

# Riparian Management Zone Checklist for Critical Areas Ordinances - Addendum

A Technical Assistance Tool – August 2023



## Purpose

The Washington Department of Fish and Wildlife (WDFW) developed a [Riparian Management Zone Checklist](#) to help local planners translate Best Available Science-based recommendations into Critical Areas Ordinance (CAO) amendments. This addendum uses the same checklist format to provide citations to *specific sections* of existing CAOs as examples local planners may consider as part of the Fish and Wildlife Habitat Conservation Area (FWHCA) amendment process. In many cases, these examples are *not fully* consistent with WDFW’s [riparian management recommendations](#) (as articulated in the checklist questions), though they include language that reflects the general intent of the recommendations at a minimum. WDFW anticipates better-fitting CAO examples will become available over time. Questions? Contact [kara.whittaker@dfw.wa.gov](mailto:kara.whittaker@dfw.wa.gov).

<b>RIPARIAN MANAGEMENT RECOMMENDATION (RMR)</b>	<b>LOCATION IN RMR VOL. 2</b>	<b>CAO Citations<sup>1</sup>: see Sections in bold</b>
A. Does your CAO intend to protect all key riparian ecosystem functions (i.e., shade, root strength, nutrient input, wood input, and pollution control)?	Section 2.2.2	<ul style="list-style-type: none"> <li>Anacortes MC <a href="#">19.70.330</a> <b>A.1</b>: Specific standards for riparian management zones</li> <li>Gig Harbor MC <a href="#">18.08.030</a> <b>B</b> Definition of “Stream buffer zone”</li> <li>Yakima CC <a href="#">16C.06.05</a> <b>(1)</b>: Functional Properties</li> </ul>
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? <ul style="list-style-type: none"> <li>the <a href="#">Site-Potential Tree Height</a> (at age 200 years, SPTH<sub>200</sub>),</li> <li>the extent of native riparian vegetation, or</li> <li>the minimum pollution removal distance of 100 feet</li> </ul>	Section 2.3 and Fig. 2.4	<ul style="list-style-type: none"> <li>Anacortes MC <a href="#">19.70.330</a> <b>A.1</b>: Specific standards for riparian management zones</li> </ul>
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.	Section 2.3 and Fig. 2.4	<ul style="list-style-type: none"> <li>Thurston CC <a href="#">24.25.020</a>: <b>Table 24.25-1</b>. Standard freshwater riparian habitat area widths</li> <li>Walla Walla CC <a href="#">18.08.640</a> <b>G.1</b>: Performance standards—General requirements</li> </ul>

