PUBLIC MEETING NOTICE
FOR THE
WASHINGTON COUNTY PLANNING COMMISSION

ZOOM VIRTUAL MEETING

WEDNESDAY, DECEMBER 2, 2020 PUBLIC MEETING 1:30 PM

NOTE: Planning Commission meetings are being held virtually, until further notice, via Zoom.

Join online: https://us02web.zoom.us/j/88990343878
Online participants will be able to see and hear the proceedings. Online participants' microphones will be muted, unless they are called upon to speak/testify. Participant cameras will not be activated at any time.

Join by phone: +1-346-248-7799 or +1-669-900-6833; Webinar ID: 889 9034 3878
Participants on phones will be able to hear the proceedings. Phone participants' microphones will be muted, unless they are called upon to speak/testify.

Prior to scheduled public hearing items, the Planning Commission conducts a Work Session to receive briefings from County staff. No public testimony is taken on Work Session items.

Following the Work Session, the Planning Commission considers agenda items, including scheduled public hearing items and consideration of minutes. The public is welcome to speak during the public hearings and time is limited to 3 minutes. The public may also speak on any item ***not*** on the agenda during Oral Communications. Time is generally limited to 5 minutes for individuals and 10 minutes for an authorized representative of a Citizen Participation Organization (CPO). The Chair may adjust time limits.

To provide testimony on agenda items or provide oral communication, please complete and submit the sign up form at www.co.washington.or.us/PlanningCommissionTestimony at least 24 hours before the start of a meeting.

To testify, either phone in or log in to Zoom. (See instructions above). When your name is called, your microphone or phone will be unmuted. You will have five seconds to begin speaking;

if you do not, the next topic/speaker will be called. Please follow these guidelines:

- When your name is called, state your name and home/business address for the record.
- Groups or organizations making a presentation must designate one spokesperson in the interest of time and to avoid repetition.
- When there is more than one speaker on any topic, please avoid repetition.

If you need a sign or spoken language interpreter, please call 503-846-3519 (or 7-1-1 for Telecommunications Relay Service) at least 48 hours prior to this event.

Andy Back
Planning and Development Services Division Manager

PUBLIC MEETING DATES	
BOARD OF COMMISSIONERS WORK SESSIONS 8:30 a.m. 1st and 3rd Tuesdays 2 p.m. 4th Tuesday **BOARD OF COMMISSIONERS MEETINGS** 10 a.m. 1st and 3rd Tuesdays 6:30 p.m. 4th Tuesday	**PLANNING COMMISSION MEETINGS** 1:30 p.m. 1st Wednesday 6:30 p.m. 3rd Wednesday ***Note: Occasionally it may be necessary to cancel or add a meeting date.***

WASHINGTON COUNTY
OREGON

PUBLIC MEETINGS BEFORE THE PLANNING COMMISSION

WEDNESDAY DEC. 2, 2020 1:30 PM

ZOOM VIRTUAL MEETING

Join online: https://us02web.zoom.us/j/88990343878
Online participants will be able to see and hear the proceedings. Online participants' microphones and cameras will be muted, unless they are called upon to speak/testify.

Join by phone: +1-346-248-7799 or +1-669-900-6833; Webinar ID: 889 9034 3878
Participants on phones will be able to hear the proceedings.
Phone participants' microphones will be muted, unless they are called upon to speak/testify.

AGENDA

CHAIR:	JEFF PETRILLO
VICE-CHAIR:	MATT WELLNER
COMMISSIONERS:	IAN BEATY, BLAKE DYE, MARK HAVENER, DEBORAH LOCKWOOD, ANTHONY MILLS, SUSHMITA PODDAR, AND ERIC URSTADT

PUBLIC MEETING

1. **CALL TO ORDER – 1:30 PM**
2. **ROLL CALL**
3. **DIRECTOR'S REPORT**
4. **ORAL COMMUNICATIONS (Limited to items not on the agenda)**
5. **WORK SESSION**
   a. **Short-term rental license requirements**
6. **PLANNING COMMISSION DISCUSSION AND POSSIBLE ACTION**
   a. **Draft Habitat Assessment Guidelines for Significant Natural Resources (SNR)**
7. **CONSIDERATION OF MINUTES**
   a. **Oct. 7, 2020**
8. **PLANNING COMMISSION COMMUNICATIONS**
9. **ADJOURN**

Department of Land Use & Transportation · Planning and Development Services
Long Range Planning
155 N. First Ave., Suite 350, MS14 · Hillsboro, OR 97124
Phone: 503-846-3519 · Fax: 503-846-4412
www.co.washington.or.us · lutplan@co.washington.or.us

WASHINGTON COUNTY PLANNING COMMISSION (PC)
MINUTES OF WEDNESDAY, OCT. 7, 2020

ALL PUBLIC MEETINGS ARE RECORDED

1. CALL TO ORDER: 1:30 p.m. Virtual Zoom meeting

The meeting was called to order by Chair Petrillo.

2. ROLL CALL

PC Members Present: Ian Beaty, Mark Havener, Deborah Lockwood, Anthony Mills, Jeff Petrillo, Sushmita Poddar and Matt Wellner; Absent: Eric Urstadt

Staff Present: Andy Back, Planning and Development Services (PDS), Theresa Cherniak, Michelle Miller, Susanne Savin, Carine Arendes, Todd Borkowitz and Susan Aguilar, Long Range Planning (LRP); Jacquilyn Saito, County Counsel

3. DIRECTOR'S REPORT

Andy Back, Manager of PDS:

- The Board will hold a work session Oct. 20 to discuss PC District 3 candidates and will take action on this appointment at the Nov. 17 Board meeting.
- An online recording of the OAPA Planning Commissioner Training from Sept. 16 is available for viewing by PC members. Please let staff know if you are interested in accessing it.

