



State of Washington

Department of Fish and Wildlife, Region 4

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August 23, 2024

City of Ferndale
Michael Cerbone, Community Development Director
P.O. Box 936
Ferndale, WA 98248
MichaelCerbone@cityofferndale.org

RE: Submittal 2024-S-7172, WDFW's comments regarding Ferndale's draft Critical Areas Ordinance update

Dear Mr. Cerbone,

On behalf of the Washington Department of Fish and Wildlife (WDFW), thank you for the opportunity to comment on the proposed draft Critical Area Ordinance (CAO) as part of the current periodic update. Within the State of Washington's land use decision-making framework, WDFW is considered a technical advisor for the habitat needs of fish and wildlife and routinely provide input into the implications of land use decisions. We provide these comments and recommendations in keeping with our legislative mandate to preserve, protect, and perpetuate fish and wildlife and their habitats for the benefit of future generations – a mission we can only accomplish in partnership with local jurisdictions.

Table 1. Recommended changes to proposed CAO language.

Policy Number	Policy Language (with WDFW suggestions in red)	WDFW Comment
16.08.010 (B). Purpose and Intent	General comment.	As outlined in our Riparian Management Zone Checklist for Critical Areas Ordinances , we suggest including within this section the intent to protect all key riparian ecosystem functions (i.e., shade, root strength, nutrient input, wood input, and pollution control).
16.08.090(A) Exemption from critical area review requirements.	2. Ongoing agriculture activities, including related development and activities that do not result in expansion into a critical area or its standard buffer or would result in	Critical areas located within agricultural areas are still held to no net loss standards. It is unclear how these standards are being met within this section. Per WAC 365-196-830 :

	a net loss of ecological values and functions within critical areas.	“(c) Local governments shall not broadly exempt agricultural activities from their critical areas regulations.”
16.08.090(A) Exemption from critical area review requirements.	11. Fish, wildlife, wetland and/or riparian enhancement activities not required as mitigation; provided, that the project is approved by the U.S. Department of Fish and Wildlife (USFWS), the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), the U.S. Army Corps of Engineers (USCOE), the Washington State Department of Fish and Wildlife (WDFW), the Washington State Department of Ecology (Ecology), or any other state or federal regulatory agency.	We appreciate the exemption of riparian enhancement activities within this section. We recommend pursuing other pathways within regulatory framework to further streamline the review process related to this work.
16.08.090 (A) Exemption from critical area review requirements. Suggested Additions	12. Invasive and/or noxious plant removal using hand tools and Ecology-approved aquatic herbicides and adjuvants. Avoid the use of hazardous substances and soil compaction.	We suggest the removal of invasive and/or noxious weeds be exempt from critical area review under the adjacent parameters.
16.08.090 (C) Exemption from critical area review requirements.	Exemption from critical area review requirements. The Critical Areas Administrator has the authority to determine whether any development activity is exempt from the provisions outlined below. (C) C. Exempt activities shall use reasonable methods or accepted best management practices to reduce potential impacts to critical areas and/or to restore impacted critical areas to the extent feasible following completion of exempt activities as determined by the Critical Areas Administrator. Exemption does not give permission to destroy a critical area or buffer or to ignore risk from a natural hazard. If impacts	We suggest critical area review be required whenever there are probable negative impacts that may result in a loss of critical area ecological values and functions (WAC 365-196-830). Critical area review outlines the sufficient mitigation needed in order to achieve no net loss. Without critical area review for projects that may cause impacts to critical areas, no clear regulatory pathway is given for ensuring no net loss standards are achieved. We caution allowing for exempt activities that impact critical areas when there is no clear path to properly mitigate losses.

