



SHORELINE CONSIDERATIONS WHEN BUYING MARINE WATERFRONT PROPERTY

You found the perfect waterfront home, but what about slope stability, vegetation, and drainage? Marine waterfront properties can be amazingly beautiful but also a challenge because of their changing nature. Before you invest, take time to ensure that the site fits your goals as well as the house does.

INTRODUCTION

This guidance is for those purchasing marine waterfront property in Puget Sound and focuses on the land rather than the house. It includes an overview of features to look for, useful information to review, and resources to explore.

An important consideration about shorelines is that they change over time. Unlike most inland parcels, marine shorelines are extremely dynamic, which makes them unique and beautiful. Each site will have different challenges based on its geology, vegetation, and hydrologic conditions.

Keep in mind that it is rare to find comprehensive records for every property and that sometimes the information found will raise uncertainties. Still, the more you can learn before a purchase, the more you understand what to expect. Based on a basic understanding of a property, each individual will need to define a personal comfort level relative to the inherent challenges of that site.

When buying marine waterfront property, expect the shoreline to change. Taking the time to do research will contribute to peace of mind when making final purchasing decisions.

THINGS TO LOOK FOR

The following sections explore desirable features in waterfront properties and explain why those qualities are benefits. It is important to remember that properties lacking some of the characteristics discussed later can still be great sites; they may just require extra management or investment.

HOME SITES

- **Significant building setbacks** from the edge of a bluff or beach (farther is almost always better). Safe setbacks are critical for homes but less crucial for decks or boathouses that can be moved back without major expense.
- **Minimal site clearing.** Properties that retain mature forest will manage stormwater and maintain slope stability more effectively than sites with large lawns and extensive clearing. Extra investment is often required to manage



A house situated well back from the shoreline, with great views through plants that provide natural bank protection.



issues with stormwater runoff or shoreline erosion at properties fully converted into lawn and structures.

- **Quality drainage infrastructure** (if any). Poor quality drainage pipes that are buried, leaking, or broken can compromise shoreline stability.
- **A natural shoreline - or armor that won't need replacement when it fails.** If the site has an old bulkhead, explore whether the home setback could allow permanent removal rather than replacement, which costs tens of thousands of dollars in design, permitting, and construction fees.

THE BEACH / SHORELINE

- **Densely-vegetated shorelines** with diverse, mature shrubs and trees provide protection against surface erosion and the heavy rains typical of Puget Sound. Well-established plants with dense, deep roots form physical infrastructure that helps stabilize bluffs and slopes, whereas groundcovers and lawn do next to nothing.
- **Vistas are created through "view corridors"** rather than shoreline clearing. Pruning trees to maintain gorgeous views (versus removal) balances preservation of critical natural infrastructure with vistas.
- **Beaches with intertidal plants.** While not found on all shorelines, beaches that have native plants growing in the upper shore are a great bonus! Pickleweed, sedge, and other native plants help to trap sediment and slow beach erosion. "Weeding" beaches is a mistake: removing intertidal plants weakens beach structure and potentially adds to beach erosion.
- **Watch out! Carefully investigate areas with dense ivy.** Ivy that covers the waterfront and/or a bluff can hide serious issues. This invasive weed is aggressive and

expensive to remove. Ivy can screen erosion, signs of slope instability, and other concerns (like perfect rodent habitat) below the heavy blanket of invasive vegetation.

WHY ARE THESE FEATURES SO IMPORTANT?

Well-vegetated properties with safely set back homes offer many benefits. They will withstand normal shoreline erosion, waterfront change, and sea level rise with less stress and expense. Such properties:

- Are unlikely to need shoreline bulkheads, therefore saving tens of thousands of dollars.
- Are less likely to need costly and complex engineering or site investigations to solve drainage and instability problems.
- Already have mature plants providing free water management and slope stabilization infrastructure! In addition to their protective function, such plants also provide aesthetic benefits and habitat.
- Cause less stress and worry as natural coastal processes occur over time.
- Preserve a sense of place and identity that is unique to Puget Sound shorelines. Most of us are drawn to this area because of its natural beauty, and we can help maintain that beauty.



This property has a lovely vegetated shoreline next to the beach and a small lawn by the home. Gorgeous views are easily maintained through the trees.

BACKGROUND INFORMATION:

Seek out and review as much of the information below as possible before making a final decision. Don't hesitate to ask a professional if you don't understand part of a report or document.

