

To: Cannon Beach Planning Commission
Attn. Community Development
PO Box 368
Cannon Beach, OR 97110
via email at planning@ci.cannon-beach.or.us

Copy: Keith Liden, Contract City Planner
Bob Lundy, Interested Party
Bradley Coffey, Spouse

Date: February 19, 2024

From: C. Mirth Walker

Re: Public hearing on Thursday, February 22, 2024, at 6:00 p.m. regarding
ZO#23-02, City of Cannon Beach request for Zoning Ordinance text amendments to
Chapter 17.43 Wetlands Overlay Zone

Dear Planning Commissioners, Planning Department, and Interested Parties:

Thank you for the opportunity to provide public comment on this subject. I have compiled my review of the Draft Wetlands Overlay Zone Amendments and have attached it to the email message, along with a copy of this letter.

My responses and suggestions are weighted on several factors:

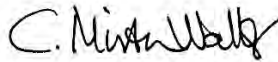
- I am a semi-retired Professional Wetland Scientist (#415) from SWCA Environmental Consultants, who purchased Fishman Environmental Services in 2006. I started my employment with Fishman in 1994, just after the Local Wetlands Inventory was completed for the City of Cannon Beach. I have over 34 years of experience conducting wetland determinations and delineations; wetland-related permitting at the local, state, and federal levels; preparing wetland and other waters (streams, ponds, etc.) mitigation plans consisting of restoration, enhancement, creation, and preservation; preparing natural resource site assessments, assessing the *good*, *marginal*, and *degraded* buffers associated with wetlands and streams, and preparing enhancement and mitigation plans for unavoidable buffer encroachments for Clean Water Services in Washington County, Oregon. I have also assessed both wetlands and other waters with all of the available functions and values assessment methods in Oregon and Washington.
- I am a long-term visitor to Cannon Beach and in 2013, I purchased from my mother's estate the cabin property in the north end that she had owned since 1969. The property to the north has a tributary to Logan Creek and adjacent wetlands present. These wetlands were delineated in 2007 for the Langs Landing Subdivision that was never built. The mapping of the stream-wetland complex to the north of our site is not mapped correctly on the City's digital LWI mapping, but that is an issue for another day and is not the primary reason for me submitting comments.
- I have worked with many municipal codes, and have greatly enjoyed working with Keith Liden in the City of King City and in other jurisdictions. I want this wetland buffer code to be the best that it can be, and have happily spent my time looking this over.

Please excuse my attention to detail, I provided quality control review of many wetland reports prepared by other staff over the years in my former position of Senior Wetland Scientist. I apologize for the delay in my response to the original draft code dated October 19, 2023. I had just completed my review of that code over this past weekend of Valentine's Day and spousal birthday, when I checked the published packet to find the updated version dated February 14, 2023, so I have updated that version for your review.

I hope to be able to attend the hearing on Thursday evening via Zoom, but will have to contend with hotel WiFi in Astoria for this coming Fisher Poets weekend. Please accept this written testimony for that hearing. I understand that there may not be sufficient time to review my comments prior to the hearing.

I look forward to working with you on this very important matter. I am very glad that the City is proposing to increase the wetland buffer to 50 feet. That is truly the minimum needed to protect our wetlands.

Sincerely,



C. Mirth Walker, PWS #415, Emerita
cmirth@gmail.com
503-860-1708

611 Beech Street
Cannon Beach, OR 97110

Primary Residence (mailing address):
4910 SW Richardson Drive
Portland, OR 97239

CHAPTER 17.43 WETLANDS OVERLAY (WO) ZONE
Amendments from October 10.19.23 Version – Including Responses to DLCD
Comments

DRAFT 2.14.24

C. Mirth Walker 2.19.24 suggestions to improve code clarity and consistency. Includes some technical editing changes provided by Bob Lundy 11.16.23.

17.43.010 Purpose

The purpose of the wetlands overlay zone is to protect wetland areas identified in the cityCity's Local Wetlands Inventory from uses and activities that are inconsistent with the maintenance of the wetland functions and values identified for those sites, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and flood waters to reduce flooding and erosion; carbon sequestration; thermal refugia, and improving water quality through biofiltration, adsorption, retention, and transformation of sediments, nutrients, and toxicants. Wetland areas also serve significant community wellness purposes such as mental and emotional well-being and sense of community in nature. (Ord. 94-29 § 2). In addition to wetland protections covered by this chapter, the cityCity also protects stream corridors (Chapter 17.71) and estuarine resources per the Ecola Creek Estuary Plan.

In addition to protecting the wetland values described above, this chapter seeks to provide for reasonable development and use of properties that are within the Wetlands Overlay Zone.

17.43.015 Definitions

"Best management practices" means structural or non-structural measures, practices, techniques, or devices employed to avoid or minimize soil, sediment or pollutants being carried in runoff to protected wetlands.

"Building coverage" means the portion of the lot area that is covered by buildings. The area of the buildings shall be measured at their exterior perimeter. Buildings include dwellings, accessory structures, garages, and carports.

"Buffer redistributionaveraging" means reducing the standard buffer width (i.e., 50 feet) around a wetland in some locations and increasing it in other locations such that the total area within the buffer around a given delineated wetland after averaging remains at least equal to what was required by the standard buffer around that wetland.

"Contiguous lots" means lots that have a common boundary and common ownership including lots separated by public streets.

"Erosion" means the process by which the land's surface is worn away by the action of wind, water, ice, or gravity.

"Lot coverage" as currently defined in 17.040.335.

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Commented [CW1]: This is the more common term used.

Commented [CW2]: You could move this to inside the definition of Wetland Lot-of-Record.

Exhibit A-7

"Low Impact Development Approaches" (LIDA) mitigate the impacts of increased runoff and stormwater pollution using a set of planning, design, construction techniques and stormwater management approaches that promote the use of natural systems for infiltration, evapotranspiration and reuse of rainwater. LIDA can ~~occur~~be applied at a wide range of landscape scales (i.e., regional, neighborhood and site) and include, but are not limited to, green roofs, porous pavement, and vegetated stormwater management ~~approaches~~facilities.

"Permeable" means surfaces that allow water to pass through whereas "impermeable" means blocking the flow of water through the surface.

"Point source stormwater discharge" means water from precipitation, surface or subterranean water from any source, drainage and nonseptic wastewater that flows from any discernible, confined, discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, or vessel.

A "qualified wetland professional" is a person with experience and training in wetlands issues and with experience in performing delineations, analyzing wetland functions and values, analyzing wetland impacts, and recommending wetland mitigation and restoration. Qualifications include:

A Professional Wetland Scientist certification from the Society of Wetland Scientists Professional Certification Program; or

B.S. or B.A., or equivalent degree in biology, botany, environmental studies, fisheries, soil science, wildlife, agriculture or related field; two years of related work experience; and minimum of one-year experience delineating wetlands using the 1987 U.S. Army Corps of Engineers (Corps) Wetlands Delineation Manual, the Western Mountain, Valleys and Coast Regional Supplement and supporting guidance; and preparing wetland reports, permits, and mitigation plans; or

Four years of related work experience and training; minimum of two years' experience delineating wetlands using the 1987 Corps Manual, the Western Mountain, Valleys and Coast Regional Supplement and supporting guidance; and preparing wetland reports, permits, and mitigation plans.

