

Riparian Management Zone Checklist for Critical Areas Ordinances

A Technical Assistance Tool – April 2023



Purpose

The Washington Department of Fish and Wildlife (WDFW) has developed guidance to support local jurisdictions as they designate and protect riparian ecosystems as critical areas (i.e., Fish and Wildlife Habitat Conservation Areas, FWHCAs¹) consistent with the goals of the Growth Management Act and Shoreline Management Act. *Volume 1: Science Synthesis and Management Implications* ([Quinn et al. 2020](#)) is a source of Best Available Science (BAS) that describes how riparian areas and surrounding watersheds affect ecological functions and aquatic habitats. Volume 1 is intended to inform policies related to management of riparian areas. *Volume 2: Management Recommendations* ([Rentz et al. 2020](#)) provides guidance to assist cities and counties with the protection and restoration of healthy, intact, and fully functioning riparian ecosystems, which are fundamental for clean water, healthy salmon populations, and climate-resilient watersheds. This guidance supports compliance with state statute², which calls for BAS to be included in developing policies and development regulations to protect the functions and values of critical areas.

This checklist is designed to help local planners translate BAS-based recommendations into Critical Areas Ordinance (CAO) amendments (reference [Addendum](#) for examples). If you need help updating your CAO and/or completing this checklist, use WDFW's appropriate [Land Use Planning Contact Email](#) for technical assistance.

Instructions

This checklist is a voluntary tool that supplements [Commerce's Critical Areas Checklist](#), specifically the section on *Protection of Fish and Wildlife Habitat and Conservation Areas*.

1. Column 1 provides a list of WDFW's key Riparian Management Recommendations (RMR) in the form of CAO-related questions.
2. Column 2 indicates the location in Volume 2 where further detail about each RMR can be found. Definitions of terms can be found in the glossary of Volume 2.
3. In column 3, check the appropriate box and where appropriate, cite the section in your CAO where the RMR is addressed. Your response to this question may change as your CAO is amended.
4. In column 4, describe how your CAO addresses or does not address the RMR or why the RMR may not apply ("N/A").
5. If sections of your CAO do not yet address the RMR, please refer to the location cited in Volume 2 and any additional BAS-based guidance to update your CAO language (and revise columns 3 and 4 accordingly). This is meant to be an iterative process through which your CAO can better designate and protect riparian areas the more boxes are checked "Y." Rows that remain checked "N" after all CAO amendments have been proposed may represent departures from BAS that must be documented and explained³.

PREPARED FOR (Jurisdiction Name):	
PREPARED BY (Name, Title, email):	DATE:

¹ [WAC 365-190-130](#)

² [RCW 36.70A.172\(1\)](#)

³ [WAC 365-195-915](#)

Riparian Management Recommendation (RMR)	Location in RMR Vol. 2	Citation in CAO	How Addressed in CAO (or why not addressed in CAO)
<p>A. Does your CAO intend to protect all key riparian ecosystem functions (i.e., shade, root strength, nutrient input, wood input, and pollution control)?</p>	Section 2.2.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
<p>B. Depending on your ecoregion(s), do your FWHCAs utilize the appropriate methodology (<i>whichever width is greater</i>) for delineating riparian management zones (RMZs) for all stream types?</p> <ul style="list-style-type: none"> • the Site-Potential Tree Height (at age 200 years, SPTH₂₀₀), • the extent of native riparian vegetation, or • the minimum pollution removal distance of 100 feet 	Section 2.3 and Fig. 2.4	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
<p>C. If your jurisdiction does <u>not</u> delineate RMZs consistent with the methodologies listed in question B, do your FWHCAs meet the intent of the RMR in Vol. 2 (or are they otherwise consistent with the BAS in Vol. 1) with regards to riparian functions? If protection varies by stream type, please address how and why protections vary by each type in your response.</p>	Section 2.3 and Fig. 2.4	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
<p>D. Where a channel migration zone (CMZ) is present, does the RMZ begin on the outer edge of the CMZ to the extent practicable (meaning, include areas having the potential to provide riparian functions and exclude functionally disconnected areas)?</p>	Section 2.3.3(B)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
<p>E. Is the RMZ width extended beyond a 100-foot minimum where needed to provide adequate pollution removal functions from upland adjacent land uses (i.e., especially at sites with steep slopes or poorly drained soils or where upland uses contribute nitrogen based on expert assessment)?</p>	Section 2.3.5, step 3	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	