<u>Upcoming PC Meetings</u>

- Oct. 21 and Nov. 4 (Staff has no items scheduled and recommended cancelling).
- Nov. 18 (via Zoom; 1:30 p.m. start)
  - Significant Natural Resources (SNRs) Habitat Assessment Guidelines
  - Work session topic TBD

4. ORAL COMMUNICATIONS
(none)

5. PUBLIC HEARING

a. A-Engrossed Ordinance No. 869 – Significant Natural Resources (SNRs) cont. from Sept. 16
Michelle Miller, Senior Planner with the LRP Community Planning group, provided a PowerPoint presentation to the PC on the proposed ordinance. It contained a brief overview of the ordinance, description of the ordinance's context and objectives, recommended changes for engrossment and public input received, past PC discussions and the project timeline.

Staff Recommendation

- Conduct the public hearing on A-Engrossed Ordinance No. 869 and hear oral testimony.
- Recommend approval of A-Engrossed Ordinance No. 869 to the Board as proposed by staff.

PC Questions and Comments

- Questions about the factors controlling the effective date of the ordinance and moving forward versus waiting until May 2021.
- An opinion that the proposed minimum preservation areas are materially different from the "should not seriously interfere" intent for SNRs.
- Question about the proposed change in the threshold distance for a required SNR assessment from 150 to 100 feet.
- Questions about public comments received, including how many comments were in favor of the ordinance versus in opposition and whether they contained feedback from any development applicants with sites containing or impacted by SNRs.
- A question about whether applicants could request an exception to the injunction in the interim if the ordinance was delayed until Spring 2021.
- A comment that the Board Chair wanted the PC to focus on whether the ordinance has clear and objective standards to satisfy the Enforcement Order.

Written Testimony

- Blaine Ackley
- Tomas and Masako Jankovsky
- Ashley Short – Tualatin Riverkeepers
- Tanya Rosencrance
- Fran Warren
- Brent Campbell
- Mary Manseau
- Paul Whitney
- Pat Forsyth
- Dale Feik, Chair – Washington County Citizen Action Network (WC CAN)
- Atsuko Rothberg
- Kenneth Dobson, Attorney at Law
- Marta Amar
- Maria Choban
- Elizabeth Silver
- Cesar Grandjean
- Pat Sandquist
- Peggy Erick
- Sheri Hiefield
- Sallie Fogarty
- Mallory Hiefield
- Brittyn Lindsey
- Matt Hiefield
- Anne Ashton Goldfeld
- Shelley Signett
- Cindy Cuellar
- Fuhua Xu
- Masao Jankovsky
- Jodi Bean
- Terrace Strand
- Maria Fernandez-Diaz
- Jim Long, Chair – CPO 4M

Oral Testimony

- Dale Feik, Chair – WC CAN (3363 Lavina Drive, Forest Grove, OR)
  - Shared a statement from James Hansen on climate change included with written testimony.
  - Highlighted concern about the amount of land not being preserved.

  - Stressed that trees are important to the earth and that forests are being affected by wildfires due largely to climate change.
  - Supports postponing this ordinance.
  - Supports applying a 250-foot threshold for required SNR assessments.

- Jim Long, Chair of CPO 4M (10655 SW Hall Boulevard, Tigard, OR)
  - Indicated CPO 4M and other Citizen Participation Organizations (CPOs) will meet after the Board hearings on A-Engrossed Ordinance No. 869 and will not have time to review it.
  - Recommended the ordinance be postponed until 2021.
  - Reiterated questions and statements from his written testimony on the ordinance and highlighted written testimony on A-Engrossed Ordinance No. 869 submitted by others.

PC Deliberations

- Regarding ordinance timing, it was noted that the Board cannot further engross this ordinance beyond the proposed A-Engrossed Ordinance No. 869 this calendar year, and a voter approved change to the County Charter could allow for Board consideration of this ordinance as soon as January 2021 should the Board not take action on it this year.
- Some PC members noted PC deliberations should focus on clear and objective standards relevant to the Enforcement Order and injunction.
- Comments were made that:
  - The proposed engrossment has been vastly improved due to feedback from the PC and the general public and should move forward. The process has resulted in a defensible and workable ordinance.
  - The proposed engrossment needs to be adopted to lift the development injunction so projects can continue, noting additional costs to development will result in higher housing costs.
  - While the proposed minimum preservation percentages would make Community Development Code (CDC) Section 422 more clear and objective, one member expressed the opinion that the minimums are inconsistent with an overall intent of protecting SNRs.
  - The County's Comprehensive Plan prescribes housing affordability and Goal 5 resource protection, and part of the PC's role is to advise toward balancing these goals.
  - The PC showed its commitment to public participation through holding four hearings on this ordinance. This extensive public involvement was a primary reason for the PC's recommendation for Board approval of the engrossed ordinance.
- At least one PC member indicated interest in preserving natural resources to the maximum extent, for current and future generations and that the County should set an example for other jurisdictions in the region to follow. Other PC members noted the PC was not tasked with a broader review or going beyond development of clear and objective standards.