	occur, mitigation shall achieve no net loss of ecological values and functions.	
16.08.110 (B).1.f Reasonable use	f. The proposed activities comply with all state, local and federal laws, including those related to no net loss , erosion and sediment control, pollution control, floodplain restrictions, and on-site wastewater disposal.	No net loss standards must be followed per state law (WAC 365-196-830).
16.08.110 (B).1.j Reasonable use	j. For single-family residences, the maximum impact area shall be no larger than 3,500 square feet. This impact area shall include the residential structure as well as appurtenant development that are necessarily connected to the use and enjoyment of a single-family residence. The appurtenant developments include garages, decks, driveways, parking, utilities, and all landscaping, with the following exceptions:	<p>We suggest further stipulations for other types of development, such as subdivisions, commercial properties, etc. If this cannot be done, we suggest Ferndale define reasonable use as a tool for single-family residence projects to use. See definition change suggestion below:</p> <p>"Reasonable use" means any one of the uses allowed within a given zone that single-family residential use may occur within a properly zoned area, given the home has the least impact on the critical areas found on the subject property. For zones that allow single family residential uses, this typically would mean a house that has a development footprint and landscaping of 3,500 square feet or less.</p> <p>If reasonable use is allowed in all zoning designations for all appropriately zoned projects, outlining limits, similar to the ones listed for single-family residences, is suggested.</p>
16.08.130 (C).5 Variances.	5. The granting of the variance is consistent with the general purpose and intent of this chapter and will not create significant adverse impacts a net loss of ecological values or functions to the identified critical areas or otherwise be detrimental to public safety or welfare;	<p>No net loss standards must be upheld in all critical area impact scenarios (WAC 365-196-830).</p> <p>Alternatively, this section could be deleted and covered by (B).7 within this section of code:</p> <p>"7. The granting of the variance is consistent with the general purpose and intent of this chapter and will not degrade the functions and values of the critical area and its buffer or otherwise be detrimental to public safety or welfare; and..."</p>

16.08.200 (A) Critical areas determination	A. The Critical Areas Administrator shall review critical areas maps and visit the site to determine if the site includes or is adjacent to a known or potential critical area, or if the project could have significant adverse impacts on a critical area.	We greatly appreciate the inclusion of site visits within this section of code. Desktop review should only be used to gather generalized information and should not be used to make conclusions that may impact critical areas. Ground truthing site-specific information, although time consuming, is vital for ensuring the protection of our natural resources.
16.08.330 (A) Mitigation banking.	A. The City may approve mitigation banking as a form of compensatory mitigation for wetland and habitat conservation area impacts when the provisions of this chapter require mitigation and when it is clearly demonstrated that the use of a bank will provide equivalent or greater replacement of critical area functions and values when compared to on-site mitigation; provided, that all of the following criteria are met:	We suggest this provision be construed narrowly, as on-site mitigation of critical areas often provide greater ecological value and function than off-site mitigation. Consideration for on-site mitigation should always be paramount.
16.08.340 (A) Use of bank credits.	A. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when: 1. The bank is certified under state rules; 2. The Critical Areas Administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and	See comment above.
16.08.360 Watershed-based management plans	The City may consider watershed-based management plans...	We appreciate the mention of watershed plans and strongly suggest that the city use the information found within these plans to inform land use decisions. Watershed-scale process restoration (i.e. channel movement, sediment transport, stormwater management, land management for stream temperatures, and protecting and restoring longitudinal, lateral, and vertical connectivity) can not be achieved without coordination across jurisdictional boundaries, which is highlighted within these plans.

16.08.350 (A) In-lieu fee mitigation.	A. In-Lieu Fee Mitigation. Credits from an approved in-lieu-fee program may be used when all of the following apply: 1. The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts; 2. The proposed use of credits is consistent with the terms and conditions of the approved in-lieu fee program instrument;	See comment in relation to 16.08.330 (A) Mitigation banking above.
16.08.380 (A) Fish and wildlife habitat conservation areas classification.	A. Fish habitat conservation areas shall be classified as types S, F, Np, and Ns waters or as per the most recent edition of the water typing system: WAC 222-16-030.	<p>We suggest incorporating WDFW's Best Available Science (BAS), Riparian Ecosystems, Vol. 1, in this section by replacing stream buffer widths with Riparian Management Zones (RMZs) measured by the Site Potential Tree Height at 200 years (SPTH₂₀₀). RMZs should be considered a type of critical area under the Fish and Wildlife Habitat Conservation Areas (FWHCA) section of code. See Riparian Ecosystems, Vol. 2 for management recommendations. Vol. 2 also provides specific resources on how to determine RMZ widths, specifying that RMZs should be at least 100 feet wide to effectively remove pollution.</p> <p>In reviewing the current scientific literature (Vol. 1), we found no evidence that full riparian ecosystem functions along non-fish-bearing streams are less important to aquatic ecosystems than full riparian ecosystem functions along fish-bearing streams. This recommendation is based on four additional considerations. Non-fish-bearing streams:</p> <ul style="list-style-type: none"> • Support a unique community of aquatic and riparian obligate wildlife; • Provide movement corridors for wildlife, particularly in the face of changing climate conditions; • Provision fish-bearing streams with matter and energy; and • Provide cool water to downstream reaches.