"Runoff" means storm water or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

"Sediment" means settleable solid material that is transported by runoff, suspended within runoff, or deposited by runoff away from its ~~original~~previous location.

"Site" means the entire area included in the legal description of the land on which the land-~~disturbing~~ construction activity is proposed in the permit application.

"Upland" as used in this title is the portion of a wetland lot-of-record that is neither protected wetland ~~or~~nor wetland buffer area.

"Utilities, underground or above ground" refers to City-~~provided~~ utilities as defined in Chapter 13.03.010 as well as private utilities such as but not limited to natural gas, electric, cable, and telecommunications infrastructure. Such utilities may occur below ground surface, at ground surface, or supported above ground surface.

Commented [CW3]: This is a separate organization from SWS.

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"Vegetation" as used in this title shall include all living plant matter (e.g., all native and non-native vines, herbaceous, shrub, and tree species of any size or amount).

~~(Ord. 94-29 § 1)~~

"Wetland buffer area" means a 50-foot-wide non-wetland area surrounding the delineated boundary of a ~~protected~~ wetlands within the Wetlands Overlay (WO) zone. (Ord. 94-29 § 1)

"Wetland buffer, degraded or marginal condition" means those definitions in the current Clean Water Services Design and Construction Standards Chapter 3
(<https://cleanwaterservices.org/development/dnc/view-the-standards/>).

"Wetland creation" means to convert an ~~upland~~ ~~or a~~ wetland buffer that has never been a wetland to a wetland. ~~The assumption that a creation site has never been a wetland is based on soils mapping, the interpretation of historical aerial photographs, and any other available information.~~

"Wetland, degraded" as defined by the Oregon Department of State Lands means a wetlands with diminished functions and values. Degradation must include hydrologic manipulation (such as diking, draining, or filling) that demonstrably interferes with the normal functioning of wetland processes.

"Wetland delineation" means a determination of the presence of wetlands and other waters that includes marking boundaries on the ground and on a detailed map prepared by professional land survey or similar accurate methods. The delineation is to be undertaken in accordance with a method acceptable to the US Army Corps of Engineers and the Oregon Department of State Lands. (Ord. 9429 § 1)

"Wetland delineation map" means a map included in a wetland delineation report or provided with a Jurisdictional Determination by the ~~Oregon~~ Department of State Lands that shows the tax lot(s) and study area(s) investigated and the location, size, and boundaries of all wetlands and other waters.

"Wetland determination" means a decision that a site may, does, is unlikely to, or does not contain waters of the state of Oregon. A determination does not include the exact location or boundaries of waters of the state of Oregon.

"Wetland enhancement" means to improve the condition and increase the functions and values of an existing degraded wetland.

"Wetland functions and values" means those ecological characteristics or processes associated with wetlands, and the societal benefits derived from those characteristics. The ecological characteristics are "functions," whereas the associated societal benefits are "values." The Oregon Department of State Lands has approved methods to measure these functions and values in Oregon Administrative Rule 141-085.

"Wetland lot-of-record" is a lot or contiguous lots held in common ownership on August 4, 1993, which are subject to the provisions of this chapter. A wetland lot-of-record includes upland portions of the contiguous property that are not subject to the provisions of the ~~wetlands-Wetlands overlay-Overlay~~ zone.

"Wetland mitigation, compensatory" means the creation, restoration, or enhancement of a wetland

Commented [CW4]: Assuming this was a typo.

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Commented [CW5]: I note that "protected" has been removed from several definitions etc. I have highlighted each case where I re-inserted.

I question this redaction strongly because the WO Zone should only apply to Protected Wetlands and not every wetland. Each newly discovered wetland must be determined to be a Locally Significant Wetland (LSW) under DSL guidelines (in the Local Wetlands Inventory code) prior to applying protections and buffers. The current method specified in the DSL OARs is the Oregon Freshwater Wetland Assessment Method (OFWAM), which obviously is not used in tidal wetlands or estuaries.

Or, the more expensive and less straight-forward alternative is to conduct an ESEE analysis on whether conflicting uses in the new wetland should be partially allowed, etc.

Other wetlands that are not LSWs are still regulated by DSL and sometimes by the USACE.

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Commented [CW6]: I reinserted "upland" to allow grading outside of a wetland buffer (in upland) to create wetland (as long as there is a reliable source of hydrology, such as a connected freshwater floodplain).

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Commented [CW7]: This method is the Oregon Rapid Wetland Assessment Method (ORWAP) used in removal-fill permits to assess function and values on all wetlands (including tidal) and the proposed mitigation site(s) to show a net lift. It cannot be used to determine Locally Significant Wetlands.

Exhibit A-7

area to maintain the functional characteristics and processes of the wetland system, such as its natural biological productivity, habitats, aesthetic qualities, species diversity, open space, unique features and water quality.

“Wetlands Overlay Zone” includes protected wetlands and wetland buffer areas that are subject to the provisions of this chapter.

“Wetland, protected” is an area in the ~~wetlands~~ Wetlands overlay Overlay zone that has been identified on the Cannon Beach Local Wetlands Inventory (LWI) or on a subsequent wetland delineation as wetlands. They are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Note that federal and state protections also exist, and the applicant is also responsible for addressing such regulations. Should discrepancies exist between federal and state wetland delineation jurisdiction, ~~city~~ City protected wetlands shall match state regulated wetland boundaries.

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Commented [CW8]: DSL prefers that all LWIs are referred to as plural wetlands, even though this might not match the City’s LWI title from 1993-1994.

Commented [CW9]: As above, does this mean any new wetland discovered in the City automatically becomes a Locally Significant Wetland (LSW) without any evaluation of size, water source, function, or value? It seems to me that any new wetland would have to be assessed using the Oregon Freshwater Wetland Assessment Method (OFWAM) to be determined to be protected as a LSW, consistent with current DSL regulations.

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"Wetland restoration" means to reestablish a former wetland.

