Critical Area Regulations

General Slides and Highlights on Trail Building
Critical Area Regulations

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

- BAS: Best Available Science
- CA: Critical area
- DBH: Diameter at breast height
- FWHCA: Fish & Wildlife Habitat Conservation Areas
- OHWM: Ordinary High Water Mark
- SJCC: San Juan County Code
- SHL: Shoreline
- TPZ: Tree Protection Zones
- QP: Qualified professional
Land Use Information

- 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 gravelly creek banks. It is identifiable July through August.
Map Source Overview

**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)

**Orion/Call CD&P:** Archaeological & cultural resources, shoreline fish presence (Beamer & Fresh Report) & additional habitat review (surf smelt spawning beaches, eelgrass, etc.)
Definitions
Definitions

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)
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.
Some of the Other New Definitions...

- Best Available Science
- Bluff backed beach
- CA functions & values
- Diameter breast height
- Hard structural & Soft shoreline measures
- Invasive Plant

- No net loss
- Qualified professional
- Shl. modification
- Stream
- Temp. Dev. Activity
- Tree Protection Zone

SJCC Chapter 18.20 or SJCC Ord. No. 2-2014
When Might the Regulations **NOT** Apply to an Activity, Use, or Structure?

- It is exempt & meets conditions,
- or
- It is a legal ongoing activity allowed to continue & meets conditions.
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.
Where Might the Regulations Apply?

- 300 ft. from wetlands (unless wetland is exempt)
- 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
- Navigation aids and survey markers
- Removal of hazardous trees

“Hazard tree” means a tree that a certified arborist has determined has: (1) a high probability of falling due to a debilitating disease or a structural defect; and (2) potential for significant property damage or personal injury if it falls.

Soil borings, & test holes provided:

- Functions/values are protected, and
- Disturbed areas are immediately restored.
Exemptions

- **C.1:** Emergencies with 7 day notice to CD&P
- **C.2** Maintenance, repair, operation, remodel, or replacement of existing structures and uses*

*If conditions are met*
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 around the wetland**
### Wetland Categories

<table>
<thead>
<tr>
<th>Wetland Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| **I**            | 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:  
- Relatively undisturbed estuarine wetlands larger than 1 acre;  
- Wetlands that are identified in the Washington Natural Heritage Program as high quality wetlands;  
- Bogs;  
- Mature and old-growth forested wetlands larger than 1 acre;  
- Wetlands in coastal lagoons; or  
- Wetlands that perform many functions well. |
| **II**           | 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:  
- Estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre;  
- Disturbed coastal lagoons;  
- Interdunal wetlands larger than 1 acre; or  
- Wetlands with a moderately high level of functions. |
| **III**          | 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:  
- Wetlands with a moderate level of functions; or  
- Interdunal wetlands between 0.1 and 1 acre in size. |
<p>| <strong>IV</strong>           | 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. |</p>
<table>
<thead>
<tr>
<th>LAND USE INTENSITY</th>
<th>TYPES OF LAND USES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>Commercial, Urban, Industrial, Institutional, Retail Residential at more than 1 unit per acre High intensity agriculture High intensity recreation (golf courses, etc.)</td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>Residential at not more than 1 unit per acre Moderate intensity open space (parks w/ biking) Paved trails, Logging roads Utility corridors with access road, Hobby farms</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Forestry (cutting trees) Low intensity open space (hiking, bird watching) Unpaved trails, Utility corridors w/o access road &amp; little/no vegetation management Low intensity agriculture (orchards, hay fields etc.)</td>
</tr>
</tbody>
</table>
### Table 3.3 Wetland Water Quality Buffers

<table>
<thead>
<tr>
<th>Wetland Rating</th>
<th>Land Use Intensity¹</th>
</tr>
</thead>
<tbody>
<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>

¹ Land Use Intensity: 1 = Low, 2 = Medium, 3 = High

Buffers increased 50% on slopes 30% or greater.
<table>
<thead>
<tr>
<th>Wetland Category</th>
<th>Land Use with Low Impact</th>
<th>Land Use with Moderate Impact</th>
<th>Land Use with High Impact</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>
Habitat Buffer Averaging

A 25% buffer reduction is permitted.
Roads: Buffers & Tree Protection Zones

- **Public**: Do not extend across road.

- **Private**: Do not extend across road if the design, runoff flow, traffic volume, and/or gaps in tree canopy does not support functions and values of the critical area.
Roads, Driveways and Trail Crossings, etc. Two sections: SJ CC 18.30.150 (Wetlands) and SJ CC 18.30.160 (FWHCAs)

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 Trail Crossings, Conditions

Note: Some differences in wetland and FWHCA conditions

Same/Similar

- Comply with work windows/time limits established agencies with jurisdiction.
- Crossings accommodate 100-yr flood flows, when practicable, serve multiple properties and are crowned, in- or out-sloped for sheet flow.
- Expansions of crossings must be updated to new standards (increasing the footprint of crossing structures and associated roads or trails).
- Adverse impacts must be mitigated.