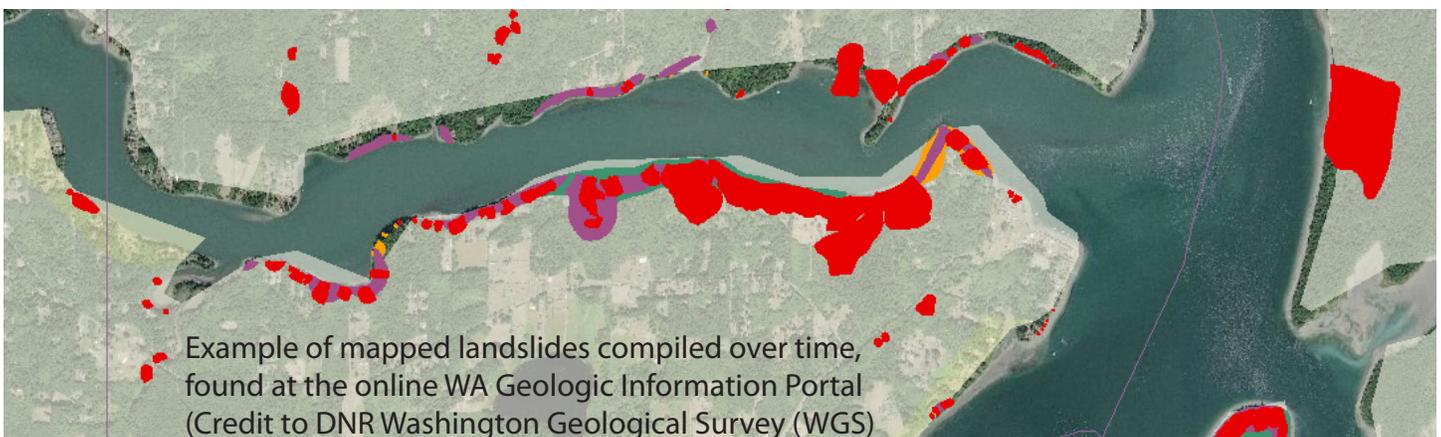
SELLER RECORDS /COUNTY RECORDS

- **All geotechnical or engineering reports** (request all known reports for the property; inquire about issues at adjacent properties or in the general neighborhood)
- **Records of infrastructure (maps; as-built drawings)** for the septic system, buried drainage infrastructure (conveyance pipes etc.), irrigation systems. Know what you are buying and how to maintain it.
- **History, even anecdotal, about previous site uses and shoreline modifications** - bulkhead designs, stairways etc., areas that have been excavated or filled . . . and any other records that provide history or context.
- **Talk to neighbors and to contractors** who worked on the site - designers, engineers, builders: these individuals might offer valuable history.

ONLINE RESOURCES

- **WA Coastal Atlas online:** Explore coastal processes and environmental features using the interactive "Coastal Atlas" mapping tool. Peruse shoreline photos that reveal prior construction, clearing, landslides etc. on the parcel or neighboring parcels.
- <https://fortress.wa.gov/ecy/coastalatlus/tools/Map.aspx>
- **WA Geologic Information Portal:** Find information about geology, landslides, and more. The maps are continually updated. They offer a point for discussion of slope instability or landslide risk with a professional. (Note that site-specific data may give results that differ from those displayed on the map.)
- <https://geologyportal.dnr.wa.gov/>
- **County GIS/Assessor Website:** find records and past permits; County GIS maps often have useful information like topography, creeks, and other important information to review.

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- **Sea Level Rise and the WA Coastal Hazards Resilience Project:** Seriously consider the implications and risks related to climate change and sea level rise - and how this may impact the property. Think about the land management challenges these changes may create. Research, resources, and maps related to climate change and sea level rise in Puget Sound can be found at this website:
<http://www.wacoastalnetwork.com/wcrp-documents.html>
 - **Climate Central: Surging Seas Risk Finder** has interactive maps, data, and resource links:
<https://riskfinder.climatecentral.org/>





MARINE WATERFRONT PROPERTY - CHECKLIST OF CONSIDERATIONS

This list offers a starting point for thinking about a potential property; it is not all-inclusive.

LAND and HOME

- Home located far back from the edge of the bluff or beach
- Trees and shrubs growing along the waterfront to stabilize the shoreline
- View corridors pruned *through* trees/shrubs rather than a fully cleared shoreline or topped trees
- Mature plants throughout the property (ideally - diverse shrubs and trees creating "layers")
- Minimal site clearing and a small development footprint
- Natural beach without armor or a bulkhead to maintain
OR
- Old bulkhead or armor that can be easily removed without needing costly replacement

RECORDS

- Maps of any pipe/drainage/irrigation systems - and where water discharges
- As-builts and records for septics, wells, earthwork (excavation/filling) etc.
- Copies of past geotechnical, engineering, or biological assessment reports

RESEARCH

- Understanding of landslide risk and current/past slope stability issues
- Property can safely withstand storm surges and sea level rise impacts