Critical Area Regulations

Public Training Session
Lopez Island
April 4, 2014
Critical Area Regulations

- General critical area regulations (SJCC 18.30.110)
- Geologically hazardous areas (SJCC 18.30.120)
- Frequently flooded areas (SJCC 18.30.130)
- Critical aquifer recharge areas (SJCC 18.30.140)
- Wetlands (SJCC 18.30.150)
- Fish and Wildlife Habitat Conservation Areas ((FWHCAs) - SJCC 18.30.160)
Acronyms

- BAS: Best Available Science
- CA: Critical area
- DBH: Diameter at breast height
- FWHCA: Fish & Wildlife Habitat Conservation Areas
- LID: Low Impact development
- OHWM: Ordinary High Water Mark
- SJCC: San Juan County Code
- TPZ: Tree Protection Zones
WASHINGTON STATE WETLAND RATING SYSTEM
for WESTERN WASHINGTON
Revised
Annotated Version August 2006
Ecology Publication # 04-06-025

Implementation Resources
Land Use Information

- Ordinances/clean copies of the regs
- Information bulletins and FAQs
- Regulation summaries
- Tree protection zone diagrams
- Tools for assessing tree canopy cover
- Protected plants, animals and habitats
Protected plants, animals and habitats

Arctic Aster
(Eurybia Merita)

This perennial plant is usually about 4 inches tall or less; however, some forms grow up to 16 inches tall. The stem and lower surfaces of leaves are often short haired. It has purple to violet ray florets and pale or creamy yellow disc florets.

Grows in meadows and in Douglas fir, lodgepole pine or spruce forests, open woods, rocky areas, clearings and recently burnt areas and along sandy, rocky or gravely creek banks. It is identifiable July through August.
County Homepage/Polaris: Critical aquifer recharge areas possible wetlands, geohazard areas, frequently flooded, and some FWHCAs.

CD&P CAO Implementation Page: Drift cells, soil liquefaction, possible wetlands, Habitat (Chinook, Marbled Murrelet, & Salmon) Lopez, Orcas and San Juan: FWHCA habitats and upland habitats (streams, lakes, protected habitat of local importance)

Call CD&P: Archaeological & cultural resources, shoreline fish presence (Beamer & Fresh Report) & additional habitat review (surf smelt spawning beaches, eelgrass, etc.)
Finding Critical Areas on Individual Parcels

- County Home Page
- Click Polaris
- Beta version: latest maps
- Type in Parcel number
- Click map contents
- Click critical area types
Finding Individual Parcel Maps Using County GIS: Polaris
Finding Individual Parcel Maps Using County GIS: Polaris

Legend

Map Contents

- Buildings
- Transportation
- Parcels
- Water Features
- Public Land Survey
- Contours

Critical Areas
- Critical Aquifer Recharge Areas
- Fish and Wildlife Habitat Conservation
- Wetlands - March 2014
- Possible Tidal Wetlands
- Possible Non-Tidal Wetlands
- NWI Wetlands
- Geologically Hazardous Areas
- Frequently Flooded Areas

Comprehensive Plan
- Soils
- Bare_Earth
- DEM
- Aerials 2013

Polaris
Definitions
Development Area

- Area **directly altered** as a result of development.
- Includes the area containing structures, driveways, gardens, landscaped areas, areas of grading, excavation, or fill.
Qualified Professional

- Training & experience in pertinent scientific discipline.
- Qualified scientific expert (WAC 365-195-905).
- Licensed and/or certified when required.
- If not required, a B.S., B.A., or equivalent & at least 5 years of related experience.
- Requirements for specific critical area professionals.
Other New Definitions...

- Aquaculture activities
- Best Available Science
- Bluff backed beach
- Buffer zone or area
- CA functions & values
- Diameter at breast height
- Garden, Garry Oak
- Hard structural shr measure
- Hydric Soils
- Invasive Plant
- Lawn
- No net loss
- Nonconforming
- Shoreline modifications
- Soft shoreline stabilization
- Stocking level, Stream
- Temp. Dev. Activity
- Tree Protection Zone
- Vesting
- West Side Prairie
- Wetland delineation and reconnaissance
Applicability
When Might the Regulations **NOT** Apply to an Activity, Use, or Structure?

