



March 26, 2025

Clallam County Board of Commissioners (BOCC)
Clallam County Department of Community Development (DCD)
223 E. 4th Street
Port Angeles, WA 98362

Subj: Shoreline management at Three Crabs Road

Commissioners Mark Ozias, Randy Johnson, Mike French, and DCD Director Bruce Emery:

At its recent monthly meeting, the MRC agreed to invoke its advisory responsibility to the BOCC and communicate our concern about shoreline armoring (permitted and unpermitted) on Three Crabs Road, which recently came to our attention.

What we are seeing

Despite Comprehensive Plan policies for protecting marine shorelinesⁱ and no-net-loss goals of the Shoreline Management Programⁱⁱ, bulkheads have been and continue to be permitted - most often under emergency provisions following erosion from extreme storm surges, which are almost becoming an annual occurrence. In addition, NASA has recently concluded that the pace of sea level rise is faster than previously thought, due to thermal expansion of the ocean's mass.ⁱⁱⁱ

Summary of concerns

The MRC is concerned that intensifying weather conditions will continue to cause erosion and that emergency bulkheads will continue to be requested and built, one property at a time, resulting in significant impacts on shoreline functions and ecology. We urge the BOCC and DCD to develop a strategy that comprehensively addresses property and shoreline protection on Three Crabs Road. The strategy should include continued education and outreach to planners, contractors, property owners and county residents overall, and should also:

- > clarify that avoidance of ecological impacts is the top priority (but if avoidance is impossible then Ecology's sequence of mitigation actions for shorelines should be followed); and
- > consider adjacent impacts and cumulative effects of any action; and
- > identify mitigative approaches if avoidance is impossible; and
- > provide how no net loss will be achieved through compensatory mitigation.

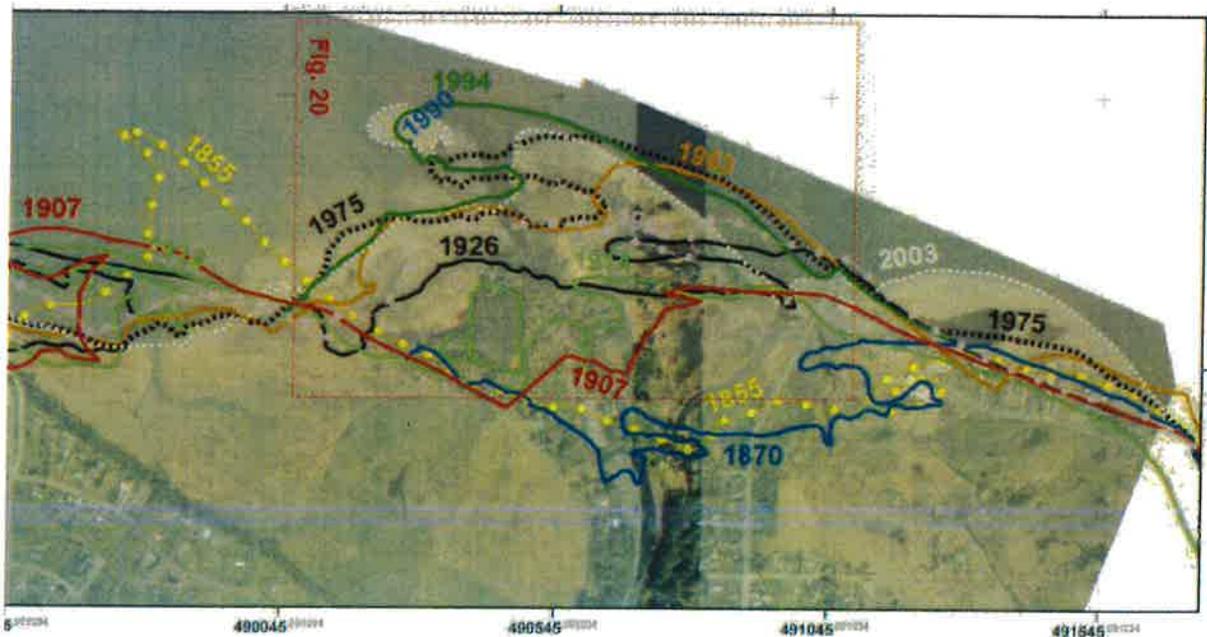
Until such a strategy is adopted, staff biologists should be consulted prior to any shoreline permit action and a moratorium on substantial new development, including hard armoring and new septic systems, should be considered.

Background

As background on the MRC's involvement in this topic of concern, for many years the MRC has supported educational efforts regarding responsible stewardship of marine shoreline habitat for county landowners as well as permitting staff through workshops, field trips and webinars. In particular, we have advocated for the "Shore Friendly" program of the Northwest Straits Foundation which offers free consultation, site visits, and potentially sources of funding to assist with revegetation and soft armoring techniques of property protection.

Despite these efforts and resources, it has come to our attention that there are actions proposed and permits under consideration by the County and State that deeply concern the MRC.