Final Vote

Commissioner Mills motioned to recommend Board adoption of Ordinance No. 869 as engrossed by the Board of Commissioners [A-Engrossed Ordinance No. 869]. Commissioner Havener seconded the motion. **Vote: 5-2. Motion passed**.

Yes: Beaty, Havener, Mills, Petrillo and Wellner; **No**: Lockwood and Poddar

6. CONSIDERATION OF MINUTES

- **Aug. 19, 2020**
  Commissioner Petrillo moved to approve the Aug. 19, 2020 PC meeting minutes. **Vote: 8-0. Motion passed.**

- **Sept. 2, 2020**
  Commissioner Petrillo moved to approve the Sept. 2, 2020 PC meeting minutes. **Vote: 8-0. Motion passed.**

7. PLANNING COMMISSION COMMUNICATION

Discussion of possible Work Session topics:

- 2020-21 LRP Work Program update
- Oregon's Statewide Planning Goals
- Planning by other local jurisdictions update (particularly UGB expansion areas)
- Roberts Rules of Order

Chair Petrillo moved to cancel the Oct. 21 and the Nov. 4 PC meetings. **Motion passed**.

8. ADJOURN: 3:30 p.m.

Jeff Petrillo, Chair	Andy Back, Secretary
Washington County Planning Commission	Washington County Planning Commission

Minutes approved this _____ day of _____, 2020

Submitted by LRP Staff

WASHINGTON COUNTY
OREGON

Nov. 25, 2020

To: Washington County Planning Commission

From: Andy Back, Manager
Planning and Development Services

Subject: **Proposed Habitat Assessment Guidelines – Supplemental to A-Engrossed Ordinance No. 869 regarding Significant Natural Resources**

STAFF REPORT

For the Dec. 2, 2020 Planning Commission Meeting

I. STAFF RECOMMENDATION

Consider the proposed Habitat Assessment Guidelines, a technical document implementing portions of Community Development Code (CDC) § 422 (Significant Natural Resources) and recommend adoption to the Board of Commissioners (Board).

II. OVERVIEW

Habitat Assessment Guidelines (Guidelines) are proposed to implement portions of CDC § 422 (Significant Natural Resources) recently adopted by the Board through A-Engrossed Ordinance No. 869. The effective date of the ordinance was set as Dec. 15 to coincide with expected adoption of the Guidelines via Resolution and Order (R&O) by the Board. Starting Dec. 15, property owners may submit applications under the revised regulations.

While not required for technical guidelines of this nature, the Board requested the Planning Commission (PC) consider the Guidelines prior to Board action. A PC work session introducing PC members to the concept of habitat assessment and providing the regulatory context for the technical Guidelines was held Nov. 18. A question for the PC's review is whether the technical guidelines provide adequate information to help implement the specific new code requirements.

Department of Land Use & Transportation
Planning and Development Services • Long Range Planning
155 N First Avenue, Suite 350, MS 14, Hillsboro, OR 97124-3072
phone: 503-846-3519 • fax: 503-846-4412
www.co.washington.or.us/lut • lutplan@co.washington.or.us

Notification

This staff report, including the draft Guidelines, was published on the PC webpage Nov. 25, one week prior to the Dec. 2, 2020 PC meeting. At the request of the PC, links to the documents were also included on the land use ordinance webpage and a Constant Contact notice was provided to those on the interested parties lists for the ordinance and for land use ordinances in general.

III. BACKGROUND

The Board adopted A-Engrossed Ordinance No. 869 on Oct. 27, 2020. The newly adopted standards included changes to § 422 that require applicants complete a Habitat Assessment to identify, evaluate and rate habitat values within field-verified, habitat-related SNRs (*Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat*). New criteria also specify the Guidelines will provide the technical methodology for delineating *Upland/Wildlife Habitat*.

Draft Guidelines were developed by staff with the assistance of an environmental consultant, David Evans and Associates (DEA). The Guidelines detail how to complete a Habitat Assessment and will ensure consistent preparation and review. Guidelines will be administered comparable to technical methodologies used for other disciplines, such as traffic engineering and grading. These technical guidelines, in conjunction with the changes in § 422 adopted via A-Engrossed No. Ordinance 869, replace a 1998 Director's Interpretation on § 422.

IV. ANALYSIS

Need for Habitat Assessment and Guidelines

On site field verification and assessment at the **site** level was not typically done when SNRs were designated. The SNR maps in the community plans and Rural/Natural Resource Plan (RNRP) were developed in 1983. Mapping technology, aerial photography, LIDAR and GIS have advanced considerably since that time, providing more accurate information than was available when the first natural resource inventory was conducted. In addition, the manual process used at the time the maps were developed may have resulted in some inaccuracies based on the countywide scale used to illustrate the data. While the inventory and mapping may be dated, the revised § 422 3.1 clarifies how site-specific field verification of any SNRs is to be done. This provides the most updated and timely information about actual site conditions.

Therefore, when there are mapped SNRs on or within 100' of a development site, the CDC requires field verification of their boundaries using methods outlined in the CDC or the Guidelines (§ 422-3.1). When *Water-Related Fish and Wildlife Habitat* and/or *Upland/Wildlife*

Habitat is present, a Habitat Assessment using the method provided in the Guidelines is also required (§ 422-3.5).