<sup>1</sup> MC: Municipal Code; CC: County Code

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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)?	Section 2.3.3(B)	<ul style="list-style-type: none"> <li>Anacortes MC <a href="#">19.70.330</a> <b>A.1</b>: Specific standards for riparian management zones</li> <li>King CC <a href="#">21A.24.358</a> <b>A.2</b>: Aquatic areas - buffers</li> <li>Thurston CC <a href="#">24.25.040</a> <b>B</b>: Riparian management zones</li> </ul>
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)?	Section 2.3.5, step 3	<ul style="list-style-type: none"> <li>Thurston CC <a href="#">24.25.030</a> <b>A-C</b>: Increased riparian habitat area width</li> <li>Pierce CC <a href="#">18E.40.060</a> <b>F</b>: Buffer Width Increases</li> <li>Walla Walla CC <a href="#">18.08.674</a> - Fish and wildlife habitat conservation areas—Water bodies—Buffer increase</li> </ul>
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	<ul style="list-style-type: none"> <li>Pierce CC <a href="#">18E.40.060</a> <b>B.1.d</b>: Buffer Requirements</li> <li>Chelan CC <a href="#">11.80.040</a> <b>(1)(B)(i)</b>: Wetland classification and rating</li> <li>Snohomish CC <a href="#">30.62A.230</a> <b>(2)</b>: Classification of streams, lakes, wetlands and marine waters</li> <li>Burlington MC <a href="#">14.15.380</a> <b>E</b>: Fish and wildlife habitat conservation area mitigation standards</li> </ul>
G. Does FWHCA designation also support terrestrial species, habitat connectivity, and Priority Habitats within and adjacent to RMZs?	Section 3.2.2, #2	<ul style="list-style-type: none"> <li>Anacortes MC <a href="#">19.70.315</a> <b>A.8 &amp; B.1.b</b>: Designation</li> <li>Burlington MC <a href="#">14.15.380</a> <b>A.5 &amp; B.1</b>: Fish and wildlife habitat conservation area mitigation standards</li> <li>Yakima CC <a href="#">16C.06.02</a> <b>(1), (3), (4)</b>: Protection Approach</li> </ul>
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	<ul style="list-style-type: none"> <li>Burlington MC <a href="#">14.15.150</a> <b>B &amp; C</b>: Critical area and buffer mitigation requirements – General provisions</li> <li>Anacortes MC <a href="#">19.70.125</a> <b>A &amp; B</b>: Mitigation requirements</li> <li>Lewis CC <a href="#">17.38.510</a> <b>(1)</b>: Fish and wildlife habitat mitigation plan</li> </ul>
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	<ul style="list-style-type: none"> <li>Anacortes MC <a href="#">19.70.115</a> (Critical area report) &amp; <a href="#">19.70.350</a> <b>A-C</b>: Critical area report additional requirements</li> <li>Pierce CC <a href="#">18E.40.030</a> <b>A &amp; B</b>: Fish and Wildlife Habitat Conservation Area Review Procedures</li> <li>Walla Walla CC <a href="#">18.08.095</a> - Critical area reports—General requirements &amp; <a href="#">18.08.630</a> - Critical area report—Additional requirements for habitat conservation areas</li> </ul>
J. Does your CAO require that On-Site Sewage Systems are located outside of RMZs?	Section 3.2.1, #1	<ul style="list-style-type: none"> <li>Marysville MC <a href="#">22E.010.180</a> <b>(6)</b> Regulated activities in habitats</li> </ul>

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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	<ul style="list-style-type: none"> <li>• Cowlitz CC <a href="#">19.15.130</a> <b>E.5.c.v</b>: Development Standards – Specific Habitats</li> <li>• Snohomish CC <a href="#">30.62A.330</a> <b>(2)(a-b)</b>: Standards and requirements for activities conducted within streams, lakes and marine waters.</li> <li>• Walla Walla CC <a href="#">18.08.620</a> <b>E-F</b>: Fish and wildlife habitat conservation areas—Water bodies—Allowed uses.</li> </ul>
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 <a href="#">CA Handbook</a> , Ch. 4	<ul style="list-style-type: none"> <li>• Burlington MC <a href="#">14.15.070</a> <b>E</b>: General requirements and authorizations required</li> <li>• Anacortes MC <a href="#">19.70.015</a> <b>B.2-3</b>: Applicability</li> <li>• Marysville MC <a href="#">22E.010.030</a> <b>(1-2)</b>: General relationship of regulation of one type of critical area protection to other regulations</li> </ul>
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	<ul style="list-style-type: none"> <li>• Olympia MC <a href="#">18.32.111</a> <b>G</b>: General Provisions – Exemptions</li> <li>• Cowlitz CC <a href="#">19.15.070</a> <b>G.1</b>: Exemptions</li> <li>• Anacortes MC <a href="#">19.70.040</a> <b>F: Table 19.70.040(A)</b> Exempt Activities, Vegetation Management (1-3)</li> </ul>
N. Does your CAO include all of the following provisions? <ul style="list-style-type: none"> <li>• define a “hazard tree” as a threat to life, property, or public safety,</li> <li>• require that the method of hazard tree removal not adversely affect riparian ecosystem functions to the extent practicable,</li> <li>• encourage the creation of snags (Priority Habitat features) rather than complete tree removal,</li> <li>• involve an avoidance and minimization of damage to remaining trees and vegetation within the RMZ, and</li> <li>• require a qualified arborist to evaluate requests for hazard tree removal</li> </ul>	Section 3.2.1, #7	<ul style="list-style-type: none"> <li>• Bellevue MC <a href="#">20.255H.055</a> <b>C.3.i.ii</b>: Uses and development allowed within critical areas – Performance standards</li> <li>• Thurston CC <a href="#">24.25.390</a> - Vegetation removal—Hazard trees</li> <li>• Bellingham MC <a href="#">16.55.080</a> <b>6.b-d</b>: Minor critical area permits.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Kittitas CC <a href="#">17A.01.050</a> <b>3.a</b>: Exemptions</li> <li>• Bellevue MC <a href="#">20.25H.055</a> <b>C.3.b</b>: Uses and development allowed within critical areas – Performance standards</li> <li>• Jefferson MC <a href="#">18.22.230</a> <b>(4)(i)</b>: General exemptions</li> </ul>

