplishing the purposes of the Shoreline Management Act in Skagit County.

Please accept the following comments on the draft update and periodic review of Skagit County's Shoreline Master Program.

No net loss of ecological functions as a standard for shoreline uses

We appreciate the repetition of this standard throughout the policies and regulations comprising the SMP. Assessing the effects which proposed actions or developments may have on ecological functions is clearly challenging. In applying the No Net Loss standard, we urge you to use the best available science, employ the expertise of appropriate and recognized experts, and when there is uncertainty, err on the side of protecting the environment.

Shoreline Environment Designation Maps

We note that many of Skagit Land Trust's shoreline properties are coded on the SMP Environment Designation Maps as "Rural Conservancy" rather than "Natural." For example, the

Kelly's Point Conservation Area on Guemes Island, protecting Yellow Bluff and its shoreline, is shown as "Rural Conservancy" while just a short distance away along the shore, San Juan Preservation Trust's Peach Preserve is designated "Natural." For consistency and given the legal purpose of Kelly's Point Conservation Area, it too should be coded "Natural." Barney Lake is another Skagit Land Trust property dedicated to conservation but shown as "Rural Conservancy" rather than "Natural" on the maps. There are many additional examples on the Skagit and Samish Rivers, Diobsud Creek, etc., of properties Skagit Land Trusts owns and manages for their natural values which fit the criteria at SMP 6B-3.1 for designation as "Natural". We would be happy to work with your staff on bringing the maps up to date regarding the properties Skagit Land Trust protects and to which the SMP applies.

Climate Change and Sea Level Rise

The SMP portrays a welcome emphasis on protecting the ecological integrity of shoreline environments and protecting shoreline processes. This emphasis makes all the more striking the near complete omission of attention to climate change in relation to changes in river flooding, sea level rise, and related storm surges and coastal flooding. Given the science, sea level rise (SLR) is a certainty. To a certain extent it has already been "baked in" to the global atmospheric system by past greenhouse gas emissions. Reducing global greenhouse gas emissions (GHG) over the coming decades will reduce the rate of SLR but not prevent a significant rise from happening. Recent studies have found that the actual rate of SLR happening now is on the upper end of projections from a decade ago and likely to be between 18 inches and 3 feet by 2100 depending on the reduction of GHG emissions over the next several decades.

While we recognize that counties and municipalities are not presently required to consider the effects of climate change in revising their SMPs, this will quite likely be a requirement in the future. Whether it becomes one or not, the effects on Skagit County's shorelines will be increasingly impossible to ignore.

We understand the Department of Ecology will be offering grants to counties to incorporate consideration of climate change in their SMPs. We urge Skagit County to take advantage of this opportunity as soon as possible. In addressing the effects of climate change on the development, protection, and restoration of shorelines, there is no time to lose. The next required update of the SMP is eight years away. It is important that Skagit County not wait so long to face this very significant reality. At a minimum, we urge you to tap into the expertise of the Skagit Climate Science Consortium (www.skagitclimatescience.org) to review the draft SMP and suggest how it might be modified in light of what will be very different conditions in the future.

Suggestions on including sea level rise in the SMP

Sea level rise is affecting Skagit County shorelines now, and these impacts will increase. If we do not address SLR impacts and adaptation now there will be greater future impacts to shoreline values and functions, homes, infrastructure, and agricultural lands. The longer we delay, the more costly fixes will be. We will have missed opportunities and spent funds on structures and actions that will have to be undone in the future.

State law does not explicitly require Skagit County to address SLR in the SMP update, but it is encouraged, and the language of RCW 90.58.020 regarding preferred shoreline uses supports its

inclusion. The guidelines for master programs at RCW 90.58.100(e) urge that those preparing SMPs, “Utilize all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data.” The evidence for climate change and its present and likely future effects, including on river flows and flooding and on sea level rise, are certainly pertinent to preparing an adequate SMP for Skagit County.