Information in the Habitat Assessment, submitted as part of the land use application, will be used during development review to ensure compliance with § 422 requirements. In the urban area, preservation of a portion of the *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat* located outside the Clean Water Services (CWS) Vegetated Corridor is required under § 422-5 (Tree Preservation in Habitat Areas). In the rural area, an analysis of the development's impact on habitat and mitigation is required under § 422-7 (Water-Related Wildlife Habitat or Upland/Wildlife Habitat outside the UGB).

Regulatory Context

The Guidelines do not create new policies or regulations, but rather are limited to implementing existing regulations. More specifically, they provide technical guidance for how to complete the submission requirements of § 422-3. They are intended to be clear and objective. Portions of the instructions require technical skill or expertise to complete. The key question for the PC to consider for their review is whether the technical guidelines provide adequate information to help implement the specific new code requirements.

Structure and Content of the Guidelines

The draft Guidelines are included as Attachment A. They start with a list of submittal materials, followed by instructions for completing each CDC requirement. Each required task results in identified products that comprise one or more components of the Habitat Assessment Report. Definitions for technical terms are provided at the end. Additional resources such as cited references and sources of additional related information are included in an appendix.

<u>Field Verification</u> (Part II of the Guidelines)

The first CDC requirement included in the Guidelines is field verification of the *Upland/Wildlife Habitat* boundary based on the outer drip-line of the tree canopy (§ 422-3.1 C.). The original inventory relied primarily on aerial photographs showing the presence of tree canopy to designate areas as *Upland/Wildlife Habitat.* The methodology in the Guidelines reflects the original focus on trees to provide an accurate determination of the boundary of the resource on the development site based on objective measures. The methodology identifies where forested areas are located on the development site based on (1) tree size, as measured by tree diameter and height, and (2) density of growth, as measured by overlapping canopy cover or canopy closure.

<u>Habitat Assessment</u> (Part III of the Guidelines)

The second CDC requirement is identification (size, extent, type), evaluation and rating of the habitat within the field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat.* This requirement is separated into two tasks:

1. Identification and evaluation of the plant communities that comprise the wildlife habitat on the site.
2. Rating of the habitat values provided by those plant communities.

Identifying and evaluating the various plant communities within the field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat* relies on the use of a sampling methodology. The Guidelines provide two similar but separate and distinct approaches to the sampling process depending on the resource type. The presence of native plant species and large trees is a factor for both resources while additional attributes are incorporated into the *Upland/Wildlife Habitat* method.

Within areas also regulated by CWS – typically within the *Water-Related Fish and Wildlife Habitat* – the sampling methodology and rating criteria are consistent with CWS requirements. That methodology relies on protocols developed by the U.S. Army Corps of Engineers (USACE) and used in the field since 1987 to meet state and local jurisdictional requirements. Due to this, the CWS Site Assessment may be used for the delineated portions of *Water-Related Fish and Wildlife Habitat* to describe the habitat condition. A CWS Site Assessment is also familiar to most applicants that develop property within CWS' service boundary. Assessing and describing the habitat in the same manner will reduce overlap with other agencies' submittal information, standards and review processes.

The methodology for *Upland/Wildlife Habitat* also includes habitat function provided by larger trees, native species and habitat connectivity. Wildlife habitat quality benefits from connectivity with other wildlife habitat areas for multiple reasons. Connectivity is essential for species to disperse and colonize other areas, increase genetic diversity, and respond to risks such as climate change, predators, and habitat disturbance.[1] Forested wildlife habitat quality has been shown to benefit from the prevalence of large-diameter trees.[2] Native species are particularly important to consider for wildlife habitat when an applicant is proposing to develop a site, because native species are adapted to the local soil and climate conditions and the native wildlife species.[3]

Definitions (Part IV of the Guidelines)
Since many of the terms in the Guidelines are technical, a list of definitions is included as part of the document.

Agency Review
Staff wildlife biologists at CWS and the Oregon Department of Fish and Wildlife (ODFW) reviewed a rough draft of the Guidelines. Comments identified areas where clarity was needed, recommendations for changes and concurrence with proposed processes.

---

[1] Abrahms et al. 2017; Beier 2018; Beier and Loe 1992; Burbrink et. al 1998; Constantine et al. 2005; McEuen 1993; Mudd 1975; Semlitsch and Bodie 2003.

[2] Hammer, T.E. and Nelson, S.K. 1995; Keeton and Franklin 2005; Meyer et. al. 2005.

[3] National Resource Conservation Service 2020; US Forest Service 2020.

Unsurprisingly, the focus of each agency's comments reflected their areas of expertise, so that CWS comments focused on segments about *Water-Related Fish and Wildlife Habitat* while ODFW had more comments on those related to *Upland/Wildlife Habitat.* Both agencies will have the opportunity to comment on the final draft Guidelines if they choose.

Importantly, neither agency expressed concern with the proposed sampling protocols. Regarding the rating categories, ODFW noted habitat classified as "degraded" may still provide functional habitat for wildlife. While the initial condition of habitat on the development site may inform site planning, in the County context, any habitat identified for preservation must ultimately meet the standard for good condition, regardless of the initial condition. Based on comments received from ODFW, staff modified the Guidelines to treat nonnative and native species similarly during the delineation process.

