



San Juan County

COMMUNITY DEVELOPMENT & PLANNING

135 Rhone Street, P.O. Box 947, Friday Harbor, WA. 98250
(360) 378-2354 | (360) 378-2116 | Fax (360) 378-3922
cdp@sanjuanco.com | www.sanjuanco.com

CRITICAL AREA REGULATIONS FOR MARINE SHORELINES AND LAKES EQUAL TO OR GREATER THAN 20 ACRES IN SIZE

On March 31, 2014, San Juan County's new "critical area" regulations will go into effect. These regulations are found in San Juan County Code (SJCC) sections 18.30.110-160. Critical areas include wetlands, areas subject to flooding, areas with geologic hazards, and certain types of fish and wildlife habitat including marine shorelines, lakes, naturally occurring ponds, streams, and habitats associated with particular plants and animals. Complete applications for permits received prior to March 31, 2014 will be processed under the current regulations, and those submitted on or after that date will be subject to the new regulations.

- The purpose of critical area regulations is to prevent property damage and to ensure that development does not harm water quality, groundwater recharge, and some types of fish and wildlife habitat.
- The regulations apply within and 200 feet landward of lakes and marine shorelines.
- Maps of many critical areas, photos of protected plants and animals, adopted critical area regulations, and other guidance materials are available on the County web site at: http://sanjuanco.com/cdp/CAO_ImplementationDocs.aspx.
- SJCC 18.30.110.C contains exemptions for some common activities.
- Existing, legally established structures, uses and activities may continue in perpetuity and are considered to conform with the new critical area requirements.
- To protect lakes, marine waters, and associated fish and wildlife, it is necessary to retain a buffer of trees and vegetation next to the water. Water quality buffers range from 50 - 100 feet depending on the land use intensity of the development, and tree protection zones (which only apply to areas with trees) are 110 feet. Both are measured from the ordinary high water mark (OHWM).
- Application of the regulations to lakes and marine shorelines that are not subject to wind and wave erosion (e.g. those comprised of bedrock) can however be simplified by siting development at least 110 feet from the OHWM.
- For marine shorelines that are not bedrock, as part of permit applications, it will be necessary to provide a geologic assessment identifying setbacks and other measures necessary to allow

for natural erosive processes for the life of proposed structures without construction of a bulkhead (at least 75 years). The soil liquefaction map on the above web page shows areas underlain with bedrock.

- Most activities that are allowed within water quality buffers are listed in Table 3.6 (SJCC 18.30.160.E.2). In addition, there are provisions for some tree removal and/or construction of one primary structure within Zone 2 of tree protection zones; requirements for roads and trails that cross buffers and tree protection zones; and lighting standards. All trees within 35 feet of the OHWM must be retained.
- The regulations include a provision for locating new residences up with existing residences on adjoining lots if adverse impacts are mitigated in accordance with SJCC 18.30.110.E.
- The County's shoreline regulations (SJCC chapter 18.50) continue to apply, and in general, if there is a conflict, the most restrictive requirement controls. For example, the setback requirements for aesthetic purposes remain in effect at 50 feet from the top of bank or OHWM for parcels with trees, and 100 feet for parcels without trees. The regulations contain some new provisions for shoreline modifications (docks, bulkheads etc.) that supplement the existing shoreline regulations.
- Some areas near lakes and marine shorelines may have a risk of landslide, soil liquefaction during earth quakes (causing more intense shaking and damage), and other geologic hazards. Maps of potential geologic hazards are available on the above web page.
- For some low lying areas along marine shorelines there is a tsunami risk, with the risks higher along the north, east, and southern areas of the County, and in bays and inlets including East Sound, West Sound and Lopez Sound. The source of tsunamis include a Cascadia Subduction Zone earthquake, an underwater landslide in the Fraser River delta near Vancouver, British Columbia, and an earthquake in a fault south of Lopez Island. Wave heights from tsunamis would vary depending on the magnitude of the event and the location in relation to the property. Following is a web site with a time lapse model of a tsunami associated with a Cascadia Subduction Zone earthquake: <http://www.pac.dfo-mpo.gc.ca/science/oceans/tsunamis/modele-tsunami-model-eng.htm>.
- Some areas near lakes and marine shorelines may be subject to frequent flooding, with flooding along marine shorelines potentially exacerbated by increasing sea levels. Estimates of sea level rise vary, but for the San Juans could be as much as 40-50 inches by the year 2100. Development in areas subject to flooding must follow the County Flood Hazard Control Regulations (SJCC Chapter 15.12). In addition, to comply with the Endangered Species Act, applications for new development proposed below base flood elevation, must include a biological assessment on potential adverse impacts to, or effects on salmon and salmon habitat from the proposal.
- Areas subject to frequent flooding are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps which are available at:

<https://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10001&storeId=10001&categoryId=12001&langId=-1&userType=G&type=1&future=false>.

- In addition to increasing the risk of property damage, as sea levels rise and move inland, development located in low lying areas along the marine shoreline may harm marine habitats, especially if a bulkhead is constructed. Though not required, steps that can be taken to minimize the risk to marine habitats and species include a) siting development, including lawns, 50 - 100 feet back from the future OHWM; b) maintaining all trees within 35 feet of the future OHWM; c) maintaining minimum stocking levels for trees (21% canopy cover for Douglas fir and other conifers) within the area 35 feet to 110 feet from the future OHWM; and d) having a geotechnical professional provide recommendations for siting structures to allow for sea level rise without the need to construct a bulkhead. Maps showing the changing shoreline and areas of inundation with varying sea levels are available at: <http://www.sanjuans.org/maps.htm>.
- There are recommendations, and in some cases requirements, for protecting the habitat of specific plants and animals. These regulations generally apply within 200 feet of protected habitats, but extend to 1,000 ft. for golden eagle nests, and to ¼ mile for peregrine falcon and great blue heron nests. Maps of known locations, photos of protected plants and animals, and protection provisions are described in handouts available on the above County web page.
- In the Eastsound and Lopez Village “urban growth areas” buffers and tree protection zones may be reduced if adverse impacts are mitigated in accordance with SJCC 18.30.110.E.
- When developing property near lakes and marine shorelines, the following are situations that may result in additional development restrictions, approval processes, cost, or risk of property damage:
 - Small lots, especially those with a lake in the middle of the lot, and those that contain or are adjacent to wetlands.
 - Activities requiring mitigation of adverse impacts.
 - Development in areas of special flood hazard as shown on FEMA maps and/or areas subject to soil liquefaction, landslides, tsunamis or other geologic hazards.