In the spirit of the Shoreline Management Act, addressing SLR will help protect statewide interests, preserve the natural character, resources, and ecology of the shoreline, and elevate long-term over short-term benefits. To not address SLR means falling short of meeting all of these.

The *Goals, Objectives, and Policies* (Comprehensive Plan portion of the SMP) briefly address SLR in just two sections. The Transportation section at 6F-1.1 (e) “Hazardous Areas”, notes that, “Transportation facilities should be located... to avoid flooding, storm tides and storm surges and near-term sea level rise...” The Utilities section has similar language. These inclusions are welcome but far from sufficient. First, why address only near-term sea level rise when clearly the Comprehensive Plan and SMP are to prioritize long-term over short-term planning and benefits? Secondly, transportation and utility uses are not the only ones that should be kept clear of areas at risk from sea level rise. Home builders should also not put themselves or others at risk by building in areas that are or will become hazardous. The regulations keep parking lots out of these areas. They should clearly also prevent building homes and commercial structures in them.

While there is much to be done for the SMP to incorporate measures needed for adapting to sea level rise and the other present and future effects of climate change, we offer the following additional suggestions as a start.

Sea level rise has serious implications for agricultural lands and wetlands.

Another area of special concern in the *Goals, Objectives, and Policies* regarding shorelines and SLR is Agricultural activities. Projections of SLR in Skagit County indicate a significant area of agricultural land will be either inundated or rendered economically not viable due to flooding and drainage issues. Dikes are only a temporary fix for some areas and will have significant adverse impacts on shoreline values and functions. Building dikes higher as the sea rises will squeeze out critical estuarine habitat on the waterward side. Farmland that can be feasibly protected should be identified and dikes pulled back and rebuilt further inland. Areas outside the relocated dikes should be restored as estuarine wetlands to replace those being lost at the waterward edge as the sea advances. Rather than ignore this difficult issue the County should begin planning now and acknowledge the need in the *Goals, Objectives, and Policies* of the SMP.

Goals for residential development should reflect climate-change projections.

Residential development, as noted in the SMP draft at 6C-15.2, “should be located ...to avoid [frequent flood areas] and storm tides or surges...without placement of extensive flood hazard management facilities or hard shoreline stabilization.” Here the reference to storm tide and surge reflects the reality of SLR, but the goal should be more forward looking. Language should be added regarding avoiding construction in tidal and storm surge areas at elevations projected as reasonably likely to be impacted for some specified period into the future. For example, to

“avoid SLR and storm surge impacts for the next 50 years” or, alternatively, “for the lifetime of the planned structure.”

In addressing Flood Hazard Reduction, the SMP addresses freshwater rivers and streams but not marine shorelines.

Flood Hazard Reduction, Section 6 I in the draft, deals with freshwater rivers and streams. A complementary section, 6 I (b), is needed for marine shorelines subject to high tides and storm surge flooding as projected to increase with SLR. The section could, in part, include (suggested new wording underlined):

1. Plans, regulations, and programs related to tidal flooding and storm surge should be coordinated and integrated with the Comprehensive Plan, marine flood hazard plans, National Flood Insurance, and regulations for critical areas and the SMP.
2. Non-Structural tidal flooding and storm surge hazards reduction measures are preferred over structural. When evaluating alternative measures, the removal or relocation of structures in the tidal flood and storm surge prone areas should be considered.
3. Tidal flood and storm surge hazard protection measures should result in No Net Loss of ecological functions and ecosystem-wide processes associated with marine and estuarine shorelines.
4. Marine and estuarine ecological systems should be returned to and maintained in the future in a more natural state where feasible including by removal of structures and hard armoring blocking the upward shoreline migration due to sea level rise.

Further improvement is needed in the standards regarding hard armoring of marine shorelines (6C-16.1 Shoreline Stabilization Structures).