- If the activity is exempt and meets the exemption conditions, or
- It is a legal ongoing activity that is allowed to continue in perpetuity.
When Might the Regulations APPLY to an Activity, Use, or Structure?

- They apply even if a permit is not required. Example: vegetation removal is regulated.

- Relocation in existing development areas requires provisional use permit.
Where Might the Regulations Apply?

- 300 ft. from wetlands (unless an exempt wetland)
- 200 ft. from geologically hazardous & FWHCAs
- In critical aquifer recharge or frequently flooded areas
- 1,000 ft. from golden eagle nests and ¼ mile from peregrine falcon/great heron nests
- Near designated protected plants, animals and habitats of local importance
Exemptions and Exceptions
Exemptions

- Forest practices under the Forest Practices Act
- Installation of navigation aids and survey markers

Site work: surveys, soil borings, & test holes provided:
- Functions & values are protected, and
- disturbed areas are immediately restored.
Exemptions

- Emergencies
- Operation, repair, maintenance, remodel, or replacement of existing structures and uses: with conditions

- Utility installation, and construction:
  in existing structures, facilities, systems, development areas, utility easements, and R-O-W, provided conditions are met.
Exemptions

- Removal of hazardous trees
- Clearing 30 feet around existing structures for fire protection
- Exempt land divisions
- Parcels created via 18.70.010(C) are not exempt.
Reasonable Use Exception

- For parcels created before March 31, 2014
- Does not apply to parcels that were not created as a building site (recreational lots)
- Requires a provisional use permit & notice to title
Reasonable Use Exception
Option One – No Mitigation
Requires Low Impact development

- Up to 2,500 sq. ft. in a buffer
- Up to 1,500 sq. ft. in a critical area
- Combined area of 2,500 sq. ft. with up to 1,500 sq. ft. in the critical area
Reasonable Use Exception
Option Two – With Mitigation

- Up to 10% of the parcel, or 1/2 acre, or the minimum to allow reasonable use if adverse impacts are mitigated.

- LID is required for all exceptions creating a footprint greater than ¼ acre.
Legally Existing and Nonconforming Uses
Legally Existing Structures, Uses, and Activities May…

- Continue in perpetuity. Are not nonconforming.
- Be maintained & repaired in their footprint.
- Be modified, replaced, relocated, or expanded in the development area under certain conditions.
Modifications, Replacements, Relocations, Or Expansions are Permitted

- Adverse impacts to water quality or the functions and values are not increased;
- Risks to people/property are not increased; and
- Replacement applications are submitted w/i 48 months of removal/destruction, or an extension is obtained.
- Relocation in the development area requires a provisional use permit.
Uses/Structures - Shoreline Jurisdiction and Shoreline Management Act (SMA)

- Legally established or vested on, or before 3/31/4, are regulated by the SMA
- Continue as conforming uses and be redeveloped or modified under shoreline regs.
- Redevelopment or modifications must not create a net loss of SHL ecological functions, or
- Must comply with the critical area regulations.
Exempt Wetlands

Category II and III: <1,000 sq. ft.

Category IV and mosaics: <2,500 sq. ft.

