

## **Minority Report to San Juan County Update of Regulations for Protecting Nearshore Critical Areas**

### **Submitted by the San Juan County Marine Resources Committee and the San Juan County Lead Entity**

The San Juan County Council appointed a representative of the Marine Resources Committee (MRC) to the Critical Areas Ordinance (CAO) Update Citizens Committee. Since the inception of this nearly two year process, the MRC supported, as outlined in the CAO Update Citizens Committee's "Guiding Legal Principles for the Protection of Critical Areas" document, the need to draft a CAO that complies with state and federal mandates and reflects Best Available Science. The MRC participated throughout the multi-year CAO Update process and is writing this report in support of the proposed nearshore buffer but with a recommendation to increase the minimum buffer size.

The San Juan County Marine Resources Committee (MRC) is a citizen-based advisory committee dedicated to the protection and restoration of the marine environment in the San Juan Islands. Created in 1996 to advise the county on marine issues, MRC members are selected by the County Council and represent local government, tribal government, the scientific, economic, recreational and conservation communities, and citizens at large. San Juan County relies heavily on the Marine Resources Committee for advice on decisions affecting the marine environment. As the designated local Citizens Advisory Group under the Washington Salmon Recovery Act, the MRC also promotes salmon recovery with projects and programs directed at assessment, protection, and restoration of nearshore habitats.

#### **Shoreline Buffer**

Riparian vegetation contributes to the food web by providing large woody debris and organic matter, important to many species, and creates habitat for insects and marine invertebrates that are important food sources for fish and other aquatic life (Brennan and Culverwell). Juvenile salmon feed in all habitats they occupy and use prey that originate from a wide diversity of sources including pelagic (marine), benthic (sea or lake bottom) and terrestrial sources. (Fresh et al, Healey, Simenstad et al, Brennan et al, Duffy et al). Nearshore food webs are noteworthy in that they support abundant prey types that are especially important to small juvenile salmon (Sibert, et al). Local San Juan County studies show that insects comprise a high proportion of juvenile salmon diet and many of the terrestrial insects are produced from riparian vegetation (Barsh).

Vegetation in tidal plains provides refuge for juvenile salmon and shades shallow water to maintain cooler temperatures that are necessary for the survival of salmon and other species. Large trees, which shade the upper intertidal zone is especially important for maintaining forage fish spawning habitat. Marine riparian vegetation also protects water quality and reduces surface erosion by slowing run off. Terrestrial and shoreline vegetation acts as a filter for runoff, while submerged vegetation causes sediments to settle out of the water column. By slowing erosion and retaining sediments, riparian vegetation reduces pollutants including nitrogen, phosphorus, hydrocarbons, PCBs, metals, and pesticides. It also prevents excessive turbidity, which can smother eggs and aquatic vegetation (EnviroVision, et al.)

With over 408 miles of shoreline in San Juan County - the most of any county in the continental United States - the nearshore is what San Juan County is best known for and is a significant critical area fish and wildlife habitat in the county. San Juan County's shorelines support

multiple aquatic and terrestrial species such as birds, mammals, fish, invertebrates, etc and also many listed species such as Puget Sound Chinook, Steelhead and Southern Resident Killer Whales. The recovery plans for these listed species also rely on the nearshore to support these species (Puget Sound Salmon Recovery Plan, Recovery Plan for Southern Resident Killer Whales.)

The draft amendments to the Shoreline Section - Critical Areas Ordinance dated April 29, 2009 proposes buffers for shoreline areas of 100 – 150 feet in Table 5.4. Best Available Science supports a minimum of 100 feet along the shoreline to prevent no net loss of nearshore functions and values but also recommends larger shoreline buffers.

The document *Protecting Nearshore Habitat and Functions in Puget Sound* is a synthesis of current science on nearshore habitats and processes and has been provided as guidance for protecting nearshore functions and values. It provides information on buffer widths and notes that while there is no consensus in the literature on a single buffer width which would protect a particular function and or even protect multiple functions, there is consensus that buffers are critical to sustaining many ecological functions. The document provides tables with buffer width ranges for protecting various functions. The minimum noted for various functions in the tables is around 100 feet up to 600 feet. The guidance document also states,

“A precautionary approach would rely on using the high end of the ranges required to protect specific functions.”

Additionally, the guidance document provided by the Washington Department of Fish & Wildlife recommends that shoreline buffers be 250 feet (Washington Department of Fish & Wildlife, Knutson and Naef).

It is also of note that in other critical areas in the Critical Areas Ordinance that the buffers are larger and more protective than the minimum of 100 feet being proposed for shorelines. The buffers are 180 feet for Category I and II wetlands and 150 feet for Type F (fish bearing) streams. The shorelines of San Juan County are as critical as the other critical areas of wetlands and fish bearing streams. Recent studies in San Juan County have demonstrated that shoreline habitats are providing nursery habitat to a wide variety of fish species including juvenile salmon, forage fish, and others such as greenling, lingcod, true cods, flatfish, and sculpins. Also juvenile salmon are present all year around and utilizing all shoreline types in all regions of the San Juan Islands (Beamer and Fresh).

Additionally, the 100 foot buffer as proposed is the lower minimum limit and is inconsistent with other jurisdictions. The minimum buffer proposed may be indefensible especially as previously noted regarding the Best Available Science recommendations and also due to the precedents set by other jurisdictions. Many other jurisdictions (Whatcom County, Jefferson County, Bainbridge Island, etc) have incorporated buffers of 150 feet and these have been determined to be defensible.

Landowners also have the option of creating a Critical Area Stewardship Plan (CASP) that is a site specific plan to allow uses and yet protect critical areas. This option is available to landowners who wish to decrease their buffer size but will still ensure protection of critical areas.

Thus in order to be consistent and protective of our most critical areas, the Marine Resources Committee strongly recommends that the buffers for shorelines be a minimum of 150 feet.

## References

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