17.43.020 Mapping

- A. The maps identifying the Wetlands Overlay (WO) zone boundaries shall be maintained and updated as necessary by the ~~city~~City. The Cannon Beach Local Wetlands Inventory (LWI) maps dated September 20, 1994, as well as subsequent updates to the LWI, shall form the basis for the location of wetlands. The original 1994 LWI is based upon wetland determinations, and subsequent updates will generally be wetland delineations. The WO zone includes both wetland and wetland buffer areas.
- B. Site-specific wetland delineations are required to determine the exact location of the WO zone boundary prior to development proposed within a wetland or wetland buffer identified in the Cannon Beach LWI. For properties that only include wetland buffer areas, the applicant may choose to rely upon the buffer area shown in the Cannon Beach LWI maps, ~~or provide a wetland delineation or determination to establish the wetland buffer boundary~~ if permission to access the off-site wetland boundary is received from the off-site property owner. If permission to access is denied or not attainable, then the applicant may conduct a wetland determination to estimate and map the location of the off-site wetland boundaries and on-site wetland buffers. These wetland determinations are to be based on review of off-site vegetation conditions, topography, soil mapping, aerial photographs, and any other available information without physically accessing the off-site property.
- C. When a report or opinion from a qualified wetland professional is submitted by an applicant, the approval authority may seek an independent expert opinion when reviewing the report or opinion, or rely on the Department of State Lands approval of a wetland determination or delineation report. A qualified wetland professional retained or hired by the ~~city~~City under this subsection is expected to render independent expert opinion, consistent with the Society of Wetland Scientists Code of Ethics.
- D. Where a wetland delineation ~~report~~ is approved by DSL, it shall be accepted by the City, and the mapping it contains shall replace that of the Cannon Beach LWI. A map refinement based on a delineation shall remain valid for the purpose of locating the WO ~~zone~~ boundary unless a subsequent delineation of the wetland boundary is approved by DSL. Any wetland delineation submitted to the City shall be accompanied by an electronic shapefile.
- E. Wetlands that are legally filled under this chapter are no longer wetlands but shall change to wetland buffer areas under this ~~overlay zone~~. Wetland buffer areas that are legally ~~filled-impacted~~ under this chapter ~~remain as are no longer~~ wetland buffer areas. (Ord. 08-1 § 40; Ord. 94-29 § 2). When the wetland boundary from a delineation or determination is updated as described in this section, the corresponding wetland buffer shall be determined based upon the updated wetland boundary.

17.43.030 Applicability

The regulations of this chapter apply to the portions of all properties that contain wetlands or wetland buffer areas as shown on the ~~city~~City LWI maps or as described in a wetland delineation or determination as ~~described provided~~ in Section 17.43.020.

Commented [CW10]: This states the obvious that under this zone, no one can fill the entire wetland and make its buffer go away. But what if an isolated wetland on a site is less than the allowed 1,400 SF of wetland impact? Then the buffer goes away if the entire wetland is filled. Perhaps we don't have any isolated wetlands in CB?

Commented [CW11]: Correct? Not sure how impacting a buffer keeps it as buffer as it will be buffer-averaged somewhere else. The buffer can be impacted by vegetation removal without filling it.

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17.43.040 Administration

- A. Activities permitted outright according to Table 17.43-1 shall be reviewed as a Type 2 Administrative review as provided in Section 17.92.010 C. 2.
- B. All other development or activities within the Wetlands Overlay Zone shall be reviewed as a Planning Commission decision as provided in Chapter 17.88.

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17.43.050 Development and Activities Permitted

- A. Uses and activities listed in Table 17.43-1 may be permitted in wetlands and wetland buffer areas, when it is determined that a reasonable development and use of property, as described in Section 17.43.070, is not possible without locating a portion or all of the development within wetland buffer or wetland areas. When a development permit is approved, it shall comply with the provisions of this title and the applicable standards in Section 17.43.070.
- B. Uses and activities that may be permitted in wetland and wetland buffers are shown in Table 17.43-1. When another provision of the Cannon Beach Municipal Code conflicts with this chapter or when the provisions of this chapter are in conflict, that provision which provides greater environmental protection to wetlands and/or wetland buffer areas shall apply, unless specifically provided otherwise in this chapter or such provision conflicts with federal or state laws or regulations.
- C. Uses and activities in existence approved by the approval authority before the effective date this Chapter 17.43, [to be specified on the date of ratification] (hereinafter referred to for purposes of this Chapter as the Effective Date), and which ~~may do~~ not conform with the permitted or conditional uses set forth herein may qualify as a “nonconforming use” as provided Chapter 17.82.
- D. The following development and activities may be permitted within wetlands and wetland buffer areas subject to the review procedures shown in Table 17.43-1.

Table 17.43-1 Review Procedure for Development and Activities within the WO Zone

Development or Activity	Review Process
Vegetation management only to the extent necessary for hazard prevention	Type 2 Administrative review
Wetland Lot-of-Record	Planning Commission review
Streets	
Sidewalks, Pathways, and Trails	
Utilities	
Land Divisions and Lot Line Adjustments	
Stormwater Management	
Wetland Mitigation and Wetland Enhancement	
Vegetation Management (beyond hazard prevention), e.g., for removal of non-native vegetation and replacement with native vegetation of a similar structure	

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Commented [CW12]: What about Structures and Driveways? Probably already included in the existing WO Zone code.

Commented [CW13]: To enable removal of Himalayan Blackberry, Scotch Broom, and Holly species to be replaced with native shrubs, and removal of English Ivy to be replaced with native groundcovers. I think this could be under Type 2 Admin review... or else move this to first row in this table under PC review.

17.43.060 Application Submittal Requirements

- A. Information Requirements. Information provided on the development plan shall conform to the following:

Exhibit A-7

1. Drawings, along with an electronic copy, depicting the proposal shall be presented on sheets not larger than 24 inches by 36 inches in the number of copies directed by the ~~city~~City;

Exhibit A-7

2. Drawings shall be at a scale sufficiently large enough to enable all features of the design to be clearly discerned.
- B. Site Analysis Diagram. This element of the ~~design review~~ development plan, drawn to scale, shall indicate the following site characteristics:
 1. A survey of the property by a licensed land surveyor clearly delineating property boundaries. ~~The City may waive this requirement when there is a recent survey that can be used to establish the applicant's property boundaries;~~
 2. Location of the wetland boundary and wetland buffer area;
 3. Location and species of trees greater than 6 inches in diameter at breast height (DBH), and an indication of which trees are to be removed or potentially affected by construction activity including trees on abutting properties;
 4. On sites that contain steep slopes, potential geologic hazard or unique natural features that may affect the proposed development, the ~~city~~City may require contours mapped at ~~2-foot~~ intervals;
 5. Natural drainageways and other significant natural features;
 6. All buildings, roads, retaining walls, curb cuts, and other manmade features on the subject property;
 7. Developed and natural features, including trees, wetlands, structures, and impervious surfaces on adjoining property having a visual or other significant relationship with the site; and
 8. The location and names of all existing streets within or on the boundary of the proposed development.
- C. Site Photographs. Photographs depicting the site and its relationship to adjoining sites and natural features shall also be provided.
- D. Site Development Plan. This element of the development plan shall indicate the following:
 1. Boundary dimensions and area of the site.
 2. Location of all existing structures, driveways, walkways, and landscaped areas proposed to be retained, including their site coverage and distances from the property line, and wetland and wetland buffer area boundaries;
 3. Location of all new structures, driveways, walkways, and landscaped areas ~~proposed to be retained,~~ including their site coverage and distances from the property line, and wetland and wetland buffer area boundaries;
 4. All external dimensions of existing and proposed buildings and structures;
 5. Existing and proposed parking and vehicular and pedestrian circulation areas, including their dimensions;

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Commented [CW14]: This was also struck from the previous version. I would strongly recommend keeping this in (as edited: changed where to when and which to that).