Summary

A-Engrossed Ordinance No. 869 modified the development review process for sites with SNRs. The proposed Guidelines will implement the new § 422-3 submittal requirements and provide for a consistent methodology for the delineation of *Upland/Wildlife Habitat* and Habitat Assessments on sites with *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat*. The proposed Guidelines will be considered for adoption by the Board on Dec. 15.

List of Attachments
The following attachments identified in this staff report are provided:

Attachment A: Draft Habitat Assessment Guidelines
Attachment B: Citations in support of Habitat Assessment Guidelines development

ATTACHMENT A

WASHINGTON COUNTY
OREGON

Nov. 25, 2020

DRAFT HABITAT ASSESSMENT GUIDELINES

Summary

Community Development Code (CDC) Section (§) 422 contains regulations for development on sites with mapped Significant Natural Resources (SNRs). SNRs are designated on Significant Natural and Cultural Resources maps in community plans and the Goal 5 Resources map in the Rural Natural/Resource Plan.

The following Habitat Assessment Guidelines (Guidelines) implement requirements of CDC § 422 and provide technical guidance for applicants to complete the field verification process for *Upland/Wildlife Habitat* (§ 422-3.1 C.) and a Habitat Assessment for *Upland/Wildlife Habitat* and *Water-Related Fish and Wildlife Habitat* areas (§ 422-3.5). If there is a discrepancy or inconsistency between the CDC and these Guidelines, the CDC provisions shall rule.

These technical Guidelines are supplemental to general application instructions and application submittal criteria in the CDC. Technical terms defined in Part IV (Definitions) are underlined.

Organization

These Guidelines are organized into the following parts:

Department of Land Use & Transportation
Planning and Development Services • Long Range Planning
155 N First Avenue, Suite 350, MS 14, Hillsboro, OR 97124-3072
phone: 503-846-3519 • fax: 503-846-4412
www.co.washington.or.us/lut • lutplan@co.washington.or.us

I. SUBMITTAL MATERIALS

County staff will rely on the materials in the Habitat Assessment to identify the location and attributes of the habitat and to determine compliance with § 422-5 (Tree Preservation in Habitat Areas), including the need for a Preservation Area and any required planting plans.

Applicants shall include the following materials in a Habitat Assessment Report and submit with the land use application. Materials are described in more detail in Parts II and III of these Guidelines:

1. **Field Verification Site Plan**. A site plan showing the field-verified boundaries of all SNRs on the development site including:
   (a) *Water Areas and Wetlands* (§ 422-3.1 A.)
   (b) *Water-Related Fish and Wildlife Habitat* (§ 422-3.1 B.)
   (c) *Upland/Wildlife Habitat* (Part II, below)

2. **Habitat Assessment Narrative and Site Plan**. Materials used to identify, evaluate and rate the habitat, as follows:

   (a) A narrative describing the landscape setting, site topography, notable alterations or conditions, anecdotal wildlife observations, and plant community boundaries and types. Narrative shall also include rationale for rating of habitat.

   (b) Existing Habitat Conditions Site Plan. A site plan showing:
   (1) Location of sample points delineating the field-verified SNR boundaries.
   (2) Location of Good, Marginal and Degraded habitat within field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat.*

   (c) Data Collection sheets. One sheet is required for each sample point, therefore multiple sheets may be required.

3. **Additional documentation as required**. Additional materials may be requested by staff, depending on the specific proposal and development site conditions. This would include providing the size of *Upland/Wildlife Habitat* and *Water-Related Fish and Wildlife Habitat* outside any CWS Vegetated Corridor when § 422-5 applies.

Note: All figures must comply with site plan criteria in § 203-4.2 E. and include:

- Property lines and dimensions.
- Topographic lines, as applicable.
- North arrow and scale.

II. FIELD VERIFICATION OF UPLAND/WILDLIFE HABITAT BOUNDARY

§ 422-3.1 C.: *Upland/Wildlife Habitat*. Identification of limits of resources based on delineation of the outer drip-line boundary of the tree canopy cover identified in Section 422-3.4 (tree inventory) and described in Section 422-3.5 (Habitat Assessment).

Product: Site plan delineating the *Upland/Wildlife Habitat* boundary.

Overview

The applicant shall determine the limits of the *Upland/Wildlife Habitat* on the subject parcel through site evaluation and survey following the methodology outlined below.

Methodology

1. **Identify preliminary area(s) for resource delineation.**
   Preliminarily identify forested areas consistent with mapped *Upland/Wildlife Habitat* on the development site. Identification may rely on site analysis as required by § 404 (Master Planning), tree inventory when required by § 407 (Landscape Design), aerial[1] or site photography, site observations, GIS, or LiDAR.

2. **Field verify the presence and location of the *Upland/Wildlife Habitat* area.**
   Field verify forested areas where crown canopy closure is 60% or greater and comprised of trees 20' or higher and 6" DBH or greater. Tree diameter, height and canopy closure can be visually estimated. An estimate of full leaf-out condition may be used when necessary due to the season. When a portion of a site is inaccessible, aerial photography[1] may be used to supplement field delineation.

3. **Delineate outer boundary of the *Upland/Wildlife Habitat*.**
   Identify on a site plan the outer drip-line of the tree canopy of the forested area identified in Step 2 above. Include within the outer drip-line of the tree canopy:
   - Canopy of trees that meet the minimum size thresholds (6" DBH or larger and 20' height or greater) but do not have a 60% canopy closure when contiguous to/overlapping with canopy meeting the closure threshold.
   - Trees with a diameter of less than 6" DBH or height of less than 20', including dead or dying trees, when enclosed by trees exceeding these minimums or with overtopping canopy.