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<p>P. Does your CAO require that impacts and disturbances from recreational trails and interpretive facilities are minimized to the extent practicable, informed by <a href="#">Priority Habitats and Species</a> data and management recommendations?</p>	<p>Section 3.2.1, #10</p>	<ul style="list-style-type: none"> <li>• Cowlitz CC <a href="#">19.15.130</a> <b>E.5.g</b>: Fish and wildlife habitat conservation areas</li> <li>• Kitsap CC <a href="#">19.300.315</a> <b>I</b>: Development standards</li> <li>• Gig Harbor MC <a href="#">18.08.184</a> <b>B.6.b</b>: Streams – Performance standards – General</li> </ul>
<p>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?</p>	<p>Section 3.4</p>	<ul style="list-style-type: none"> <li>• Pierce CC <a href="#">19D.230</a> Other Water Quality Plans</li> <li>• Walla Walla CC <a href="#">18.08.085</a> <b>P</b>: Allowed activities</li> <li>• Jefferson CC <a href="#">18.22.900</a> <b>(1)(d)</b>: Purpose</li> <li>• Bellingham MC <a href="#">16.55.010</a> <b>F</b>: Purpose</li> </ul>
<p>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)?</p>	<p>Section 1.4, #6 Section 3.4.1, <a href="#">GMA Climate Guidance</a></p>	<ul style="list-style-type: none"> <li>• Tumwater MC <a href="#">16.32.065</a> <b>B.1</b>: Riparian habitat areas - Buffers</li> <li>• Issaquah MC <a href="#">18.802.310</a> <b>A.6 &amp; B.1.b</b>: Development standards for FWHCAs</li> <li>• Anacortes MC <a href="#">19.70.615</a> <b>C</b>: Designation</li> <li>• Kittitas CC <a href="#">17A.05.010</a> Purpose and Intent</li> </ul>
<p>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?</p>	<p>Section 4.2</p>	<ul style="list-style-type: none"> <li>• Burlington MC <a href="#">14.15.020</a> <b>B.2</b> Application</li> <li>• Kittitas CC <a href="#">17A.06.050</a> <b>(4)</b>: Erosion Hazard Area Standards</li> <li>• Anacortes MC <a href="#">19.70.010</a> <b>B.2</b> Purpose</li> <li>• Marysville MC <a href="#">22E.010.220</a> <b>(2)</b> Fish and wildlife habitat buffer areas</li> </ul>
<p>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?</p>	<p>Section 4.3</p>	<ul style="list-style-type: none"> <li>• Clallam CC <a href="#">27.12.315</a> <b>(4)</b>: Protection standards for aquatic habitat conservation areas</li> <li>• Burlington MC <a href="#">14.15.431</a> <b>B.3</b>: Habitat impacts and mitigation</li> <li>• Kittitas CC <a href="#">17A.01.050</a> <b>3.f</b>: Exemptions</li> </ul>
<p>U. Does your CAO establish a monitoring and adaptive management program designed to:</p> <ul style="list-style-type: none"> <li>• collect information on CAO effectiveness,</li> <li>• evaluate the potential for exemptions and variances to cumulatively affect riparian functions across your jurisdiction, and</li> <li>• improve permit implementation?</li> </ul>	<p>Section 3.2, Chapter 5; <a href="#">CA Handbook</a>, Ch. 7</p>	<ul style="list-style-type: none"> <li>• Snohomish CC <a href="#">30.62A.720</a> Monitoring and adaptive management program – contents</li> <li>• Jefferson CC <a href="#">18.22.280</a> Adaptive management</li> <li>• Burlington MC <a href="#">14.15.150</a> <b>F</b>: Critical area and buffer mitigation requirements – General provisions</li> </ul>