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Commented [CW15]: This conflicts with Section 16.04.180 L. (Subdivisions Tentative Plan - Map Contents, and others)

1. Two-foot contour intervals for ground slopes twenty percent or less.

2. Five-foot contours intervals for ground slopes over twenty percent.

But is consistent with Section 17.62.030 Grading and Erosion Control Permit. And Section 17.44.050 Design review plan-Submittal Requirements

Just checking for consistency.

Exhibit A-7

6. Existing and proposed service areas for such uses as the loading and delivery of goods;
 7. Locations, descriptions and dimensions of easements;
 8. Grading and drainage plans, including spot elevations and contours;
 9. Location of areas to be landscaped or retained in their natural state;
 10. Exterior lighting including the type, intensity, height above grade and area to be illuminated; and
 11. Other site elements which will assist in the evaluation of the application.
- E. Site Alternatives Analysis. A site alternative analysis shall be provided. The purpose of the site alternative analysis is to evaluate development options that would avoid any encroachment into the wetland ~~buffer~~ or wetland ~~buffer~~ on the property. When encroachment appears necessary, the site alternatives analysis shall be structured using the following sequential steps when it is determined that 1,000 square-foot building coverage and 400 square feet of additional lot coverage for access and parking are not available on the upland portion of the property:
1. Step 1 Setback Reduction. Determine whether the proposed development could be located exclusively on the upland portion of the property if adjustments in Section 17.43.070 C. 1. are ~~utilized~~used.
 2. Step 2 Setback Reduction and Wetland Buffer ~~Redistribution~~Averaging. When the proposed development cannot be located exclusively on the upland portion of the property as provided in Step 1 above, the applicant shall determine if a maximum 25 percent (12.5 feet) encroachment into the wetland buffer would accommodate the proposed development. The analysis shall provide an area calculation for the encroachment into the wetland buffer. To the extent upland area is available on the property, the analysis shall indicate where the wetland buffer will be expanded by an equivalent area to compensate for the wetland encroachment.
 3. Step 3 Setback Reduction and Wetland Buffer Reduction and Mitigation. When the proposed development cannot be located exclusively on the upland portion of the property and with a minor wetland buffer encroachment as provided in Step 2 above, the applicant shall determine if further reduction of the wetland buffer, excluding wetland encroachment, would accommodate the proposed development. The analysis shall provide the wetland buffer encroachment area calculation and compensation as provided in Step 2 above.
 4. Step 4 Setback Reduction, Wetland Buffer and Wetland Encroachment and Mitigation. When the proposed development cannot be located exclusively on the upland portion of the property and with wetland buffer encroachment as provided in Step 3 above, the applicant shall determine if encroachment into the wetland buffer and the wetland would accommodate the proposed development. To the extent upland area is available on the property, the analysis shall indicate where the wetland buffer will be expanded by an equivalent area to compensate for the wetland encroachment.

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5. For any type of wetland buffer or wetland encroachment, the applicant shall provide an explanation of the alternatives considered and the reasons why the site development plan is proposed to ~~utilize-use~~ portions of ~~a~~the wetland or buffer area.
- F. Landscape Plan. Applications that propose development within a wetland or wetland buffer shall include the following:
1. The size, species, and locations of plant materials to be retained or placed on the site, including eradication and replacement of ~~invasive~~ plant species;
 2. The layout of proposed irrigation facilities;
 3. The location and design details of walkways, decks, courtyards, patios, and similar areas;
 4. The location, type and intensity of lighting proposed to illuminate outdoor areas; and
 5. The location and design details of proposed fencing, retaining walls, and screening for service areas.
- G. Stormwater management plan.
1. A stormwater management plan shall be required of the applicant and reviewed and approved by the public works director for the following types of developments where stormwater will move from the site into wetlands:
 - a. New building covering more than 200 square feet; or
 - b. New addition covering more than 200 square feet; or
 - c. New road or driveway; or
 - d. Road or driveway expansion; or
 - e. New parking lot or parking lot expansion; or
 - f. Point source stormwater discharge; or
 - g. Diversion of stormwater for any reason within the wetland or wetland buffer.
 2. A stormwater management plan must include all information necessary to demonstrate to the public works director that the proposed stormwater management system will maintain pre-construction activity, or background, water quality and similar flow characteristics (e.g., volume, velocity, and duration) and be consistent with Public Works Department standards and the requirements of this Chapter. The stormwater management plan shall provide the following in addition to any information requested by the public works director:

Commented [CW16]: Need to define invasive plant species.
A good but somewhat cumbersome list of noxious species in Oregon is at the ODA:
<https://www.oregon.gov/oda/programs/Weeds/OregonNoxiousWeeds/Pages/AboutOregonWeeds.aspx>
It captures all the common baddies in CB.

Exhibit A-7

- a. Site map or maps, drawing or specifications detailing the design, route, and location of the stormwater management system.
 - b. A map or model of drainage patterns and stormwater flow before and after the development or activity; impacts to water quality in the wetland, changes to water quantity and timing that may adversely affect wetland function (e.g., ~~affect~~effects of rapidly fluctuating water levels on amphibian egg masses, scour impacts to vegetation) and potential for sediment deposition into the wetland or wetland buffer.
 - c. Best management practices and methods of treatment that will maintain or improve background levels of water quality, which includes but is not limited to: dissolved oxygen levels; pH; temperature; total dissolved solids; and contaminants.
- H. When development is proposed within a wetland or wetland buffer as provided in Section 17.43.060 E. 3. or 4., a mitigation plan shall be provided including the following information prepared by a qualified wetland professional. In cases where a Department of State Lands and/or US Army Corps of Engineers permit is required, the mitigation plan approved by either agency shall satisfy this requirement.
1. Plan Overview including a summary narrative.
 2. Proposed impact details:
 - a. Description of existing site conditions within the wetland and the wetland buffer including, but not limited to, hydrologic characteristics, plant communities, and/or ecological conditions.
 - b. Square footage of the proposed encroachment into the wetland ~~buffer~~ and/or wetland buffer.
 - c. Demonstrate ion of compliance with the applicable provisions in Section 17.43.070 J.
 3. Proposed mitigation details:
 - a. On-site mitigation shall first be considered.
 - b. If on-site mitigation is not feasible, off-site mitigation may be proposed with the following supporting information:
 - i. Tax lot and ownership of proposed mitigation site.
 - ii. Justification for why on-site mitigation ~~was~~is not practicable and why the off-site location is appropriate.
 - c. An on-site or off-site mitigation plan shall include the following information:
 - i. Existing conditions site plan for the mitigation site, showing wetlands, buffers, and plant communities and/or ecological conditions.

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- ii. Site plan showing proposed restoration or enhancement activities within the wetlands and/or buffer including but not limited to grading, hydrologic improvements, invasive plant removal, native plantings, and habitat structures.
 - iii. An explanation of the rationale for the mitigation area location, including any expansion of the wetland and/or buffer area.
 - iv. Planting plan describing location, species, size, and quantities of plants to be provided.
- d. A monitoring plan shall be provided, to include the following:
- ii. ~~2.~~ Monitoring schedule including a minimum of once per year during the required 5-year monitoring period.
 - iii. Methods to ensure success and plant replacement as needed.
 - iv. Proposed photo point locations to be used during the monitoring period.