SJCC 18.30.150
Wetland Water Quality and Habitat Buffers

- State Wetland Rating System for Western WA (Categories: I, II, III and IV)

- Buffers: based on rating/land use intensity

- Water quality buffers apply between the upland development area and wetland

- Habitat buffers apply all around the wetland
**Wetland Categories**

<table>
<thead>
<tr>
<th><strong>WETLAND CATEGORY I</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I wetlands represent a unique or rare wetland, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a very high level of functions. These are wetlands that are:</td>
</tr>
<tr>
<td>- Relatively undisturbed estuarine wetlands larger than 1 acre;</td>
</tr>
<tr>
<td>- Wetlands that are identified in the Washington Natural Heritage Program as high quality wetlands;</td>
</tr>
<tr>
<td>- Bogs;</td>
</tr>
<tr>
<td>- Mature and old-growth forested wetlands larger than 1 acre;</td>
</tr>
<tr>
<td>- Wetlands in coastal lagoons; or</td>
</tr>
<tr>
<td>- Wetlands that perform many functions well.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WETLAND CATEGORY II</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>These wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. They occur more commonly than Category I wetlands and need a relatively high level of protection. They include:</td>
</tr>
<tr>
<td>- Estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre;</td>
</tr>
<tr>
<td>- Disturbed coastal lagoons;</td>
</tr>
<tr>
<td>- Interdunal wetlands larger than 1 acre; or</td>
</tr>
<tr>
<td>- Wetlands with a moderately high level of functions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WETLAND CATEGORY III</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetlands in this category may have been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. They provide important functions and values and habitat for a variety of flora and fauna. Category III wetlands are:</td>
</tr>
<tr>
<td>- Wetlands with a moderate level of functions; or</td>
</tr>
<tr>
<td>- Interdunal wetlands between 0.1 and 1 acre in size.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WETLAND CATEGORY IV</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>These wetlands are smaller, isolated, and have less diverse vegetation than Category I, II, and III wetlands. Category IV wetlands have the lowest levels of functions and values and are often heavily disturbed.</td>
</tr>
</tbody>
</table>
## Land Use Intensity Table

<table>
<thead>
<tr>
<th>LAND USE INTENSITY</th>
<th>TYPES OF LAND USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Commercial, Urban, Industrial, Institutional, Retail</td>
</tr>
<tr>
<td></td>
<td>Residential at more than 1 unit per acre</td>
</tr>
<tr>
<td></td>
<td>High intensity agriculture (dairies, nurseries,</td>
</tr>
<tr>
<td></td>
<td>greenhouses, annual tilling, raising animals etc.)</td>
</tr>
<tr>
<td></td>
<td>High intensity recreation (golf courses, etc.)</td>
</tr>
<tr>
<td>Medium</td>
<td>Residential at not more than 1 unit per acre</td>
</tr>
<tr>
<td></td>
<td>Moderate intensity open space (parks w/biking)</td>
</tr>
<tr>
<td></td>
<td>Paved trails, Logging roads</td>
</tr>
<tr>
<td></td>
<td>Utility corridors with access road, Hobby farms</td>
</tr>
<tr>
<td>Low</td>
<td>Forestry (cutting trees)</td>
</tr>
<tr>
<td></td>
<td>Low intensity open space (hiking, bird watching)</td>
</tr>
<tr>
<td></td>
<td>Unpaved trails, Utility corridors w/o access road &amp;</td>
</tr>
<tr>
<td></td>
<td>little/no vegetation management</td>
</tr>
<tr>
<td></td>
<td>Low intensity agriculture (orchards, hay fields etc.)</td>
</tr>
<tr>
<td>Wetland Rating</td>
<td>Land Use Intensity¹</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Cat. I Bogs²</td>
<td>125 feet</td>
</tr>
<tr>
<td>Cat. I &amp; II</td>
<td>50 feet</td>
</tr>
<tr>
<td>Cat. III</td>
<td>40 feet</td>
</tr>
<tr>
<td>Cat. IV</td>
<td>25 feet</td>
</tr>
</tbody>
</table>

Table 3.3 Wetland Water Quality Buffers

SJCC 18.30.150.D.1.a Step 4

Buffers increased 50% on slopes 30% or greater.
**Table 3.4**
Wetland Habitat Buffers