Riparian Management Recommendation (RMR)	Location in RMR Vol. 2	Citation in CAO	How Addressed in CAO (or why not addressed in CAO)
F. In locations where riverine wetlands are present, do the RMZs incorporate them using the appropriate wetland delineation, assessment methodology, and protection (per Ecology)?	Section 2.3.5, step 2 Section 3.2.2, #2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
G. Does FWHCA designation also support terrestrial species, habitat connectivity, and Priority Habitats within and adjacent to RMZs?	Section 3.2.2, #2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
H. Does your CAO apply the mitigation sequence to ensure no net loss of riparian ecological functions and values due to permitted activities within RMZs delineated consistent with question B (or equivalent methods)?	Section 3.2.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
I. Does your CAO require that applicants provide a Critical Areas Report prepared by a qualified professional for projects in or near known or suspected FWHCAs, and require that a Habitat Management Plan be provided if FWHCAs are found to be present and/or impacted by the project?	Section 3.2.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
J. Does your CAO require that On-Site Sewage Systems are located outside of RMZs?	Section 3.2.1, #1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
K. Does your CAO prohibit new development that requires bank protection/hardening now or in the future (taking into consideration channel migration, wind and wave action, and climate change)?	Section 3.2.1, #2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	

Riparian Management Recommendation (RMR)	Location in RMR Vol. 2	Citation in CAO	How Addressed in CAO (or why not addressed in CAO)
L. Could other regulations conflict with your CAO and inadvertently impact riparian functions (e.g., clearing, grading, and filling ordinances)? If so, does your code include a provision that the regulation which provides greater protection to critical areas shall apply?	Section 3.2.1, #3 CA Handbook , Ch. 4	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
M. Does the issuance of an exemption letter or permit for invasive and/or noxious plant removal require that impacts to fish, wildlife, and habitat are minimized (e.g., hand weeding with light equipment, use only Ecology-approved aquatic herbicides and adjuvants, avoid use of hazardous substances, and avoid soil compaction)?	Section 3.2.1, #4	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
N. Does your CAO include all of the following provisions? <ul style="list-style-type: none"> • define a “hazard tree” as a threat to life, property, or public safety, • require that the method of hazard tree removal not adversely affect riparian ecosystem functions to the extent practicable, • encourage the creation of snags (Priority Habitat features) rather than complete tree removal, • involve an avoidance and minimization of damage to remaining trees and vegetation within the RMZ, and • require a qualified arborist to evaluate requests for hazard tree removal 	Section 3.2.1, #7	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
O. Does your CAO incorporate a pathway to mitigate or compensate for impacts to RMZs arising from emergency activities (e.g., bank stabilization to address imminent threats to homes)?	Section 3.2.1, #9	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
P. Does your CAO require that impacts and disturbances from recreational trails and interpretive facilities are minimized to the extent practicable, informed by Priority Habitats and Species data and management recommendations?	Section 3.2.1, #10	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	

Riparian Management Recommendation (RMR)	Location in RMR Vol. 2	Citation in CAO	How Addressed in CAO (or why not addressed in CAO)
Q. Does your CAO include watershed-scale management considerations such as protecting and restoring watershed processes (e.g., channel movement, sediment transport); stormwater management; land management for stream temperatures; and protecting and restoring longitudinal, lateral, and vertical connectivity?	Section 3.4	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
R. Does the CAO include measures for bolstering climate resilience within critical areas (i.e., increase habitat connectivity, plan for a wider range of stream flows, and increase stream shading)?	Section 1.4, #6 Section 3.4.1, GMA Climate Guidance	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
S. Is there a stated goal or intent in your CAO to retain and restore CMZs and RMZs to the extent practicable to maximize riparian function over time?	Section 4.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
T. Does your CAO promote incentives and include a streamlined review process for riparian restoration or enhancement projects to help facilitate projects that go “above and beyond” minimum regulatory requirements?	Section 4.3	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	
U. Does your CAO establish a monitoring and adaptive management program designed to: <ul style="list-style-type: none"> • collect information on CAO effectiveness, • evaluate the potential for exemptions and variances to cumulatively affect riparian functions across your jurisdiction, and • improve permit implementation? 	Section 3.2, Chapter 5; CA Handbook , Ch. 7	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Citation:	