While the draft SMP is somewhat stricter than the current regulations, there remain far too many loopholes allowing this ecologically destructive practice. Impacts from hard armoring to shoreline values and functions are significant, and SLR will exacerbate them. Recent studies have especially singled out this use as a major driver of habitat loss for forage fish species, in turn impacting salmonids, orca, and seabirds.

The draft proposes “limited use” of such hard armoring, but this standard is too vague and permissive. We suggest language to this effect: “Use of hard armoring is prohibited except where there is no reasonable alternative to protect a structure existing as of the adoption of this code amendment.

While existing hard armoring is already having major ecological impacts, these will worsen significantly under SLR without stricter control. As sea level rises it will squeeze out shoreline habitat against armoring, and those hard structures will prevent shoreline habitat from migrating upslope. If new structures are built now within the SLR risk zones of the future, owners will want protection and more and more armoring as SLR increases. New structures should be located where or in a manner that will not require hard armoring of the shoreline for protection over the lifetime of the structures.

Mitigation for hard armoring and new development

The SMP draft at 6C-16.2 calls for shoreline stabilization structures to be designed and located to minimize and mitigate impacts to the shoreline. There needs to be stronger mitigation language to meet the requirements of No Net Loss. Every new or expanded foot of hard armoring leads to loss of shoreline function and values. Mitigation actions contemplated in the plan would reduce those impacts but not eliminate them. Any new or expanded hard armoring installed should be fully mitigated through the removal of another existing hard armor section on the shoreline or by other specific habitat restoration actions sufficient to provide for No Net Loss of shoreline values and ecological functions.

Suggestions for modifying the SMP Development Regulations to address the issues mentioned above

- 14.26.320 (1)(a) – *New Development must be located / designed to avoid the need for future shoreline stabilization to the extent feasible.*

This language in the current draft could be used to avoid armoring in the future as SLR increases but should be more explicit. We suggest adding:

..., to the extent feasible, during the lifetime of the structure considering best available science including projections of sea level rise.

- 14.26.350 – Flood Hazard Reduction. This section addresses flood hazard areas associated with freshwater rivers and streams. It does not address flood hazards associated with marine shorelines including from SLR.

Add the following section:

14.26.355 – Marine Tidal Flooding and Storm Surge Hazard Reduction.

This would address similar issues to those in the freshwater flood hazard section, but specific to marine shorelines and the threat of SLR. It should implement the policies outlined in the proposed additional Comprehensive Plan section 6 I (b) draft provided above.

- 14.26.470(4)(b) Residential Development Standards

Residential development must be located and designed to avoid the need for flood hazard reduction measures and for tidal flooding and storm surge protection measures, including shoreline stabilization.

The underlined language above should be added to address marine shoreline flood hazards from SLR.

- 14.26.480 (2)(a) Shoreline Stabilization Structures (When allowed)

i. New hard shoreline stabilization structures are prohibited except...to protect an existing primary structure [likely to be] damaged within 3 years.

With this approach, absent sufficient regulation, more and more structures will be built in future harm's way given SLR. Owners will then claim the structures are likely to be damaged. To get ahead of the problem, this option should only apply to homes now existing, not to ones built in the future in disregard of what is known now about SLR and related effects such as storm surge. We suggest the following change:

14.26.480(2)(a) i. ... to protect a primary structure existing at the date of adoption of this Shoreline Management Plan update.

- 14.26.480 (2)(c) i – should be edited to mirror the above underlined language as well.
- 14.26.480 (2)(c) ii – allows new non-water dependent development, including single family residences, to be built in certain circumstances where new hard armoring would be needed to protect them.

This subsection should be deleted. No new non-water dependent development should be built after the adoption of the SMP code update that will require protection from hard armoring.

We appreciate the opportunity to comment on the revision and update of Skagit County's Shoreline Master Program. Further modifying it now to meet the reality of climate change will help avoid the need for emergency revision before the next required eight-year review.

Sincerely,



Mark Hitchcock
President, Skagit Land Trust