<table>
<thead>
<tr>
<th>Wetland Category</th>
<th>Land Use with Low Impact ¹</th>
<th>Land Use with Moderate Impact ¹</th>
<th>Land Use with High Impact ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>150 feet</td>
<td>225 feet</td>
<td>300 feet</td>
</tr>
<tr>
<td>II</td>
<td>150 feet</td>
<td>225 feet</td>
<td>300 feet</td>
</tr>
<tr>
<td>III</td>
<td>75 feet</td>
<td>110 feet</td>
<td>150 feet</td>
</tr>
<tr>
<td>IV</td>
<td>25 feet</td>
<td>40 feet</td>
<td>50 feet</td>
</tr>
</tbody>
</table>

¹ SJCC 18.30.150.D.1.b Step 2
Habitat Buffer Averaging

A 25% buffer reduction is permitted.
Roads, Driveways and Trail Crossings, etc.

Construction of new/expanded roads, driveways, trails, and associated culverts & bridges across wetlands and their buffers

Must comply with road standards and critical area conditions.

Road and driveway crossings may also be approved through the reasonable use exception process.
<table>
<thead>
<tr>
<th>allowed in wetlands or their buffers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 3.5 Structures, Uses, Activities</strong></td>
</tr>
<tr>
<td><strong>Allowed in Wetlands or Their Buffers</strong></td>
</tr>
</tbody>
</table>
| - **Outdoor activities:** do not modify the land/vegetation, or adversely affect functions and values.  
| - **Harvest of wild plants:** No tilling, planting, or changed conditions.  
| - **Invasive plant removal, planting native wetland plants, and vegetation management with an approved habitat management plan.**  

**SJCC 18.30.150.D.3**
<table>
<thead>
<tr>
<th>Agriculture Allowed in Wetlands or Their Buffers</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ <strong>Ag activities, existing, or in development prior to March 31, 2014 if there are no additional adverse impacts to wetland functions and values</strong></td>
</tr>
<tr>
<td>➢ <strong>Changing the type of farming, crops and management within the existing area</strong></td>
</tr>
<tr>
<td>➢ <strong>AG structures: subject to the same provisions as other structures.</strong></td>
</tr>
<tr>
<td>Allowed in Wetlands or Their Buffers</td>
</tr>
<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>➢ Noncompensatory enhancement (NE) such as wetland restoration or enhancement not required for a project</td>
</tr>
<tr>
<td>➢ New ponds in or next to Cat. IV wetlands, as mitigation or non. enhancement</td>
</tr>
<tr>
<td>➢ Temporary wildlife watching blinds</td>
</tr>
</tbody>
</table>

Table 3.5
Allowed in Wetlands or Their Buffers

- Construction of Trails, Stairs, or Raised Walkways under certain conditions.

- New or expanded orchards and gardens:
  - In Category III or IV Wetland buffers;
  - Cultivated and managed with BMPs;
  - No synthetic chemicals; and
  - Other conditions.
Structures, Uses, Activities Allowed in Wetlands or Their Buffers

- Fences that do not impede water flow or prevent the movement of animals.
- Maintenance to support or improve wetland functions and values.
<table>
<thead>
<tr>
<th>Structures, Uses, Activities Allowed in Wetland Buffers Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <strong>Drilling/Digging of Wells</strong>: outer 25% of the buffer &amp; other conditions are met</td>
</tr>
<tr>
<td>- <strong>Temporary Dev. Activities with mitigation</strong></td>
</tr>
<tr>
<td>- <strong>Stormwater Facilities</strong> that meet conditions &amp; mitigate adverse impacts</td>
</tr>
</tbody>
</table>
Structures, Uses, Activities
Allowed in Wetland Buffers Only

- Limited tree removal for a view from a primary structure
- For view or fire hazard reduction, minor trimming/pruning of trees and shrubs
  
  (conditions must be met)
On-site Sewage Components

- Water-tight septic tanks/pump chambers (wetland buffer)
- Sleeved/water-tight lines (buffer or wetland)
- Drainfields (outside of the water quality buffer)

When reasonable efforts are made to avoid impacts to wetland functions/values and other conditions are met
Provisional or Conditional Use Permit