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- I. Narrative addressing the relevant standards in Section 17.43.070.

17.43.070 Development Standards

The following standards are applicable to the uses and activities listed in Section 17.43.050. The following standards are applicable in all areas under the ~~wetlands~~ Wetlands overlay-Overlay zone.

A. General Standards. Uses and activities in wetlands and in wetland buffer areas are subject to the following general standards:

1. The proposed uses and development comply with the applicable requirements in this title unless modified as provided in this chapter.
2. Uses and activities in wetlands or wetland buffer areas may be approved only after the following list of alternative actions, listed from highest to lowest priority, have been considered:
 - a. Avoiding the wetland and wetland buffer areas entirely and locating uses and activities on upland portions of the property.
 - b. When development within a wetland and/or wetland buffer is proposed, the applicant shall demonstrate how the affected land area is minimized by ~~utilizing~~ using design options to reduce building coverage, ~~such as~~ multistory construction, ~~reducing~~ impervious surface area, grading, and similar actions to the extent possible while properly accommodating the proposed use or activity.
 - c. Where a use or activity must be located in either the wetland or the wetland buffer, preference shall be given to the location of the use or activity in the wetland buffer.

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3. Valid permits from the US Army Corps of Engineers and from the Oregon Department of State Lands, or written proof of exemption from these permit programs, must be obtained before any of the following activities occur in wetlands:

- a. Placement of ~~and any~~ amount of fill;
- b. Construction of any pile-support structures;
- c. Excavation (any amount);
- d. Compensatory mitigation;
- e. Wetland restoration; and
- f. Wetland enhancement.

4. Where a **protected** wetland is identified by the Cannon Beach LWI as riverine, uses and activities are also subject to the requirements of Chapter 17.71, stream corridor protection. If the riverine mapping only encompasses the active channel (i.e., no wetlands are present), then only Chapter 17.71 applies.

5. Where wetlands occur below the Ordinary High Water Line (or Mark) of the stream, the buffer shall be that of the requirements of Chapter 17.71, stream corridor protection.

B. Wetland Lot-of-Record.

1. Reasonable use of a wetland lot-of-record is defined as a maximum building coverage of 1,000 square feet and an additional maximum of 400 square feet of lot coverage, for a total lot coverage of 1,400 square feet, as provided in Section 17.43.050 C. below.
2. The uses and development subject to the reasonable use provisions in Section B. 1. above include:
 - a. Non-residential structures include commercial, institutional, and other public buildings with a maximum building coverage of 1,000 square feet.
 - b. On-site improvements include driveways, walkways, decks, patios, and parking on the property being developed ~~with have~~ a maximum lot coverage of 400 square feet.
3. When it is demonstrated that reasonable use of a wetland lot-of-record is not possible on the upland portion of the property, and a hardship would result, the proposed development shall be reviewed in accordance with Section 17.43.070 C.

- C. **Approval Criteria for Development Subject to Wetland Lot-of-Record Requirements.** To allow reasonable use of a wetland lot-of-record where sufficient upland area is not available to accommodate up to 1,000 square feet of building coverage and 400 square feet of lot coverage, the applicant shall be entitled to obtain approval for this amount of development by one or more of the four following options, which are presented in order of priority. For all options, upland area shall be utilized to the maximum extent deemed appropriate by the Planning Commission to minimize the

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Commented [CW18]: Meaning that streams with wetlands below OHW will only have a 10 foot buffer.

Commented [CW19]: In the wetland or buffer, or on upland?
I see now that it is described below.

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amount of ~~wetland buffer or wetland~~ impact encroachment or wetland buffer encroachment.

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1. Adjustment. An adjustment to the applicable dimensional standards to accommodate all or a portion of the proposed development on available upland portions of the property shall be considered. The Planning Commission may approve an application for up to a 50 percent adjustment to the following development and dimensional standards to accommodate development outside of wetland and wetland buffer areas:
 - a. Building setback requirements of the applicable base zone; and
 - b. Lot dimension requirements of the applicable base zone.
2. Wetland Buffer ~~Redistribution-Averaging~~. Where the upland portion of the lot-of-record cannot accommodate 1,000 square feet of building coverage and 400 square feet of other lot coverage, with an adjustment to the building setback and/or the lot dimension requirements, then minor wetland buffer encroachment shall next be considered to allow reasonable use of a parcel when all the following are met:
 - a. The site alternative analysis prepared by the applicant demonstrates that there are no feasible alternatives to the site design to accommodate 1,000 square feet of building coverage and 400 square feet of other lot coverage without utilizing a portion of the wetland buffer; and
 - b. The proposed development or activity is designed to utilize the 50 percent adjustment to the dimensional standards listed in 17.43.070 C. 1. to develop within the available upland to the maximum extent practicable; and
 - c. The reduced buffer width will not result in degradation of the wetland's functions and values as demonstrated by an assessment from a qualified wetland professional; and
 - d. The lot coverage within the wetland buffer does not exceed 1,000 square feet for the building and 400 square feet for other lot coverage.
 - e. The buffer at its narrowest point is never less than 75 percent of the required width or 37.5 feet.
 - f. To the extent upland area on the subject property is available, the wetland buffer area shall be expanded by an equivalent amount to the encroachment into the buffer.
 - g. Compliance with the applicable requirements in Sections 17.43.070 E. through M.
3. Wetland Buffer Reduction and Mitigation. Where the upland portion of the lot-of-record cannot accommodate 1,000 square feet of building coverage and/or 400 square feet of lot coverage, and a wetland buffer encroachment greater than 25 ~~%percent~~ is necessary, the wetland buffer width may be reduced by the ~~approval authority~~City when all the following criteria are met:
 - a. The site alternative analysis prepared by the applicant demonstrates that there are no feasible alternatives to the site design to accommodate 1,000 square feet of building coverage and or 400 square feet of lot coverage without ~~utilizing~~using a portion of the wetland buffer; and

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- b. The proposed development or activity is designed to ~~utilize~~use the 50 percent adjustment to the dimensional standards listed in 17.43.070 C. 1. to develop within the available upland to the maximum extent practicable; and
 - c. The reduced buffer width will not result in degradation of the wetland's functions and values as demonstrated by an assessment from a qualified wetland professional; and
 - d. The lot coverage within the wetland buffer does not exceed 1,000 square feet for the building and 400 square feet for other lot coverage; and
 - e. Mitigation for the proposed encroachment into the wetland buffer shall be provided in accordance with Section 17.43.070 J; and
 - f. Compliance with the applicable requirements in Sections 17.43.070 E. through M.
4. Wetland Buffer ~~and Wetland~~ Encroachment, Wetland Impact, and Buffer Enhancement, Buffer Mitigation, and Wetland Mitigation. Where the upland portion of the lot-of-record cannot accommodate 1,000 square feet of building coverage and 400 square feet of lot coverage, and the wetland buffer reduction cannot accommodate this amount of development, the approval authority shall allow development within the wetland buffer first and/or wetland second when all the following criteria are met:
- a. The site alternative analysis prepared by the applicant demonstrates there are no feasible alternatives to the site design to accommodate 1,000 square feet of building coverage and 400 square feet of other lot coverage without ~~utilizing~~using a portion of the wetland buffer and/or wetland; and
 - b. The proposed development or activity is designed to ~~utilize~~use the 50 percent adjustment to the dimensional standards listed in 17.43.070 A. 3. to develop within the available upland area to the maximum extent practicable; and
 - c. The development, with the mitigation required in Section 17.43.070 J., will not result in degradation of the wetland's functions and values as demonstrated by an assessment from a qualified wetland professional; and
 - d. The lot coverage within the wetland buffer and wetland does not exceed 1,000 square feet for building coverage and 400 square feet for other lot coverage; and
 - e. Mitigation for the proposed ~~impact to encroachment into~~ the wetland or proposed encroachment into wetland buffer ~~shall~~shall be provided in accordance with Section 17.43.070 J; and
 - f. Compliance with the applicable requirements in Sections 17.43.070 E. through M.

