

## Coastal Watershed Institute (CWI)

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*"Our mission: To protect and restore marine and terrestrial ecosystems through scientific research and local community, place based partnerships."*

4 July 2018

Terra Rentz  
Washington Department of Fish and Wildlife  
P.O. Box 43200  
Olympia, WA  
98501

Dear Ms. Rentz:

Per request, we are providing written comments for the most recent draft of the Priority Habitat and Species (PHS) document on riparian ecosystems in Washington (<https://wdfw.wa.gov/news/may1718b/>). Our comments largely echo those provided by Mr. James Brennan. Like him, we are writing you directly instead of the online form as our comments are specific to the incomplete scientific foundation for the development of management recommendations, and the complete exclusion of marine riparian areas in particular. While we understand that you are only seeking comments on Volume 2, our comments also apply to Volume 1 (Science Synthesis and Management Implications) because appropriate management recommendations can only result from a complete and accurate scientific foundation.

The WDFW has invested significant public tax resources over the last twenty plus years (the majority of my career) to studying and articulating the importance of nearshore systems. Rightly so. From this work we know that the nearshore, including the riparian nearshore, is a cornerstone for conserving, protecting, and restoring our marine and watershed ecosystems. Marine riparian areas provide critical habitat to numerous species in the nearshore and influence the overall health and integrity of marine nearshore ecosystems in Washington. The stated mission of the Washington Department of Fish and Wildlife (WDFW) is "preserve, protect and perpetuate fish, wildlife and ecosystems". Nearshore riparian systems are critical for this management goal, and so critical for WDFW to include in the PHS.

Providing complete and accurate technical information, including the decades of work the WDFW (and others) have invested in understanding the nearshore is crucial to meeting WDFW's responsibilities, as well as informing policy and actions designed to protect,

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perpetuate, and/or restore habitats and species, especially for those which have been severely depleted. Local jurisdictions and other management agencies turn to WDFW for technical guidance, and it is imperative that information provided by WDFW is based upon best available science and ecological principles.

In its current form the PHS document suffers from a number of significant errors and omissions. The documents use an outdated definition of “riparian”. This must be corrected. As defined by the National Research Council (NRC 2002), riparian areas are transitional between terrestrial and aquatic ecosystems and are distinguished by gradients in biophysical conditions, ecological processes and biota. They are areas through which surface and subsurface hydrology connect water bodies with their adjacent uplands. They include those portions of terrestrial ecosystems that influence exchanges of energy and matter with aquatic ecosystems (i.e., zone of influence). Riparian areas are adjacent to perennial, intermittent, and ephemeral streams, lakes, and estuarine–marine shorelines. This is also the definition adopted by Brennan et al (2004), Brennan (2007) and WDFW (2009). The WDFW (2009) reference is particularly relevant, since it was designed to provide guidance for managing Puget Sound marine shorelines (as indicated in the title: Protection of Marine Riparian Functions in Puget Sound).

Over the last two decades a large amount of research has been done that highlights the importance of marine riparian areas as part of nearshore marine ecosystems (e.g., Williams et al 2001; Brennan and Culverwell 2004; Brennan 2007), their connections to salmon and salmon recovery (e.g., Brennan et al. 2004; Fresh 2006; Duffey et al 2010; Beamer and Fresh 2012), their importance for forage fishes (Penttila 2001; Rice 2006), wood recruitment and associated functions (Tonnes 2008), and their importance in watershed planning and salmon recovery efforts. The Puget Sound Ecosystem Restoration Partnership (PSNERP) selected marine riparian areas as one of its primary Valued Ecosystem Components (VECs) (Brennan 2007) to help illustrate the declining integrity of the Puget Sound nearshore, explain how ecosystem processes are linked to ecosystem outputs, and to describe the potential benefits of proposed actions for protection and recovery.

Omitting this body of scientific information available on marine riparian areas in Volume 1, leaves volume 2 incomplete in its coverage of all riparian ecosystems. This will in turn result in significant impairment to vast and ecologically significant areas that are critical components of the Salish Sea thru grossly uninformed/misinformed management decisions at all levels of management, given that, as stated in Volume 2, local jurisdictions, and other agencies, policy makers, and NGOs will refer to this guidance document in making land use decisions.

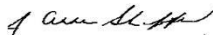
This is particularly relevant to the development and implementation of rules under the Growth Management Act (GMA) Critical Areas Ordinance (CAO) and the Shoreline Management Act (SMA) Shoreline Master Program (SMP). Although the volume of science on marine riparian areas is substantially less than that available from studies of freshwater systems, the current science on marine riparian areas is consistent with BAS criteria set out in WAC 365-195-900 through 365-195-925. In order for local

jurisdictions to meet their statutory obligations for protecting critical areas and marine shorelines, they must have current, complete, and accurate information. Nearshore riparian zones must be accurately included in management guidance, including PHS.

Puget Sound nearshore habitats and species are in severe decline based on all indicators, due directly to degraded marine riparian zones. It is therefore imperative that nearshore riparian areas be included in any discussion, review, and development of management recommendations and rule making for marine aquatic and riparian ecosystems. To accurately reflect the current and best available science and more broadly protect and perpetuate fish and wildlife, nearshore riparian areas must be included in the WDFW PHS documents-both Volume 1 and 2.

Please feel free to contact myself or Trevor Burmester, CWI intern, [t\\_burmester@nevada.unr.edu](mailto:t_burmester@nevada.unr.edu), for additional information.

Respectfully,



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