- For other uses that will not adversely impact functions and value

- Applicants must consider the Best Available Science.
Similar Aquatic FWHCA Use Table 3.8

<table>
<thead>
<tr>
<th>Activity</th>
<th>Aquatic FWHCA (area in the water)</th>
<th>Buffer</th>
</tr>
</thead>
</table>

SJCC 18.30.16
Fish and Wildlife Habitat Conservation Areas

SJCC 18.30.160
Areas where endangered, threatened and sensitive animals and plants have a primary association:

- Endangered Species Acts listings;
- Shellfish areas, kelp and eelgrass beds;
- Herring, smelt, & forage fish spawning areas;
- Natural ponds <20 acres & aquatic beds;
- Lakes and streams - waters of the State;
- State preserves, resource and wildlife areas; &
- Habitats of local importance.
What is a Primary Association?

- Areas that provide habitat, including physical and biological features, that are necessary for long term species survival.

- Examples: Areas necessary for essential life cycle functions including feeding, nesting, breeding, and rearing areas.
# Animal and Plant Species and Habitats of Local Importance

- Protection Recommendations & Requirements
- See bulletins on website

## Protection Measures for Specific Animals

**SJCC 18.30.160**

<table>
<thead>
<tr>
<th>Animal Species</th>
<th>Habitat Description</th>
<th>Protection Methods</th>
</tr>
</thead>
</table>
| Sharp-tailed Snake | Live in relatively open, moist, woodlands, particularly near streams and seeped, south facing, rocky slopes. Usually found under rocks and rotting woody material. Primary food source is slugs. Use communal egg laying sites in cracks between rocks, underground or in clumps of grass roots. | - Minimize soil-disturbing activities.  
- Retain rocks and down wood.  
- Avoid predation by domestic cats. |
| Western Toad | Live near springs, streams, meadows and woodlands, especially those within 1,500 feet of ponds or wetlands. Feed on insects. Preferred breeding sites are water bodies with shallow, sandy bottoms. After breeding, they disperse into terrestrial habitats such as forests and grasslands, preferring damp conditions. Spend much time underground, often in small mammal burrows, beneath logs, and within rock crevices. Winter hibernation is in burrows. | - Protect buffers in accordance with SJCC 18.30.150 (required).  
- Establish wetland buffers using a Category I Wetland Rating (required).  
- Minimize soil-disturbance.  
- Prevent pollution of runoff.  
- Retain rocks & down wood.  
- Avoid introducing aquatic predators (e.g. fish) into ponds and lakes. |
Fish & Wildlife Habitat Conservation Areas
Aquatic Water Quality Buffers
Wetland Water Quality Buffers To Protect Designated Plants

<table>
<thead>
<tr>
<th>Land Use Intensity</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 feet</td>
<td>75 feet</td>
<td>100 feet</td>
<td></td>
</tr>
</tbody>
</table>

All buffers shall be increased by 50% on slopes greater than 30%.
## Tree Protection Zone Evaluation Area

(Only for areas with trees 😊)

<table>
<thead>
<tr>
<th>Type of Water Body</th>
<th>Tree Protection Zone Evaluation Area (measured horizontally)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type F (Type 2 or 3) streams, lakes, ponds, and marine waters (Type S) designated as FWHCAs</td>
<td>110 ft. from Ordinary High Water Mark or Bank Full Width²</td>
</tr>
<tr>
<td>Type Np (Type 4) streams</td>
<td>50 ft. from Bank Full Width</td>
</tr>
<tr>
<td>Type Ns (Type 5) streams</td>
<td>30 ft. from Bank Full Width</td>
</tr>
<tr>
<td>Type Ns (Type 5) streams flowing less than 6 months per year</td>
<td>Stream banks must be vegetated</td>
</tr>
</tbody>
</table>
FWHCA Tree Protection Zones
(Tree Protection Zones Are Divided Into Two Sections)

Type Np Stream

Bank Full Width

Tree Protection Zone

Water Quality Buffer (varies based on site characteristics)

50’ Tree Protection Zone Evaluated

house
Tree Protection Zones (TPZ)

- **Zone 1** - first 35 ft. from water - no cut zone and limited pruning.