D. Approval Criteria for Development Exempt from Wetland Lot-of-Record Requirements.

Development that is not specified in Section 17.43.070 B. shall be subject to relevant requirements in Sections 17.43.070 E. through M. The following improvements are exempt from the wetland lot-of-record requirements but shall comply with all applicable requirements in this chapter:

Commented [CW20]: Need to define how this assessment is measured. Either OFWAM or the Oregon Rapid Wetland Assessment Protocol (ORWAP), the latter of which is much more cumbersome and not useful for determining LSWs. One out is to say that "Best Professional Judgement" is acceptable (all wetland professionals typically use BPJ in any assessment method). Professional, via a method accepted by the DSL; and would be one way to handle this,

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1. Streets;
2. Public sidewalks, pathways, and trails;
3. Utilities;
4. Land Divisions and Lot Line Adjustments;
5. Stormwater Management;
6. Wetland Mitigation and ~~Wetland~~ Enhancement; and
7. Vegetation Management.

E. **Streets** shall comply with following applicable standards:

1. Streets in the WO zone shall be constructed of permeable materials.
2. Streets crossing wetlands or wetland buffer areas shall be no wider than 20 feet.
3. Streets in wetlands shall be constructed in a manner that allows the free flow of water beneath the street.
4. Streets in wetland buffer areas may be placed on piling or fill, ~~whichever is deemed least impactful by a qualified wetland professional.~~

Commented [CW21]: In my opinion, piling will always be least impactful to wetlands compared to placing fill.

F. **Sidewalks, Pathways and Trails.** Development of new sidewalks, pathways and trails may be permitted in wetland ~~buffer areas~~ and in wetlands ~~buffer areas~~ subject to the applicable requirements in this title and the following standards:

1. Sidewalks, pathways, and trails across ~~wetlands or~~ wetland buffer areas or wetlands may only be developed or maintained in a manner that does not restrict water movement. Bridges shall be used to cross open water areas.
2. Routes for new sidewalks, pathways, and trails shall be chosen to avoid traversing wetlands. Route alignments around the perimeter of wetlands, and in wetland buffer areas, are preferred.
3. Sidewalks, pathways, and trails within wetlands and wetland buffers shall be a maximum of 12 feet wide and constructed of permeable material or on pilings.

Commented [CW22]: Do you want to define Open Water as a stream, pond, river etc. that has a stream bed and bank channel? Or are you thinking about shallowly ponded wetland areas? Maybe not relevant to wetlands as it should be covered in the Stream Protection Code. Do Bridges include open-bottomed Arch Culverts and buried natural bottom concrete box culverts? Bridge over Ecola and Logan Creeks, certainly.

G. **Utilities.** Electric power lines, telephone lines, cable television lines, water lines, wastewater collection lines, and natural gas lines may be permitted in wetlands and in wetland buffer areas subject to the following standards:

1. Underground utilities, including water, wastewater, electricity, cable television, telephone, and natural gas service, may be routed through wetland buffer areas in trenches provided the following standards are met:

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- a. Material removed from the trench is either returned to the trench as back-fill within a reasonable period of time, or, if other material is to be used to back-fill the trench, excess material shall be immediately removed from the wetland area. Side-casting into a wetland for disposal of material is not permitted;
 - b. Topsoil and sod shall be conserved during trench construction or maintenance, and replaced on the top of the trench;
 - c. The ground elevation shall not be altered by the utility trench construction or maintenance; and
 - d. Routes for new utility trenches shall be selected to minimize vegetation removal and hydraulic impacts on wetlands.
2. Aboveground utilities, including electricity, cable television, and telephone service, may be routed through protected wetlands and wetland buffer areas on poles subject to the following standards:
 - a. Routes for new utility corridors shall be selected to minimize adverse impacts on the wetland, and to minimize vegetation removal; and
 - b. Vegetation management for utility corridors in wetlands and wetland buffer areas shall be conducted according to the standards in Section 17.43.070 K.
 3. Utility maintenance roads in wetlands and in wetland buffer areas must meet applicable standards in Section 17.43.070 E.
 4. Common trenches, to the extent allowed by the building code, are encouraged to minimize ground disturbance when installing utilities.
 5. Underground utilities shall be routed under disturbed areas such as streets, driveways, and off-street parking areas whenever feasible.
- H. **Land Divisions and Lot Line Adjustments.** In addition to the applicable requirements in Title 16, subdivisions, replats, partitions, and property line adjustments of a wetland lot-of-record are subject to the following standards:
1. The applicable requirements in Title 16.
 2. Preliminary plat maps for proposed subdivisions, replats, partitions, and lot line adjustments involving a wetland lot-of-record must show the wetland and wetland buffer boundaries, as determined by a wetland delineation approved by DSL.
 3. Subdivisions, replats, partitions, and property line adjustments of upland portions of a wetland lot-of-record are permitted subject to the following standards:

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- a. Each proposed lot shall include an upland area that contains a minimum of 1,400 square feet.
- b. The wetland and wetland buffer area on the subject property shall be retained on one lot.
- c. Wetlands and wetland buffer areas may be counted towards meeting the dimensional requirements of the base zone.

I. **Stormwater Management.** Management of stormwater flowing into wetlands or wetland buffer areas is subject to the following standards:

1. The City recognizes that stormwater is an important component of wetland hydrology, and it shall regulate flow of stormwater into or out of wetlands and wetland buffers to ensure no net loss of wetland functions and values. It is the policy of the City that all stormwater that would naturally flow into wetlands and wetland buffers shall continue to flow into wetlands and wetland buffers in accordance with this Chapter. Uses and activities intended to remove stormwater away from or around wetlands and wetland buffers or to move stormwater within a wetland or wetland buffer are prohibited unless undertaken as part of an approved wetland mitigation or enhancement plan.
2. A stormwater management plan, including the required information specified in Section 17.43.060 G, shall be submitted for approval by the public works director according to the following standards:
 - a. Stormwater runoff should be directed toward the same drainage system that would have handled the runoff under natural conditions. Where the public works director determines that stormwater volumes are or will be significant, stormwater management systems must disperse and potentially delay stormwater rather than discharging it at a single point.
 - b. Stormwater flowing onto protected wetlands and wetland buffers from any use or activity permitted under this Chapter 17.43 shall be treated to remove contaminants and sediment. There shall be a preference for passive methods of stormwater management, which may include but are not limited to: bioretention and rain gardens; vegetated swales, buffers and strips; roof leader disconnection; and impervious surface reduction and disconnection.
 - c. Where the use or activity involves point source water discharge, new or modification of an existing road or parking lot, one or more active methods shall be employed including but are not limited to: catch basins and catch basin inserts; hydrodynamic separators; media filters; and advanced water treatment.