16.08.380 (B).3 Fish and wildlife habitat conservation areas classification.	<p>B. Wildlife Habitat Conservation Areas. Wildlife habitat shall include those areas that meet any of the following criteria:</p> <p>3. Stream corridors and riparian management zones (RMZs) designated on the City critical areas map, including:; a. Shoreline streams as defined by WAC 173-18-410; b. Fish-bearing streams have current, historic, or potential use by resident or anadromous fish; c. Non-fish-bearing streams have no current, historic or potential use by anadromous or resident fish; and d. Drainage ditches are not streams and are defined as watercourses that are purely artificial, and do not have a headwater area.;</p>	<p>We suggest this section incorporate RMZ language. Please see above comment, as well as RMZ mapping resources:</p> <ul style="list-style-type: none"> • RMZ web app map • RMZ downloads for jurisdiction mapping purposes <p>We also recommend using WDFW's RMZ checklist as a tool to supplement Ferndale's current CAO with these suggestions. The checklist addendum provides code language used by other local jurisdictions.</p> <p>See also Anacortes municipal code, section 19.70.330 Specific standards for riparian management zones.</p>
16.08.380 (B).4 Fish and wildlife habitat conservation areas classification.	<p>4. The approximate location and extent of habitat conservation areas are shown on the following map adopted by the City, as revised: Washington Department of Fish and Wildlife Priority Habitat and Species maps;</p>	<p>We greatly appreciate the inclusion of WDFW's PHS mapping information in this section.</p>
16.08.380 (B).6 Fish and wildlife habitat conservation areas classification.	<p>6. Areas in which state listed priority species are found, have a primary association with, or contain suitable habitat for said listed species, as listed on the Washington Department of Fish and Wildlife's Priority Habitats and Species list;</p>	<p>We greatly appreciate the inclusion of WDFW's PHS list in this section.</p>
16.08.400 (A).1 table 4 Fish and wildlife habitat conservation areas buffers.	Table 4	<p>This table does not represent BAS as noted above. Using stagnant stream buffer widths without considering site specific characteristics results in a net loss of ecological values and functions. At minimum, all streams should have an RMZ of 100 feet in order for pollution removal. Type Ns water within this table is listed as having a 25-foot buffer. Other buffers listed in this table may result in degraded riparian areas, as all ecosystem functions and values are not being accounted for (i.e. shade,</p>