- **Zone 2** – remainder - some tree removal and construction of 1 primary structure is allowed.

Must meet minimum tree stocking levels and other requirements.
Shorelines
Coastal Geologic Buffers on Erodible Marine Shorelines

- Development/vegetation removal in areas that are not bedrock, within 200 ft. of shoreline and provide:
  - sediment to areas with eelgrass, shellfish, spawning/holding areas for forage fish, mudflats, or intertidal habitats with vascular plants.

- Setbacks must allow natural erosive processes for the life of the structure (75 years min).

- Stormwater piped to marine waters must be treated.
Reduced Water Quality Buffers and TPZ

- Views blocked by houses on adjoining parcels;
- Adverse impacts are mitigated; and
- The buffer and TPZ are the greater of the:
  - Waterward side of a line drawn between the most waterward points of houses on adjoining parcels; or
  - Average of the distances from the OHWM to the most waterward points of houses on adjoining parcels.
New Shoreline Requirements

Public docks and docks serving 5 or more single family homes, piers, bulkheads, bridges, fill, floats, jetties, utility crossings, lifts, stairs, ramps, and other structures:

- Shall not intrude into or over critical saltwater habitats, and
- Must meet critical area conditions.

These requirements are in effect until replaced with an approved update of the SMP.
Project Permit and Mitigation Plan Reviews
Regulatory Overview

- Regulations apply even if a permit is not required (e.g. vegetation removal).

- Shoreline regulations still apply. (e.g. aesthetic setbacks are 50 ft. from TOB/OHWM on parcels with trees & 100 ft w/o.

- Unless stated, the more restrictive requirement applies.
Applications must include enough information to show compliance.

When required, mitigation plans are reviewed with the permit application.

When no permit, stand-alone mitigation review is required under an hourly fee.
Field Marking

Before building permits are approved, the edge of wetlands and FWHCAs and their buffers, and Tree Protection Zones adjacent to the area being developed must be marked in the field.

Markers must be maintained throughout the duration of construction.
General Mitigation Requirements and Review Process

- Minimizing impacts, reestablishment, restoration rehabilitation, creation, and enhancement activities.
- Mitigation plans - developed by a qualified professional(s).
- Review/approval is by the decision-maker for the permit or approval.
Questions?

Suggested topics for next training?
Provided that the construction...

- Conforms with local/State requirements, efforts are made to avoid impacts, and

- Appropriate BMPs are used to minimize soil disturbance.

- For new systems, limited tree removal is allowed in habitat buffers (see requirements) and

- Adverse impacts are mitigated.
Mitigation Requirements

- **Outside shoreline jurisdiction:** avoid adverse impacts and consider Best Available Science.

- If adverse impacts cannot be avoided, mitigate.

- **Within shoreline jurisdiction,** mitigation must use the sequence in SJCC 18.30.160.E.7.
Mitigation Sequence and Location

- **Reduce or minimize** adverse impacts by limiting the degree and magnitude of the action, or by applying appropriate technology and engineering;

- **Rectify** adverse impacts by repairing, rehabilitating, or restoring the affected environment;

- **Compensate** for adverse impacts by replacing, enhancing, or providing similar resources or environments that will substitute for those functions and values that were adversely affected.

- **Mitigate adverse impacts on-site**. If this is not possible, an off-site area located on the same island and as close as possible to the development site shall be used.
Mitigation Sequencing. Per WAC 173-26-201(2)(e) adverse impacts associated with new, expanded or replacement shoreline modifications must be mitigated consistent with the requirements of SJCC 18.30.110 and the following mitigation sequence:

- Avoiding the impact altogether by not taking the action or part of the action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.
- Rectifying the impact by using appropriate technology or by repairing, rehabilitating or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations.
- Compensating for the impact by replacing, enhancing or providing substitute resources or environments.
- Monitoring the impact and compensation projects and taking appropriate corrective measures.
Mitigation Cost Estimates, Financial Guarantees and Inspections

- **Cost estimate**: prepared by a qualified professional for implementing the mitigation plan and monitoring the site for a period of 3 years or until the project is expected to be fully completed and functional.