I. ~~J.~~ **Wetland Mitigation and Wetland Enhancement.** Except for Wetland Buffer ~~Redistribution-Averaging~~ in 17.43.070 C.2., all projects involving development, removal or fill in a wetland or wetland buffer must provide a wetland mitigation and/or a wetland enhancement plan that meets the following standards to retain wetland functions and values.

1. The proposed activities and development in wetlands or wetland buffer areas satisfy the requirements of Section 17.43.070 B.

Commented [CW23]: This is not practicable in all cases. The wetland and buffer area could be placed in a separate Tract, with or without use restrictions, but to create a legal Lot is problematic.

For example, a fifteen thousand square foot wetland lot-of-record that has not been platted into three five thousand square foot lots, none of which contain wetlands but all of which contain a small area of wetland buffers. After platting, three dwelling units could be permitted while avoiding the wetland buffer entirely. The problem is that there is not enough square feet of the buffer within the lot to create a legal Lot of the minimum lot size for the overlying residential density zone.

I am sure there may be other "what if" examples out there, but maybe this is more about platting than making a legal Lot of the wetland and wetland buffer. I guess I don't understand why this is being proposed as an amendment to the WO Zone. Making a wetland and wetland buffer "Lot" offers no protection to its contents.

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2. The wetland mitigation and/or wetland enhancement plan shall be prepared by a qualified wetland professional, and it shall address anticipated impacts of the proposed development on the wetland or wetland buffer along with proposed measures to mitigate the onsite wetland impacts and wetland buffer impacts ~~encroachments~~. Mitigation actions shall include but not be limited to: the restoration of native vegetation; restoration of hydric soil; restoration of the clay pan or other natural water barriers; restoration of natural slopes and contours; restoration of natural drainage or water flows; restoration of the wetland's nutrient cycle; and the restoration of wildlife habitat that may be impacted by the proposed development or activity.
3. Mitigation ratios. When mitigation is required, the following requirements shall be satisfied:
 - a. When wetland impacts require mitigation per federal or state regulations, then federal or state wetland mitigation ratios will apply, so long as equal to or greater than the City's minimum requirement.
 - b. If wetland impacts are below federal and state thresholds for a removal fill permit or are exempt from federal or state regulations, then:
 - i. Wetland mitigation that is provided within the wetland shall require a 1:1 mitigation area ratio within the wetland on the site.
 - ii. Wetland mitigation that is provided within the adjacent wetland buffer shall require ~~a~~ a 2:1 mitigation area ratio.
 - c. Wetland buffer mitigation that is provided within the wetland buffer shall satisfy one of the following:
 - i. Wetland buffer mitigation can occur as expansion of buffer at a 1:1 area ratio; or
 - ii. Wetland buffer enhancement of marginal or degraded buffer conditions at a 1:1 area ratio.
 - d. Upon approval, the mitigation plan shall be integrated with the design package, and it shall be the responsibility of the building official to confirm compliance with the mitigation plan before issuing a certificate of occupancy. In the event that mitigation efforts ~~are have not been~~ completed when occupancy is requested, the owner or the owner's agent may certify in writing that owner or their agent will complete the mitigation plan within a specified period. The certification shall represent the owner's or owner's agent's agreement that, in exchange for the granting the certificate of occupancy, ~~that~~ the mitigation plan will be completed in accordance with its terms.
 - e. If a landowner or responsible party fails to implement ~~a the~~ mitigation plan, the City may undertake any action necessary to comply with the mitigation plan and all associated costs and accrued interest thereon ~~will shall~~ become the immediate responsibility of the landowner or responsible party.

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4. Monitoring results shall be provided to the City on an annual basis prior to the end of the calendar year. If results show a risk of not meeting the success criteria detailed in the ~~monitoring mitigation~~ plan, then corrective actions to be implemented shall be described in the monitoring report. The mitigation plan will remain in effect for a period of 5 years following completion of the development or project, unless extended for non-compliance, with an affirmative obligation on the part of the applicant to restore or repair the implementation of the mitigation efforts plan, as required by conditions through the end of the effective period.

4.5. The proposed mitigation plan may be modified to implement adaptive management strategies to ensure the success of the proposed mitigation plan, upon approval by the City. One example is changing the proposed plant species to be installed to reflect actual hydrologic and/or soil conditions.

K. **Vegetation Management.** Vegetation in wetlands and in wetland buffer areas may be managed (including planting, mowing, pruning and removal) subject to the following standards:

1. Tree removal in wetlands and in wetland buffer areas shall be consistent with the criteria and standards in Chapter 17.70, tree removal.
2. Tree pruning is prohibited unless:
 - a. Necessary for placement of a dwelling or driveway approved pursuant to this chapter including required vehicular and utility access, subject to the requirements in Section 17.70.030(B) and (Q); or
 - b. Necessary for maintenance of an existing dwelling or driveway; or
 - c. Necessary for correction or prevention of foreseeable danger to public safety, or a foreseeable danger of property damage to an existing structure; or
 - d. Part of an approved restoration, enhancement, or compensatory mitigation plan.
3. The fact that a tree or part thereof is or may be dead or compromised (e.g., a snag) is not a sufficient ~~criteria~~ criterion for its removal or pruning unless the property owner demonstrates foreseeable danger to public safety, or a foreseeable danger of property damage to an existing structure. An application for the removal of a dead tree shall require an International Society of Arboriculture (ISA) Tree Hazard Evaluation Form prepared by a certified arborist at the property owner's sole expense.
4. Tree trunks, stumps, roots, and ~~bows boughs~~ of trees removed or pruned ~~on in~~ protected wetlands and wetland buffers pursuant to this chapter shall be left by the property owner *in situ*. When a tree is removed, it shall be topped at the highest point possible that ~~avoid~~ avoids hazards while leaving as much stump as possible for wildlife habitat (i.e., snags).
5. In all cases, removal or pruning of trees from wetlands and wetland buffers must follow best professional standards to ensure that wetlands and wetland buffer areas functions and values are not compromised.
6. Any tree removed in accordance with this title or damaged by activities authorized under this

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title shall be replaced by the property owner with a tree on the wetland lot-of-record of comparable native species approved by the City. For example, Red Alder trees could be replaced with longer lived deciduous trees or coniferous trees.