- To summarize our concerns: Three Crabs Road is on a stretch of beach between the Strait of Juan de Fuca and an estuary connected with the water table that extends between Meadowbrook Creek and Cooper Creek. Like all such landforms, it is a dynamic environment, becoming more so with sea level rise. It always has been dynamic, as seen in this image of reconstructed shorelines between 1855 and 2003 (from "Historical geomorphology and ecology of the Dungeness River delta and nearshore environments from the Dungeness Spit to Washington Harbor", Collins 2005):



- Sea level rise and increasing intensity of storms are two of the expected impacts of global warming and can already be measured in many areas. The northeast-facing coastline between Meadowbrook and Gierin creeks is vulnerable to storm surges coming from the

east, and especially when they coincide with high, “King” tides. Residents of this shoreline have experienced more erosion in recent years, probably a result of the combined effect of more-intense storms and higher-elevation King tides. Their own photos and others illustrate the increasing frequency of flooding at Three Crabs Road (photo by John Gussman, December 2024):



Photo: John Gussman, permission received to use photo of three Crabs Area.

- Maintenance of the safety and environmental protection of this dynamic and fragile shoreline lies with permitting agencies ranging from the federal US ACOE and the state WDFW, DNR and Ecology, to the local: Clallam County, ideally in co-management with local tribes. Among these it is often the local entities that are the most knowledgeable about a specific location, area, or property – or could most easily obtain new information. This is particularly true for environmental and habitat features, for development permits and

- proposals for structures (including septic systems), and for perspective on potential impacts on neighboring properties.
- The environmental functions of dynamic shorelines are many; protection of these functions often protects infrastructure as well. For example:
 - Wave action dissipation is a natural function that prevents vertical scouring and nearshore habitat function loss – one problem caused by bulkheads.
 - Drift cell maintenance is a normal/natural function that supplies sediment to neighboring beaches and Dungeness Spit. Along the Three Crabs Road landform the drift cell movement is from east to west.
 - Niche habitats found in nearshore beaches are used by species specifically adapted to the terrestrial-aquatic interface and nowhere else.
 - Local governments also have the highest responsibility for adapting permitting to local conditions – through conditioning the permit, mitigating impacts, or denying a permit – and not assuming that state and federal agencies know the site best.
 - Given that sea level is rising, an OHWM from the past used to establish setbacks is not where it would be set today, and today’s mark would not be appropriate tomorrow or next year. We cannot outrun it with more frequent measurements; instead, a conservative, forward-looking mitigative approach is warranted.
 - Clallam County’s current SMP and Comp Plan – and/or associated codes – may not be as protective as they should be since the measure and timing of impacts of climate change have not been predictable precisely – and never will be. That said, the impacts of sea level rise and more threatening storms have been known to be imminent since before the prior SMP update and there are numerous references to no net loss, cumulative impacts, and mitigation. According to code it is not in the public’s interest to have structures that run risk of being eroded in the near future.^{iv}
 - The County is responsible for making permitting decisions that conservatively protect both landowners and County taxpayers from paying for programs to correct permitted actions that should have been avoided.
 - Finally, there are currently multiple actions and requests for actions from landowners along Three Crabs Road affected by the now-regular occurrence of flooding associated with storm surge and King tides. These actions propose using traditional engineering methods that prioritize protection of limited private properties, including hard armoring and raising the elevation of the road surface.
 - First, this is not surprising. It would be very upsetting and frightening to see waves eroding one’s property. Damage to one’s landscaping and septic system would also be disturbing. If one had the financial means to construct better protection, they would understandably be motivated to do something as soon as possible. If one did not have the means to hire consultants and contractors, it would be much more frightening.
 - The temporary closure of one’s only access road would also be upsetting; fortunately, high tide water’s subside within hours and emergency ingress or egress may not be affected.

MRC advisory messages

- It is also upsetting and frightening for thousands of taxpayers to observe the destruction of the fragile environment for the expensive and temporary relief of landowners living on a dynamic shoreline. Any “solution” would be temporary since sea level rise and storm surge are on a worsening trajectory. We submit that traditional engineering will not fully protect residents from re-occurrences and that a long-term strategy to address the issues along Three Crabs Road is warranted – as soon as possible.
 - In fact, some of the current applications for bulkhead repair are for bulkheads constructed relatively recently.
- The imminent FEMA RiskMAP updates include current projections of shoreline changes due to sea level rise, including data for citations on flooding.
- SEPA is designed to consider cumulative impacts, and hard armoring a segment of dynamic shoreline is known to cause erosion and destruction of adjacent properties almost immediately. SEPA decisions should consider neighboring properties and cumulative/long-term effects. Mitigation of impacts should start with considering avoidance. In the case of roads and homes along Three Crabs Road that means retreat or removal.
- Historic engineering methods like hard armoring will not resolve the new issue of indefinite, rapid erosion in the long term. What are alternatives to hard armoring? It is worth checking with state agencies for housing, infrastructure, and habitat restoration grant opportunities to help landowners with retreat, removal, or raising structures out of harm’s way. This is a problem faced by every county with marine shorelines, so other collaborations may be available. Also, house insurers may start requiring landowners to take such steps and could be a source of practical advice.
 - Even though armoring of any type is considered a temporary fix for many beachfront structures, soft armoring can be less expensive to build and maintain and is much less destructive (potentially restorative) to fragile habitat.
- At Three Crabs Road, armoring the marine shoreline will not address or resolve property flooding coming from two directions resulting from a higher sea level, estuary elevation, and/or water table during high tides.
 - Regarding regular inundation of septic systems, a regional sewer line or off-site community system may be needed due to the risk to human and environmental health from potential release of pathogens. Note that a study of sewage treatment options for Three Crabs was published in 2013 in anticipation of this scenario but was not pursued due to the expected short lifespan of new infrastructure in that area.
- Retreat is not without precedent. Landowners on Rivers End Road (west side of the Dungeness River mouth) were bought out and/or structures were raised or removed. This was accomplished to benefit the shoreline habitat of the river and remove the risk to taxpayers of compensating private property owners for repeated flood damage.
- The shoreline landscape is changing as fast as development proposals are coming in. In a short time, our shorelines could look closer to the tsunami inundation maps than they do now.