- **Financial Guarantee**: Unless exempt under RCW 36.32.590, a financial guarantee and agreement is required that covers 3 years or until the project is expected to be completed and functional. The maximum cost is the original cost of implementing and monitoring the project, plus 115% of that cost.

- **Periodic inspections** established in the monitoring plan are required. Inspections can be performed by the property owner’s qualified professional, or a County representative who makes an appointment or provides advance written notice.
Measuring Buffers And Tree Protection Zones Next To Lakes, Natural Ponds And Marine Shorelines

Measure from the ordinary high water mark. This is found by examining the bed and banks and finding where the presence and action of waters are so common in ordinary years, that there is a mark upon the soil in a character distinct from that of the abutting upland, in respect to vegetation -

- as that condition exists on June 1, 1971,
- as it may naturally change thereafter, or
- as it may change thereafter in accordance with permits issued by the County or Ecology.
Geologically Hazardous Areas

- See evaluation worksheet and regulations for geologically hazardous areas.
- Subclass “e” soils found in County soil survey or Cat. 2 map.
Development

- Division of a parcel into two or more parcels
- Construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure;
- Any grading, draining, dredging, drilling, filling, paving, excavation, mining, landfill; or
- Any extension of the use of land. (See also SHL)
Conforms with local and State requirements, reasonable efforts are made to avoid impacts to wetland functions and values, and:

- Appropriate BMPs are used to minimize erosion, sedimentation and soil disturbance;
- For new systems, limited tree removal is allowed in habitat buffers,
  - Stumps are retained and disturbance of the soil and duff layer is minimized;
  - The remaining forest consists of trees that are multi-aged and well distributed across the buffer and the canopy cover for the remaining forest is at least 65%;
  - All vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained;
  - Trees ≥ 12 inches dbh are retained; and
- Adverse impacts to critical areas or their buffers are mitigated.
The construction of new or expanded roads, driveways, trails, and associated culverts and bridges across wetlands and their buffers is allowed, provided they comply with SJCC roads standards and:

- Reasonable efforts are made to avoid and minimize impacts to wetland functions and values;
- When practicable, they are located on existing road grades, utility corridors, or previously disturbed areas;
- Permits and approvals are obtained (including state & federal);
- Roads cross wetlands and their buffers at 90, or as close as possible to, a ninety degree angle;
- Crossings do not impede water flow, circulation or other processes; and
- The location/design of crossings are evaluated by a qualified professional to ensure that wetland processes will not be adversely affected.
Road and Trail Crossings, Continued

- Construction occurs during work windows/time limits established agencies with jurisdiction.

- All crossings are designed to accommodate 100-yr flood flows.

- Whenever practicable, crossings serve multiple properties.

- When expanding existing crossings that do not meet these standards are updated to meet them (increasing the footprint of crossing structures and associated roads or trails).

- Roads and driveways are crowned, in- or out-sloped to sheet flow runoff into vegetated areas.

- If roads/trails cross wetlands, adverse impacts must be mitigated.
Construction of Trails, Stairs, or Raised Walkways

If they:

- Direct sheet flow runoff into adjacent vegetation
- Prevent adverse impacts from runoff & erosion
- Are not > five feet in width
- Are made of non-toxic material
- Do not circumnavigate wetland perimeter
- Do not require placement of fill
- Are consistent with all SJCC 18.30.150.D.6 (Road and trail crossing standards).
Establishment and Expansion of Orchards and Gardens

Within Category III or IV Wetland buffers; Cultivated and managed with appropriate BMPs; and Without the use of synthetic chemicals if:

