

**From:** philip grange <[REDACTED]>  
**Sent:** Sunday, November 3, 2024 7:36 PM  
**To:** Rob Pingle  
**Subject:** Baker Beach Erosion proposal.  
**Attachments:** COMMENTS 7 .pdf

Dear Trustees and DPA Planners,

% [rpingle@islandstrust.bc.ca](mailto:rpingle@islandstrust.bc.ca)

I wish to comment on the

Proposed Beach Mitigation (Pilot) Project located on Booth Bay ,Salt Spring Island.  
Application Reference Crown Land File... # 1415573

### PRESERVE THE WILD AND NATURAL IN BAKER BEACH

I have enjoyed walking and swimming along this beach for over 45 years.

I have spent time fishing in the waters of the bay.

I have observed all states of tides and effects of wind and weather over these decades, and I have enjoyed the many rich seasonal wild-life cycles of the area.

An important attraction for people visiting any beach is the wild and natural interface of land and sea, and this beach fulfils this admirably. This is still a natural beach-scape largely unspoiled by human activities and structures, which is becoming ever rarer here in the Gulf Islands.

To live and own property on such a beach is a privilege indeed; to visit for a day is a delight.

Having access to this beach is a most important Amenity for our island residents and visitors for both physical and mental health.

We have raised two generations of family here, where children turn over rocks to delight in shore crabs scrambling, and learn to swim in the sea.

We have witnessed many times the annual nesting and spawning of the Plainfin Midshipman fish along this shore. This is a celebration of life for the many species of birds and animals also attending the forage food frenzy it stimulates. Human photographers abound as do Eagles and Blue Heron, and many more.

This event must never be disturbed or degraded.

### Shoreline and natural boundary

Our observed changes to the shoreline, over our time here , have been slow and rather minor; nor has there been recent acceleration.

Most of the bottom of the bluffs is already bedrock exposure ; many are more than a metre in height. These rock walls are generally stable and very slow to change under wind , spray and rain effects, perhaps a few centimetres per decade. This will not significantly change the steepness of the bluffs above, and so not increase the risk of landslide from this cause. The aerial photo-study in the reports observes that there is no evidence of landslide along the coast despite the many seismic events over long time. I suspect if this process continues that bedrock will eventually be exposed to a height along the entire shore. Of course actual measurements of shoreline regression have not so far been made and therefore at the moment rely on hearsay.

### The Tree Topple

The most noticeable change along this coast has been the periodic Tree-topple from the crest of the bluffs. We estimate the frequency of this at a tree about every 3—4 years along this 600m of coast.

Historically the Eagles and Kingfishers soon find a new perch.

Tree, root and attached soil falls to the toe of slope, which can take a few winters to dissipate and leave woody debris along the high tide area. This soil passes along the drift of the beach to join the sand and mud deposits in the foreshore, and has done so for millennia, resulting in the overall beach deposits as we see them today.

This is the historical “nourishment” of our beach.

I believe the incidence of Tree-Topple is quite likely to continue at historic rates.

The present proposal will neither provide support to existing slopes, nor change the ongoing effects of wind, rain and sunlight on these slopes supporting the trees. Many trees are over 100 years old, confirming the very slow evolution of this bluff edge. There may be ways to reduce loss of trees and soil from bluff edges should the owners prefer not to await nature taking her slow historic course.

### The Bluffs

The soil overburden above the rock is quite hard and it too is slow to change by wind and weather. It has been steep in aspect for centuries. The professional reports indicate these slopes primarily vulnerable to water table pressures from upper slopes' rainfall, and also mention this area has been long-time stable. The main change then has been by human occupation of the past 75 years by logging, driveways, ditches, septic fields, perimeter drains and roof drains. Climate-predicted more intense rain events may exacerbate these development effects.

Measures to direct all collected flows to non erosive surfaces near water's edge might well return steep slopes to pre occupation levels of stability.

### The Proposal.

I note the geotechnical report confirms a low risk to the stability of all four subject house sites over the long term, yet still suggests the extensive works in the proposal, perhaps intended to preserving the tree cover to the bluffs.

Considering the proposed Beach Terrace and Wave Dissipation structures to be within the intertidal areas I am most uncomfortable with several possible impacts.

—That the predicted migration of the “beach nourishment” terrace materials may very well adversely impact the fish habitat of the iconic Midshipman fish and the entire food chain associated with it.

—That these Terraces on Crown Lands will become effectively privatized to owners, whose investment and plantings there may lead to signage like “No Trespassing-Restoration Area”.

—That the intertidal rock structures 1.2m high will certainly adversely impact the safety and enjoyment of swimmers and paddlers who have used this beach for many years, in particular those areas which have few such rocks at present.

My concern is that this might be a “Pilot” project based on unproven need and effectiveness on such high bank locations and puts at risk the intertidal environment and human enjoyment of this important beach. It would turn this into an “engineered” beach forever.

My request therefore is that the approval be put on hold for sufficient seasons that a more detailed study of the shoreline and bluffs be conducted to provide real data on the “predictive timeline of shoreline regression” , the actual extent of bedrock in the shoreline bluffs, and study and mitigation of impacts of human occupation.

Geotechnical assurances can then be made with more confidence as to the risk of landslide and extent of rock outcrop and its ability to withstand rigours of sea level rise over the next 75 years. Spring (king) tides will continue to occur at the same frequency and size as historically, but above the climate change predicted mean water level some 0.87m higher.

I understand there are other proven Bioengineering techniques available for steep slopes within the properties themselves, and I suggest these be considered to avoid habitat risk in the intertidal zone. Perhaps the woody debris could be secured in a different way to protect the shoreline.

Could the proposed terraces become effectively privatized and restrict public use below present natural boundary?.

Could our governments eventually become financially responsible for protection of the beach environment and maintenance of the proposed mitigations?

Is this a “Pilot “ project to test the technology on High Bluff rock foreshores?

I hope the landowners recognise the historical slow long term natural changes to their lands which have been in process for millennia, and review and design their improvements with minimal intrusion into the wider and equally important surrounding environment . And enjoy the privilege of their very special long term natural location.

Please PRESERVE THE WILD AND NATURAL IN BAKER BEACH

Yours Sincerely  
Philip Grange, P.Eng ( Ret.)

3 NOVEMBER 2024

I respectfully acknowledge that I live and work within the ancestral and unceded territory of the Hul’qumi’num and SENĆOŦEN speaking people.