Bottom line

Band-aids including hard armoring and raising roads will not permanently solve the problems of increasing erosion and inundation and are more likely to cause new problems with both habitat and infrastructure.

This letter is primarily concerning activities we have noted in the Three Crabs Road area; however, the information is pertinent to marine shorelines throughout Clallam County. The vulnerability and fragility of beach and nearshore habitats is most recognizable but bluff shorelines are vulnerable as well due to erosion and risk to structures above.

Clallam County MRC would be glad to assist with outreach and education on shoreline habitat functions and values and alternatives to hard armoring. For example, this spring we are hosting “Shore Friendly” trainings for county staff as well as building contractors, made available by the Northwest Straits Foundation – one of our state-level partners.

The MRC and/or staff would welcome an invitation to discuss these concerns at your next convenience. To contact us please reach out to our coordinators: Cathy Lear, cathy.lear@clallamcountywa.gov and Rebecca Mahan, rebecca.mahan@clallamcountywa.gov.

Sincerely,



LaTrisha Suggs, Chair
Clallam County Marine Resources Committee (MRC)

Cc: Rebecca Mahan, Cathy Lear (MRC staff habitat biologists)
Tim Havel, Clallam County DCD (tim.havel@clallamcountywa.gov)
Maria Sandercock, WA Department of Ecology (MARI461@ecy.wa.gov)
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Alex Scagliotti, Jamestown S’Klallam Tribe (ascagliotti@jamestowntribe.org)

End Notes:

¹ Comp Plan, Section 31.02.320 Environment and Open Space Goals

17. Clallam County shall preserve, the scenic, aesthetic, and ecological qualities of the marine shorelines of Clallam County, in harmony with those uses which are deemed essential to the life of its citizens. Clallam County shall implement marine resource goals through the Clallam County Shoreline Master Program and/or Critical Areas Ordinance, as now or hereafter amended.

Comp Plan, 31.03.465 Dungeness-Jamestown neighborhood

(6)(b) Policy 15. Development in this area should avoid placing greater impacts on the Dungeness River, wetlands, and saltwater shorelines from stormwater runoff, loss of sensitive area buffers and riparian zones and human disturbance.

ⁱⁱ SMP 35.05.050, Shoreline Master Program goals.

(3) To ensure, at minimum, no net loss of shoreline ecological functions and processes, and to promote, where feasible, voluntary and collaborative efforts by government agencies, Tribes, businesses, property owners, and other citizens to restore shorelines that have been impaired or degraded in the past by non-natural events.

(15) To inform citizens and property owners about information on potential climate change and sea level rise impacts such as the 2015 Climate Change Preparedness Plan for the North Olympic Peninsula, as amended, and the Projected Sea Level Rise in Washington State – A 2018 Assessment.

SMP 35.40.030, Regulations – General mitigation requirements.

(6) The Administrator shall prohibit any use or development that will result in unmitigated cumulative impacts.

ⁱⁱⁱ <https://www.nasa.gov/missions/jason-cs-sentinel-6/sentinel-6-michael-freilich/nasa-analysis-shows-unexpected-amount-of-sea-level-rise-in-2024/>

^{iv} Shoreline Residential–Intensive designations should include moderate to high density while “ensuring infill and new development occur in a manner that avoids and minimizes adverse impacts on shoreline functions.” (SMP)

“This Program [the SMP] should be implemented in a manner that achieves no net loss of shoreline ecological functions” and when considering new projects that could result in loss of ecological function, the County must take into account the effects of the project on downdrift resources (e.g. neighbors as well as habitat), (Ch 35.40.020)

“The cumulative effects that development would have when added to other past, present, and reasonably foreseeable future development.” (Ch 35.40.020)

“The Administrator shall prohibit any use or development that will result in unmitigated cumulative impacts.” (Chapter 35.40.030(6))

Conditional Use Permit public interest criteria: States that in the long term it is not in the public interest to encourage these structures on properties that run the risk of being uninhabitable if erosion rates continue at ~10ft/ft SLR, increased coastal flooding, changing climate (35.50.040, Conditional use permits)