- They occupy no more than 4,000 sq. ft. of the buffer;
- They are installed within the outer 25% of the buffer;
- No structures or impervious surfaces are constructed or created other than fences that will not impede the flow of water or prevent the movement of wetland animals;
- A 30 foot buffer is retained;
- Mowing does not occur in the habitat buffer until after July 15; and
- Trees protection complies with the wetland protections section.
Structures, Uses, Activities Allowed in Wetland Buffers Only

Limited tree removal for a filtered view from a primary structure if:

- Stumps are retained & disturbance of the soil/duff layer is minimized;

- The remaining forest trees are multi-aged, well distributed across the buffer, and the canopy cover for the remaining forest is at least 65%;

- Except directly between the structure and the wetland, where it may be reduced to not less than 50%;

- All vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained; and

- Trees ≥ 12 inches diameter at breast height are retained.
On-site Sewage Components

- Water-tight septic tanks & pump chambers (in a wetland buffer)
- Sleeved & water-tight sewer lines (in a wetland buffer or wetland)
- Drainfields (Outside of the water quality buffer)

If they conform with local/State requirements; reasonable efforts are made to avoid impacts to wetland functions and values and code conditions are met:

- BMPs are used to minimize erosion, sedimentation & soil disturbance;
- For new systems, limited tree removal is allowed in habitat buffers, stumps are retained and disturbance of the soil and duff layer is minimized; the remaining forest consists of trees that are multi-aged and well distributed across the buffer and the canopy cover for the remaining forest is at least 65%;
- All vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained; and Trees ≥ 12 inches dbh are retained;
- Adverse impacts to critical areas are mitigated.
FWHCA Tree Protection Zone

For a type F stream with one tree with the trunk located 80 feet from the bank full width of the stream, with a drip line 30 feet in diameter, the TPZ would be 30 ft. by 80 ft. plus the area within the drip line on the uphill side of the tree.

For a tree with the trunk located 20 ft. from the shoreline, with a drip line 30 ft. in diameter, the TPZ would be 30 ft. by 20 ft. plus the area within the drip line on the uphill side of the tree.
FWHCA Tree Protection Zones

Include the area within the drip line of each tree along with the area between the drip line and the bank full width of streams or the OHWM of lakes, ponds, or marine shorelines.

For individual trees, the Tree Protection Zone must be at least as wide as the drip line of the tree being protected.
New Shoreline Requirements

- Shoreline modifications, including shoreline stabilization measures, are allowed within and over aquatic FWHCAs and their buffers subject to SJCC SJCC 18.30.160.E.7 and chapter 18.50. Unless specifically allowed, new shoreline modifications are prohibited.

- General Standards Include Mitigation Sequencing
  - Avoiding the impact by not taking the action or part of the action.
  - Minimizing impacts by limiting the magnitude of the action by using appropriate technology or taking steps to avoid or reduce impacts.
  - Rectifying the impact by using appropriate technology or by repairing, rehabilitating or restoring the affected environment.
  - Reducing or eliminating impacts over time by preservation & maintenance.
  - Compensating for the impact by replacing, enhancing or providing substitute resources or environments.
  - Monitoring impacts, compensation projects & taking corrective measures.

These requirements are in effect until replaced with an approved update of the SMP
New Shoreline Requirements

- Public docks and docks serving 5 or more single family homes, piers, bulkheads, bridges, fill, floats, jetties, utility crossings, lifts, stairs, ramps, and other structures shall not intrude into or over critical saltwater habitats unless multiple conditions are satisfied:
  - Public need is demonstrated and the proposal meets many criteria such as:
    - consistency with the County’s SMP;
    - public benefits (e.g. providing physical/visual access to the shoreline);
    - will not have adverse impacts on the navigability of adjacent waters;
    - avoidance of impacts to critical saltwater is not feasible, or the project, including mitigation = no net loss of ecological functions;
    - consistency with State resource protection & species recovery; and
    - when feasible, public access and ecological restoration are incorporated into publicly financed projects.

These requirements are in effect until replaced with an approved update of the SMP – SJCC 18.30.160.E.7.b