



February 24, 2021

Skagit County Commissioners

Regarding: Skagit County Shoreline Master Program

Dear Commissioners

We appreciate the opportunity to comment on the revision and update of Skagit County's Shoreline Master Program (SMP). Skagit Land Trust encourages the adaption of county planning documents and procedures to take climate change into account. Further modifying the SMP now to begin to meet the reality of climate change will help avoid the need for emergency revision before the next required eight-year review and avoid costly mistakes.

We understand this would be a significant addition, however due to counties and municipalities who have incorporated sea level rise considerations in their SMP's, there are now case studies and guidance on how this can be done. The Department of Ecology's publication, Lessons Learned from Local Governments Incorporating Sea Level Rise in Shoreline Master Programs (July 2021, Publication 21-06-014) is an excellent resource. WAC 173-26-090 encourages jurisdictions to consider new information and consult Ecology guidance on emerging topics such as sea level rise. 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.

Climate Change and Sea Level Rise

The draft 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, related storm surges and inundation of shoreline areas. Given the science that sea level rise (SLR) and other impacts of climate change are a certainty, planning should begin now.

Skagit County sits squarely in an area being affected. **A first step towards adaptation to climate change is reducing vulnerability and exposure to areas that are now, and will be, affected.**

We are already seeing impacts of a changing climate. On or near Skagit Land Trust properties we have witnessed sluffing of marine bluffs whose erosion is quickening with wet winters and more storm events –this sluffing threatens certain roads on Guemes. With increasingly dynamic flood events, some homes upstream of our properties on the Skagit River and its tributaries have destabilized and become hazards that had to be removed. In the 2021 fall floods, 90% of our Skagit River lands had large portions under water. These are all properties that formerly had development rights on them. Several conservation areas that were completely under water, had historically been platted for residential housing developments. With climate change, the frequency and quite likely the size of floods is increasing. We also saw in January king tides driven higher by low barometric pressure. Some dikes overtopped or came close to over-topping and some low elevation marine areas flooded. As sea levels rise, coastal flooding will increase, which can lead to regular storm events becoming more damaging in vulnerable areas.

Both climate change and management decisions will have a significant impact in our area. Sea level rise and climate change impacts will only increase. If we do not address these impacts through planning, there will be greater future impacts to shoreline ecological values and functions, homes, infrastructure, and agricultural lands. The longer we delay, or use dated parameters, the more costly the fixes will be. This is in addition to dealing with problems from decisions made decades ago. Well-planned avoidance is by far the least expensive strategy, the least risky to community members, and best for the environment.

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, including NOAA’s 2022 Sea Level Rise Technical Report, 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 under state law 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.

Suggestions on including sea level rise in the SMP

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 about 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 and a changing climate 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.

- **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.**
- **Conducting a sea level rise vulnerability assessment is a critical step.**

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

Projections of SLR in Skagit County indicate a significant area of low elevation Skagit County, and in particular agricultural land, is at risk of either being inundated or rendered economically not practical due to increased flooding and drainage issues. Dikes and levees are a short-term and intermediate term solution for some areas but are not workable for all areas that will be affected. Building more seawalls as the sea rises could also squeeze out critical estuarine habitat on the waterward side. Many types of seawalls would interrupt drift cell activity which build our beaches and berms protecting many of our natural and residential shorelines. Innovative and creative solutions need to be discussed and tried. Ways to protect farmland should be identified and plans developed to preserve these lands functionally and cost effectively while also protecting other ecosystem services and shoreline functions. Since our county's infrastructure runs through our agricultural valleys and in shoreline areas that are prone to inundation and SLR, infrastructure may need to be moved or elevated. New technologies should be considered that have a chance of lasting for the next century and that fit with the changing environment.

- **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."

- 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.**”

Armoring of Marine Shorelines (6C-16.1 Shoreline Stabilization Structures).

While the draft SMP is stricter than the current regulations, there are still too many loopholes allowing this ecologically destructive practice that also impacts other landowners’ shorelines. Affects 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. It is also easier to avoid developing in the wrong location now, than deal with future impacts of SLR on these properties.

- The draft proposes “limited use” of 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.

Stronger Standards Needed for New 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.** The no net loss standard is designed to halt the introduction of new impacts to shoreline ecological functions resulting from new development. Both protection and restoration are needed to achieve 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. Limiting new hard armoring in the face a climate change and sea level rise is critical. **Suggestions for modifying the SMP Development Regulations to address this issue are the following:**

- 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.**

- 14.26.470(4)(b) Residential Development Standards

We suggest this language: **“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.”**

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

We suggest this language for i: **. New hard shoreline stabilization structures are prohibited except...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 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. We suggest this language:
 - **No new non-water dependent development that will require protection from hard armoring should be built after adoption of the SMP code update.**

Other Recommendations

The proposal also includes changing the shoreline variance requirement to allow buffer reductions of between 25% and 50% to be done via administrative review rather than requiring a shoreline variance through a hearing examiner. **We oppose this change in process, which could**

allow significant reduction in buffer protections without a hearing, at a time climate change is hastening shoreline erosion. Setbacks are a critical way to avoid shoreline deterioration and/or future requests for hard armoring. **It is most cost effective to ensure development happens in the right places and in the right way, now, then to have to fix problems in the future.** There are also risk management issues that can occur when buffers are reduced without adequate review.

The Planning Commission recommendations include that logging roads within the shoreline zone be exempt from the requirement of submitting a substantial development permit. We do not support this change due to the following: Forest practices under the Forest Practices Act are already exempt because they are adequately covered by that Act. However associated logging roads are not exempt from this review. Ecology's Shoreline Permitting Manual Guidance for local governments states "The development of roads, trails and bridges and placement of culverts associated with forest practices are typically considered to be substantial development and require substantial development permits."

In summary, we are pleased to see the overall progress and improvements in the County's Shoreline Management Program Draft. However, we urge the county to begin addressing the effects of climate change on the development, protection, and restoration of shorelines through the SMP. 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. Adding steps the county will take to plan and certain guidance in the updated SMP is an excellent place to start. Public support for climate and sea level rise planning is strong and continues to increase as Skagit County residents accept and understand that sea level rise is an issue that needs addressing. The County's leadership is imperative.

Thank you for the opportunity to give input.



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