7. Vegetation removal in a wetland shall be the minimum necessary and in no case shall it substantially impair wetland functions and values. Removal of vegetation, except trees covered by Chapter 17.70, in wetlands and in wetland buffer areas is permitted only if:

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- a. Necessary for placement of a structure for which a building permit has been issued (or for which a building permit is not needed); or
- b. Necessary for maintenance of an existing structure, road, or pathway; or
- c. Necessary for correction or prevention of a hazardous situation; or
- d. Necessary for completion of a land survey; or
- e. Part of an approved restoration, enhancement, or compensatory wetland or wetland buffer mitigation plan.
- ~~f. Vegetation removal in a wetland shall be the minimum necessary and in no case shall it substantially impair wetland functions and values.~~
- 8. Pruning or mowing permitted under subsections J. 8. A. through f. in a wetland shall be the minimum necessary and in no case shall it substantially impair wetland functions and values.
Pruning or mowing of vegetation in wetlands and in wetland buffer areas is permitted only if:
 - a. Necessary for placement of a structure for which a building permit has been issued (or for which a building permit is not needed); or
 - b. Necessary for maintenance of an existing structure, road, or pathway; or
 - c. Necessary for correction or prevention of a hazardous situation; or
 - d. Necessary for completion of a land survey; or
 - e. Part of an approved restoration, enhancement, or compensatory mitigation plan; or
 - f. Part of a landscape plan approved by the cityCity in conjunction with a building permit that minimizes adverse impacts on wetlands.~~g. Pruning or mowing permitted under subsections J8a through f in a wetland shall be the minimum necessary and in no case shall it substantially impair wetland functions and values.~~
- 9. Planting new vegetation in wetlands is permitted subject to the following standards:
 - a. The planting is part of an approved restoration, enhancement, or mitigation plan; or
 - b. The planting is part of a landscape plan involving native wetland plant species, and the plan is approved by the cityCity in conjunction with approval of a building permit; or
 - c. The planting is intended to replace dead or damaged plants that were either part of a maintained landscape or part of the existing wetland plant community.
- 10. Planting new native vegetation in wetland buffer areas is permitted as part of a managed garden or landscape.

Commented [CW26]: Moved g. here.

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11. Vegetation management practices ~~will~~ shall be employed in wetlands and in wetland buffer areas that minimize short-term and long-term adverse impacts on wetlands. Impacts to be avoided or minimized include turbidity, erosion, sedimentation, contamination with chemicals, unnecessary or excessive vegetation removal, ~~or and~~ substantial alteration of native wetland plant communities. The following are not permitted as part of a vegetation management plan for wetlands or wetland buffer areas: alteration of wetland hydrology, use of herbicides consistent with state and federal regulations, or application of ~~soil amendments or~~ fertilizer.

L. Construction Standards

1. Construction management practices ~~will to~~ be employed in wetlands, wetland buffer areas, and the upland portion of a wetland-lot-of-record that will address impacts to wetland values and function. Impacts to be avoided or minimized include: turbidity, erosion, sedimentation, contamination with construction waste or debris, unnecessary or excessive vegetation removal, ~~or and~~ damage to existing vegetation. At a minimum, erosion fencing shall be installed between areas to be disturbed and adjacent wetlands and their wetland buffer areas. Construction equipment shall be kept out of wetlands and wetland buffers unless required for an approved use, ~~and which will require that~~ signs are posted at appropriate intervals ~~intended~~ to restrict entry by equipment or personnel. Construction debris shall be removed from the site and properly disposed of. Chemicals, paints, and solvents, including paint tools, masonry equipment, and drywall tools, shall be used, cleaned, and stored in a manner that does not result in discharge of wastewater to waters of the state or placement of pollutants such that they could enter waters of the state. Any and all washdown of concrete trucks shall occur off-site. All construction activities shall be conducted as required by the ~~city~~ City manager ~~Manager~~.
2. Pile-supported construction may use wood piling (treated or untreated), steel piling, concrete piling, or other piling material meeting building code requirements. If treated wood piling or posts are used for structures in wetlands, the following standards are applicable:
 - a. Treated wood shall be completely dry;
 - b. Treated wood shall not have any wet wood preservative on the wood surface; and
 - c. The type of chemical treatment chosen shall be the type that minimizes possible contamination of the wetland environment.
3. When removal and fill are ~~is~~ approved by the Department of State Lands and/or US Army Corps of Engineers, the requirements of those permits shall prevail. For development approved by the ~~city~~ City approval authority, the following standards shall be satisfied:
 - a. All fill material shall be clean and free of contaminants; and
 - b. Filled area sides shall be finished to a stable slope; and
 - c. Measures shall be incorporated into the fill design to minimize erosion or sloughing of fill material into wetlands; and

Commented [CW27]: I deleted this because biochar may be very beneficial to plantings in any landscape, and I think it is considered a soil amendment.

Commented [CW28]: We don't want to fence the buffer off from the wetland.

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- d. Fills shall be designed in a manner that complies with Chapter 17.38 Flood Hazard Overlay Zone; and
 - e. Fill side slopes shall be revegetated with native plant species, as recommended by a qualified wetland professional, to stabilize the slope.
5. To avoid harm to wetlands and wetland buffers from excessive traffic and frequent visitors who are unaware of wetland protections, short term rentals shall provide protection signage or education materials regarding wetland protection on the site.
6. Excavation in wetlands and in wetland buffer areas for any purpose must meet the following standards:
- a. Excavation for purposes of gravel, aggregate, sand, or mineral extraction is not permitted.
 - b. Excavation for utility trenches in wetland buffer areas is subject to the following standards:
 - i. Material removed from the trench is either returned to the trench (back-fill) or removed from the wetland area. Side-casting into a wetland for disposal of material is not permitted;
 - ii. Topsoil shall be conserved during trench construction or maintenance, and replaced on the top of the trench; and
 - iii. The ground elevation shall not be altered as a result of utility trench construction or maintenance. Finish elevation shall be the same as starting elevation.
 - c. Excavation for building footings in wetlands is subject to the following standards:
 - i. Material removed for approved footings is either returned to the trench (back-fill), or removed from the wetland or wetland buffer area. Side-casting for disposal of material is not permitted; and
 - ii. Disturbance of wetland vegetation and topsoil during footing construction shall be minimized; and
 - iii. The ground elevation around a footing shall not be altered as a result of excavation for the footing, unless required to meet building code requirements for positive drainage. Finish elevation shall be generally the same as starting elevation.
 - d. Excavation for wetland enhancement is subject to the following standards:
 - i. No more material than necessary and specified in the enhancement plan shall be excavated; and

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- ii. Side-casting for disposal of excavated material is not permitted; however, excavated material may be placed in a wetland or wetland buffer area for enhancement purposes as specified in the enhancement plan.

M. Mapping Delineated Wetlands and Wetland Buffers. As a condition of approval, the applicant shall provide digital GIS mapping data of the accepted wetland delineation or resulting change in the boundary of a protected wetland and wetland buffer to the ~~city~~City manager-Manager for the purpose of updating the ~~city~~City's LWI map file.

Commented [CW29]: Is there any way to have the City, County, or DSL digitize old paper copy wetland delineation maps that have been concurred with by DSL? These would be very useful in making the City's digital LWI maps more accurate, to be paired with an analysis of aerial photographic imagery, slope files, and tree canopy cover to ensure that nothing has changed since the date of the delineation map. Just a thought, I don't know if there are internship positions available for student GIS wizards out there.

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