[Diagrams/sketches may be provided for clarity]

[1] Plane or satellite derived aerial photography is acceptable. Drone aerial photography obtained in compliance with Federal Aviation Administration (FAA) rules may also be used. Aerial photographs must include source citation and be dated within 36 months of application.

How to address common site characteristics

a) **Portions of site have been landscaped or converted to gardens.** Landscaping or gardens beneath or within the outer drip-line of the forest canopy do not affect the delineation. Nonnative trees planted as landscaping are excluded from the *Upland/Wildlife Habitat* delineation.

b) **Entire site is forested and is of similar qualitative value.** If the entire development site is covered with dense forest, such that all trees of 6" DBH or greater are at least 20' in height and canopy closure rates are 60% or greater, sampling is allowed. Site plan should show the extent of the forested area, and the applicant should provide at least one representative measured sample plot of 30' in diameter that includes a spherical densiometer value and measured trunk diameter for all trees in the sample plot.

c) **Site contains multiple distinct *Upland/Wildlife Habitat* areas.** When multiple areas of *Upland/Wildlife Habitat* occur on a development site, delineate each area, following the Steps above.

III. HABITAT ASSESSMENT

§ 422-3.5: A Habitat Assessment that identifies the size, extent and type of wildlife habitat located in the field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat*. The Assessment will evaluate and rate the different habitat values using the methodology outlined in the Habitat Assessment Guidelines.

Task 1. Identify and Evaluate Wildlife Habitat

Products**:** Site plan with field-verified resource delineations showing the location of different plant communities, sample plot(s) and associated Data Collection sheets. Narrative describing site conditions and identified plant communities.

Overview

Once SNR boundaries have been delineated, a Habitat Assessment is required for the field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat.* The Habitat Assessment shall identify the size, type and extent of the wildlife habitat within these areas and evaluate the on-site plant communities, including native, nonnative, and invasive vegetation. Data shall be collected for **each** plant community and will inform the ratings process.

For *Water-Related Fish and Wildlife Habitat* documented in a CWS Site Assessment, that report may be used to satisfy these requirements and included in the County application.

Methodology

1. **Determine plant communities.** Within field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat,* determine plant communities present on-site.

   (a) Within each plant community, establish a representative sample plot from which to visually evaluate characteristics.

   (b) Provide at least one representative sample plot per acre per plant community and show sample plot locations on site plan with field-verified resource delineations. Additional plant communities require additional sample plots.

   (c) Sample plots shall use a 10-foot radius plot for herbs (nonwoody vegetation) and a 30-foot radius plot for woody vegetation (trees, shrubs/saplings and woody vines).

2. **Record species and frequency in plant community.** Record the plant species by stratum (tree, sapling/shrub, herb, woody vine). Estimate the coverage of each species that occupies at least 5% of the total coverage within plant community.

3. **Record cover composition and additional attributes.**
   This information will inform the rating of the habitat in Task 2.

   (a) Cover composition. For each plant community, determine the percent cover provided by native, nonnative, and invasive vegetation, utilizing the species listings in the most current version of the East Multnomah Soil & Water Conservation District Native Plant Database or the applicable U.S. Department of Agriculture (USDA) PLANTS Database for each stratum. Record the resulting total native percentage cover in each sample plot.

   (b) Additional attributes. Within field-verified *Upland/Wildlife Habitat* only*,* record the following:
   - Connectivity (contiguous or abutting) to a Riparian Corridor, CWS Vegetated Corridor, or Significant Natural Area.
   - Percentage of trees that are 24" DBH or greater
   - Presence, location and number of the following native plant species, including whether the species comprises at least 20% of canopy cover within the plant community where it occurs, either individually or cumulatively:
     - Oregon white oak (*Quercus garryana*)
     - Pacific yew (*Taxis brevifolia*)
     - Pacific madrone (*Arbutus menziesii*)
     - Ponderosa pine (*Pinus ponderosa*)
     - Western flowering dogwood (*Cornus nuttallii*)

[Diagrams/sketches may be included in the Guidelines for clarity]

Task 2. Rate the Habitat Values

Products: Site plan showing the location of Good, Marginal and Degraded habitat within field-verified *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat*. Narrative describing rationale for boundaries and rating.

Overview

This task rates the quality (i.e., good, marginal, degraded) of wildlife habitat resources on-site within the delineated *Water-Related Fish and Wildlife Habitat* and the *Upland/Wildlife Habitat*.

Methodology

The methodology for rating the habitat values differs slightly between the types of habitat. If the site contains **both** *Water-Related Fish and Wildlife Habitat* and *Upland/Wildlife Habitat*, one Existing Habitat Conditions site plan and written narrative should be prepared.

A. **Water-Related Fish and Wildlife Habitat**

This category includes areas within the CWS Vegetated Corridor and/or that meet the definition of Riparian Corridor in § 106-185. For consistency, CWS methods for evaluating the Vegetated Corridor condition will be used to evaluate both types of areas as detailed below. For the delineated portions of *Water-Related Fish and Wildlife Habitat* that have been documented in a CWS Site Assessment, that report may be used to meet the requirements of this section and should be included in the County application.