		root strength, nutrient input, wood input and pollution control).
16.08.400 (A).4 Fish and wildlife habitat conservation areas buffers.	4. Stream Designations. The designations, e.g., stream typings, are indicated on the critical areas map. Field verification of the typing and buffers shall be confirmed and determined by a qualified consultant.	As mentioned in comments associated with 16.08.380 (B).3 above, we suggest that RMZs are incorporated into critical area maps (See RMZ downloads for jurisdiction mapping purposes).
16.08.400 (C) Fish and wildlife habitat conservation areas buffers.	C. A deed restriction shall be placed on the remaining on-site wildlife corridors, buffer, and mitigation area that protect the critical area from future development. (Ord. 1987 § 1 (Exh. 1), 2017; Ord. 1398 § 2, 2006. Formerly 16.08.310)	We appreciate the inclusion of protecting wildlife corridors and buffer areas into perpetuity. We suggest Ferndale compile this data and incorporate it within critical area maps. We also suggest considering open spaces as key components of wildlife corridors. We propose that, along with requiring open space set-asides, site plans should demonstrate active efforts to connect these open spaces with others in the surrounding area. This open space connected network could serve pedestrian opportunities and wildlife habitat connectivity simultaneously. Additionally, open spaces are climate-resilient assets that can serve as community gathering spaces. All development should strive for open space retention, creation, and <i>connection</i> for the benefit of people and the environment. Connecting wildlife habitat is also important to reduce safety concerns as it relates to wildlife collisions and conflict. See Whatcom's project for information on habitat connectivity within your region – link .
16.08.510 Flood hazard areas designation.	The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "Flood Insurance Study, Whatcom County, Washington (All Jurisdictions)," dated May 30, 2003, with an accompanying flood insurance rate map, dated May 30, 2003, and any revisions thereto are adopted by reference and declared to be a part of this chapter as of January 16, 2004. The flood insurance study and flood insurance rate map are on file at City Hall, 2095 Main Street,	FEMA's Flood Insurance Rate Map (FIRM) modeling does not take climate change projections into consideration. We suggest Ferndale supplement FIRM maps with regulations that take best available science (including climate change projections) into consideration. For example, King County regulations place ' Flood Protection Elevations ' three feet above base flood elevation for development within flood-prone areas. For assessing future conditions, see Climate Mapping for a Resilient Washington , as well as FEMA's Resilience Analysis and Planning Tool (RAPT) for resources in visualizing these hazard areas.

	Ferndale, WA 98248. (Ord. 1987 § 1 (Exh. 1), 2017; Ord. 1398 § 2, 2006. Formerly 16.08.400)	Regulations that account for future flooding projections also lower flood insurance premiums, resulting in cost saving for citizens. See FEMA's National Flood Insurance Program Community Rating System Coordinator's Manual for resources.
16.08.530 Definitions.	"Riparian area" means the portion of habitat extending from the ordinary high water mark (OHWM) of a stream to that part of the upland influenced by elevated water tables or flooding. It includes the area that directly influences the aquatic ecosystem, provided riparian areas associated with an existing system of dikes and levees shall not extend beyond the toe of the slope on the landward side of the dike or levee structure.	<p>We suggest replacing the "Riparian Area" definition with:</p> <p>"Riparian management zone" (RMZ) means the area that has the potential to provide full riparian functions. In many forested regions of the state, this area occurs within one 200-year site-potential tree height measured from the edge of the stream channel. In situations where a CMZ is present, this occurs within one site potential tree height measured from the edges of the CMZ. In non-forest zones the RMZ is defined by the greater of the outermost point of the riparian vegetative community or the pollution removal function, at 100-feet.</p> <p>We also recommend defining the channel migration zone:</p> <p>"Channel migration zone" (CMZ) means the area within which a river channel is likely to migrate and occupy over a specified time period (e.g., 100 years).</p>
16.08.530 Definitions. Suggested Addition	"Hazard tree" is defined 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.	This suggestion comes from section N. of WDFW's Riparian Management Zone Checklist for Critical Areas Ordinances .

Appendix A (B).4	4. How the proposed mitigation will maintain or compensate for the lost functions and values of the critical area or reduce potential risks posed by the critical area, following the proper mitigation sequence outlined in 16.08.230;	It is necessary for mitigation to follow the mitigation sequence, outlined in FMC 16.08.230 and WAC 197-11-768 .
Appendix A (B).10	10. Mitigation for biological work shall adhere to the mitigation sequence (16.08.230) . If this sequence is used and compensatory mitigation is required, such mitigation shall occur, in order of preference: (a) on-site and in-kind, (b) onsite and out-of-kind, (c) off-site, (d) out-of-kind.	Please refer to the comment above. The mitigation sequence must be used when impacts to critical areas are proposed.

Thank you for considering our recommendations to better reflect the best available science for fish and wildlife habitat and ecosystems. We value the relationship we have with your jurisdiction and the opportunity to work collaboratively with you throughout this periodic update cycle. If you have any questions or need our technical assistance or resources at any time during this process, please don't hesitate to contact me or our Regional Land Use Lead, Morgan Krueger (morgan.krueger@dfw.wa.gov).

Sincerely,



Timothy Stapleton
Washington Department of Fish and Wildlife
Region 4 – Habitat Program Manager

CC:

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