Road and driveway crossings may also be approved through the reasonable use exception process.
**Roads, Driveways and Trail Crossings, etc.**

Two sections: SJCC 18.30.150 (Wetlands) and SJCC 18.30.160 (FWHCAs)

### Different

- **Allowed when reasonable efforts:** avoid & minimize impacts to functions and values *(wetlands)*. Allowed for FWHCAs when there is no practicable alternative.

- **FWHCAs:** Type F streams design standards and other conditions to avoid interference with fish passage.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor activities: do not modify the land/vegetation, or adversely affect functions and values.</td>
<td>Invasive plant removal, planting native wetland plants, and vegetation management with an approved habitat management plan.</td>
</tr>
<tr>
<td>Harvest of wild plants: No tilling, planting, or changed conditions.</td>
<td></td>
</tr>
</tbody>
</table>
### Allowed in Wetlands or Their Buffers

- **Noncompensatory enhancement (NE)** such as wetland restoration or enhancement not required for a project
- **New ponds in or next to Cat. IV wetlands, as mitigation or non. enhancement**
Construction of trails, stairs, or raised walkways if they meet the following conditions...
Construction of Trails, Stairs, or Raised Walkways

- Direct sheet flow runoff into adjacent vegetation
- Prevent adverse impacts from runoff & erosion
- Are = or < five feet wide
- Are made of non-toxic material
- Do not circumnavigate wetland perimeter
- Do not require placement of fill
- Are consistent with road and trail crossing standards.
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>Temporary Dev. Activities w/ mitigation</strong></td>
</tr>
<tr>
<td>- <strong>Stormwater Facilities that meet conditions &amp; mitigate adverse impacts</strong></td>
</tr>
</tbody>
</table>
## 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

§ CC 18.30.160
Types of FWHC As

- Most marine shorelines, 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.
- Endangered, threatened and sensitive animals/plants and associated areas.
Animal and Plant Species and Habitats of Local Importance

- Protection Recommendations & Requirements
- See bulletins on website

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**PROTECTION MEASURES FOR SPECIFIC ANIMALS**
(SJCC 18.30.160 TABLE 3.11)
Measures are Recommended Unless Noted as a Requirement
For additional information see http://wdfw.wa.gov/hab/plslist.htm

<table>
<thead>
<tr>
<th>ANIMAL SPECIES</th>
<th>HABITAT DESCRIPTION</th>
<th>PROTECTION METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMPHIBIANS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharp-tailed Snake</td>
<td>Live in relatively open, moist, woodlands, particularly near streams and seeps, 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.</td>
<td>Minimize soil-disturbing activities. Retain rocks and down wood. Avoid predation by domestic cats.</td>
</tr>
<tr>
<td>Western Toad</td>
<td>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.</td>
<td>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 &amp; down wood. Avoid introducing aquatic predators (e.g. fish) into ponds and lakes.</td>
</tr>
</tbody>
</table>
Fish & Wildlife Habitat Conservation Areas

Aquatic Water Quality Buffers
Wetland Water Quality Buffers To Protect Designated Plants

<table>
<thead>
<tr>
<th>Land Use Intensity&lt;sup&gt;1&lt;/sup&gt;</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%.

<sup>1</sup> SJCC 18.30.160
Protected Animals

Northern Harrier, Short Eared Owl, Wilson Snipe and within 1,640 feet from a Western Toad:

Establish water quality buffers based upon a Category I Wetland Rating.
### 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</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>
Tree Protection Zones
Marine Waters, Lakes and Ponds

- Water quality buffer
- Tree Protection Zone (110' + drip line)
- Ordinary High Water Mark (OHWM)
- 110' Tree Protection Zone Evaluation Area
- Marine waters, lakes or ponds designated as FWHCAS
Tree Protection Zones (TPZ): Zone 1 and Zone 2

Type Np Stream

Bank Full Width

Tree Protection Zone

Water Quality Buffer (varies based on site characteristics)

50' Tree Protection Zone Evalu

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.
Coastal Geologic Buffers on Erodible Marine Shorelines

- **Development/vegetation removal** in non-bedrock areas, within 200 ft. of shoreline and that 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.**
San Juan County CD&P - Example

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 (aesthetic setbacks: 50 ft. from TOB/OHWM on parcels with trees & 100 ft. without trees).

- 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.
General Mitigation Plan Requirements and Review Process

- Minimizing impacts, re-establishment, restoration rehabilitation, creation, and enhancement activities.
- Plans: developed by qualified professional(s).
- Review/approval is by the decision-maker for the permit or approval.
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 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 § CC 18.30.160.E.7.
Shoreline Mitigation Requirements

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.

§ CC 18.30.110.E.7
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.
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.
Questions?