1. **Rate condition of plant communities.** Within the *Water-Related Fish and Wildlife Habitat* area, applicants shall use the following criteria to rate the condition of each plant community type found in Task 1 above:
   (a) Good: More than 80% of the plant community consists of a combination of native trees, shrubs and groundcover with more than 50% tree canopy cover (area measure).
   (b) Marginal: Combination of native trees, shrubs and groundcover covering 50% or more of the community and 25% or greater tree canopy exists (area measure).
   (c) Degraded: Combination of native trees, shrubs and groundcover covering less than 50% of the community and less than 25% tree canopy exists (area measure).

2. **Prepare Existing Habitat Conditions site plan and narrative.** Based on the plant community sample plots established in Task 1, and the evaluation completed in Step 1 above, prepare Existing Habitat Conditions site plan that demonstrates the

location of good, marginal and degraded habitat within the field-verified *Water-Related Fish and Wildlife Habitat*. Address rating(s) of identified plant communities and any rationale for the boundaries in written narrative.

B. **Upland/Wildlife Habitat**

1. **Rate condition of plant communities.** Within the *Upland/Wildlife Habitat* area, applicants shall use the following evaluation criteria to rate the condition of each plant community type found in Task 1 above:

   (a) Good: More than 80% of the plant community is covered by/consists of native plants (may be a combination of trees, shrubs and groundcover) or meets Marginal rating for cover of native plants but provides at least two Additional Attributes (see 2, below).

   (b) Marginal: 50% to 80% coverage by native plants or meets Degraded rating for cover of native plants but provides at least one Additional Attribute.

   (c) Degraded: Less than 50% coverage by native plants and no Additional Attributes.

2. **Additional attributes** (refer to Task 1, Step 3b, above).

   (a) The *Upland/Wildlife Habitat* is contiguous with or abutting a Riparian Corridor, CWS Vegetated Corridor, or Significant Natural Area.

   (b) At least 25% of the trees within the site's *Upland/Wildlife Habitat* are 24" or greater DBH.

   At least 20% of the plant cover within the plant community where they occur, either individually or cumulatively, are comprised of:
   - Oregon white oak (*Quercus garryana*)
   - Pacific yew (*Taxis brevifolia*)
   - Pacific madrone (*Arbutus menziesii*)
   - Ponderosa pine (*Pinus ponderosa*)
   - Western flowering dogwood (*Cornus nuttallii*)

3. **Prepare Existing Habitat Conditions site plan and narrative.** Based on the plant community sample plots established in Task 1, and the evaluation completed in Steps 1 and 2 above, prepare Existing Habitat Conditions site plan that demonstrates the location of good, marginal and degraded habitat within the field-verified *Upland/Wildlife Habitat* and the location of any additional attributes. Address rating(s) of identified plant communities and any rationale for the boundaries in written narrative.

[Diagrams/sketches may be included in the Guidelines for clarity]

IV. DEFINITIONS

Any word or term not herein defined shall be used as defined by Webster's New World College Dictionary.

Canopy. The outer extent of the limbs and vegetative growth (leaves and flowering parts) of the tree.

Canopy closure. The portion of the sky obscured by vegetation, including branches, leaves and limbs in hemispheric view from a fixed point on the ground.

Canopy cover. A measure of the space of a given land area covered by the crown and limbs of trees as viewed vertically.

DBH. Diameter of tree at breast height, measured approximately 4' from the ground.

Development. Any man-made change to improved or unimproved real estate or its use, including but not limited to construction, installation or change of land or a building or other structure, change in use of land or a building or structure, land division, establishment, or termination of right of access, storage on the land, tree cutting, drilling, and site alteration such as that due to land surface mining, dredging, grading, construction of earthen berms, paving, improvements for use as parking, excavation or clearing. (CDC § 106-57)

Development site. A lot or parcel or combination of lots or parcels upon which any development, as defined by Section 106-57, occurs. (CDC § 106-60)

Drip-line. The outermost edge of a tree's canopy; when delineating the drip-line on the ground, it will appear as an irregularly shaped circle defining the canopy's perimeter.

Drip-line boundary. The outermost edge of the canopy of an individual tree or the canopy of a group of trees; when delineating the drip-line on the ground, it will appear as an irregular shape defining the canopy's perimeter. (CDC § 106-68)

Ecological functions. The primary biological and hydrologic characteristics of healthy wildlife habitat, including size of habitat area, amount of habitat with interior conditions, connectivity of habitat to water resources, connectivity to other habitat areas, and presence of unique habitat types.

Full leaf-out condition. Maximum leaf development in deciduous trees – extending from spring until autumnal leaf drop.

Plant community. A grouping of dominant plant species that often occur growing together in a uniform physical environment (soil type, topography, climate and disturbance) or habitat.

Preservation Area(s). Those areas of the development site that are to be retained in or enhanced to Good Condition as required by CDC § 422-5.

Spherical densiometer. A tool for systematically measuring canopy closure.

Stratum. Vegetative layer – divided by the U.S. Army Corps of Engineers and the Oregon Department of State Lands into the following four categories: trees, saplings/shrubs, herbaceous, woody vine.

Vegetated Corridor. (CWS VC) Lands located within Clean Water Services boundary that meet the definition in Chapter 3 of the "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor. Vegetated corridors are generally preserved and maintained lands intended to protect the water quality functions of water quality sensitive areas. (CDC § 106-215)

Vegetation:

- Herbaceous. A nonwoody plant.
- Invasive. Nonnative plant species with the potential to cause ecological and/or economic harm. These are often defined or listed by local agencies and jurisdictions.
- Native. Plant species historically grown and/or evolved within a region without human introduction or management.
- Nonnative. Plant species that did not evolve in a given habitat, but which do not cause ecological and/or economic harm, instead having a benign to beneficial impact on the ecosystem.
- Riparian. Plants occurring on land parallel to or at the margins of aquatic habitats.
- Upland. Plant species that almost always occur within non-wetland areas that lack the combination of hydrophytic vegetation, hydric soils, and hydrology which define a wetland.
- Woody. Trees, saplings, shrubs, and woody vines.

APPENDIX

Sources Cited

Clean Water Services. 2019 (April). Design and Construction Standards, R&O 19-5, Chapter 3: Sensitive Areas and Vegetated Corridors. http://cleanwaterservices.org/media/2450/final-chapter-3.pdf

East Multnomah Soil & Water Conservation District. No date. Native Plant Database. http://emswcd.org/native-plants/native-plant-database/

U.S. Department of Agriculture. 2020. PLANTS Database. https://plants.sc.egov.usda.gov/java/

Useful Links

CWS Sensitive Areas and Vegetated Corridors assessments. To look up requirements: https://cws.maps.arcgis.com/apps/webappviewer/index.html?id=a2a448a5079d4dc18f78383af829f247 or http://cleanwaterservices.org/permits-development/step-by-step-process/

Native Plants/Invasive Plants

- Native plants are listed in the East Multnomah Soil & Water Conservation District's Native Plant Database: http://emswcd.org/native-plants/native-plant-database/
- USDA PLANTS Database: https://plants.sc.egov.usda.gov/java/
- The complete list of invasive plants is listed in the Oregon Department of Agriculture's Oregon Noxious Weed Profiles: https://www.oregon.gov/oda/programs/weeds/oregonnoxiousweeds/pages/aboutoregonweeds.aspx
- Clean Water Services Identifying Invasive Plants brochure: https://www.oregon.gov/oda/programs/Weeds/OregonNoxiousWeeds/Pages/AboutOregonWeeds.aspx and http://cleanwaterservices.org/media/1306/invasive-plant-handout.pdf

Resource for planting and maintaining native plants

- Portland Trees. No date. On-Site Tree Preservation. https://www.portlandoregon.gov/trees/article/520568
- Tualatin Soil and Water Conservation District. No date. Native Plants (resources for planting and maintaining native plants). https://www.swcd.net/urban/backyard-habitat/native-plants/

ATTACHMENT B

CITATIONS IN SUPPORT OF HABITAT ASSESSMENT GUIDELINES DEVELOPMENT

Abrahms, B., Sawyer, S.C., Jordan, N.R., McNutt, J.W., Wilson, A.M., and Brashares, J.S. 2017. Does wildlife resource selection accurately inform corridor conservation? J Appl Ecol 54:412–422. https://doi.org/10.1111/1365-2664.12714

Beier, P. 2018. A rule of thumb for widths of conservation corridors. Conserv Biol 33: 976–978. https://doi.org/10.1111/cobi.13256

Beier P., and Loe, S. 1992. A checklist for evaluating impacts to wildlife movement corridors. Wildl Soc Bull 20:434–440. https://doi.org/10.2307/3783066

Burbrink, F.T., Phillips, C.A., and Heske, E.J. 1998. A riparian zone in southern Illinois as a potential dispersal corridor for reptiles and amphibians. Biological Conservation 86:107-115.

Constantine, N.L., Campbell, T.A., Baughman, W.M., Harrington, T.B., Chapman, B.R., and Miller, K.V. 2005. Small mammal distributions relative to corridor edges within intensively managed southern pine plantations. Southern Journal of Applied Forestry 29:148-151.

Hammer, T.E. and Nelson, S.K. 1995. Characteristics of marbled murrelet nest trees and nesting stands. In: Ralph CJ, Hunt GL Jr, Raphael MG, Piatt JF, editors. Ecology and conservation of the marbled murrelet. General Technical Report PSW-152. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Albany, California.

Keeton, W.S. and Franklin, J.F. 2005. Do remnant old-growth trees accelerate rates of succession in mature Douglas-fir forests? Ecological Monographs 75: 103–118.

McEuen, A. 1993. The Wildlife Corridor Controversy: A Review. Endangered Species Update, 10 (11 & 12).

Meyer M.D., Kelt, D.A., and North, M.P. 2005. Nest trees of northern flying squirrels in the Sierra Nevada. Journal of Mammalogy 86: 275–280.

Mudd, D.R. 1975. Touchet River study: Part 1. 1-43. 1975. Olympia, WA, Washington Department of Fish and Game. Ref Type: Report.

Potter, K.M. and Conkling, B.L. 2020. Forest health monitoring: national status, trends, and analysis 2019. Gen. Tech. Rep. SRS-250. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. https://www.srs.fs.usda.gov/pubs/29282

Semlitsch, R.D. and Bodie, J.R. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219-1228.

USDA Natural Resources Conservation Service (NRCS). 2020. Wildlife Habitat. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcs143_023553

USDA Forest Service (USFS). 2020. Landscaping for Wildlife. https://www.fs.fed.us/wildflowers/Native_Plant_Materials/Native_Gardening/landscapingforwildlife.shtml