

Wetland Resources

Burlington Workshop

April 28, 2016

Ecology Guidance Documents

- 2004 Rating System (the old one): #04-06-025
 - Rapid assessment tool for categorizing wetlands based on their sensitivity to disturbance, their rarity, our ability to replace them, and the functions they provide
 - Provides information for determining buffer widths and mitigation. It helps us decide what protection is necessary based on the functions an individual wetland is actually providing.
- Volume 1 Synthesis of the Best Available Science (with WDFW): #05-06-006
 - Reviewed more than 17,000 peer-reviewed works
 - Over 1,000 were relevant to management of Washington's freshwater wetlands
 - Described how human impacts affect wetlands
- Volume 2 Guidance based on Volume 1, collaboratively with Local Government Advisory Team (2005): #05-06-008
 - Was focused on a diversified landscape-based approach, including restoration and incentives
 - Identified ways to apply commonly used regulatory measures (appendix 8-C and 8-D)
- Mitigation Guidance, joint with Corps and EPA (2006) will be updated in the next 2 years.
 - Part 1: Agency Policies and Guidance, including ratios: #06-06-11a
 - Part 2: Development Mitigation Plans: #06-06-11b
- Site Selection Guidance (2009): WWA #09-06-032; EWA #10-06-007
 - How to apply a watershed-based approach when selecting sites
 - Choosing between on-site and off-site mitigation
- Small Cities Guidance (2010, 2011, 2012): WWA #10-06-002; EWA #10-06-001
 - Simplified Volume 2 appendices for small cities
 - Easily updated
- Credit/Debit Method (2012): WWA #10-06-011; EWA #11-06-015
 - Tool for estimating whether a plan for compensatory mitigation will adequately replace functions and values lost when a wetland is altered
- ILF Mitigation (2012): #12-06-012, and Advance Mitigation Guidance (2012): #12-06-015
 - Guidance on different approaches to compensatory mitigation
- Update on Wetland Buffers (2013): #13-06-011
 - Refinement of previous knowledge
 - Wider buffers still more effective at protection functions but width only one of several environmental factors
 - Ecology's buffers are protective of the majority of species using wetlands
 - We are reviewing the science and management implications to determine whether to change our guidance, but won't do so for 2015-2018 updates.
- 2014 Rating System (2014): WWA #14-06-029; EWA #14-06-030
 - Landscape factors are more important than previously thought, so these factors have been incorporated into a new scoring system (which subsequently affects buffer tables)
 - It's more scientifically supportable
- 2016 Wetland Guidance for CAO Updates: WWA #16-06-001; EWA #16-06-002
 - No longer just for small cities, but applicable to all jurisdictions, with caveats

Core Team Members Involved in the Production of Volume 2

Andy McMillan, Washington State
Department of Ecology

Douglas Peters, Washington Department of
Community, Trade, and Economic
Development

Dyanne Sheldon, Sheldon & Associates

Erik Stockdale, Washington State Department
of Ecology

Jane Rubey, Washington State Department of
Ecology

Katherine March, Washington Department of
Fish and Wildlife

Sara Noland, 2N Publications

Stephen Stanley, Washington State
Department of Ecology

Teri Granger, Washington State Department
of Ecology

Tom Hruby, Washington State Department of
Ecology

Members of the Local Government Wetlands Advisory Team

Bill Blake, City of Arlington

Bob Landles, City of Everett

Brent Davis, Clark County

Chuck Jones, Douglas County

Dan Cox, Skagit County

Dean Patterson, Yakima County

Debbie Hyde, Pierce County

Douglas Peters, Washington Department of
Community, Trade and Economic
Development

Geoffrey Thomas, City of Redmond

John Marvin, Yakima County

Kim Spens, City of Bellingham

Klaus Richter, King County

Laura Casey, King County

Margaret Clancy, Parametrix

Mike Desimone, Pacific County

Phil Mees, Benton County

Randy Middaugh, Snohomish County

Rob Knable, City of Seattle

Steve Morrison, Thurston County

Teresa Vanderburg, Adolfson Associates

Todd Stamm, City of Olympia

Mitigation Sequencing

RCW 43-21C Washington State Environmental Policy Act (SEPA) and Section 404 of the federal Clean Water Act (CWA)

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- Monitoring the impact and taking appropriate corrective measures.

New Stormwater Language in Wetland Guidance

A wetland or its buffer can be physically or hydrologically altered to meet the requirements of an LID, Runoff Treatment or Flow Control BMP if ALL of the following criteria are met:

- The wetland is classified as a Category IV or a Category III wetland with a habitat score 3-4 points, and
- There will be “no net loss” of functions and values of the wetland, and
- The wetland does not contain a breeding population of any native amphibian species, and
- The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, 5 of Chart 4 and questions 2, 3, 4 of Chart 5 in the “Guide for Selecting Mitigation Sites Using a Watershed Approach,” (available here: <http://www.ecy.wa.gov/biblio/0906032.html>); or the wetland is part of a priority restoration plan that achieves restoration goals identified in a Shoreline Master Program or other local or regional watershed plan; and
- The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing, and
- All regulations regarding stormwater and wetland management are followed, including but not limited to local and state wetland and stormwater codes, manuals, and permits, and
- **Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost would have to be compensated/replaced.**

Stormwater LID BMPs required as part of New and Redevelopment projects can be considered within wetlands and their buffers. However, these areas may contain features that render LID BMPs infeasible. A site-specific characterization is required to determine if an LID BMP is feasible at the project site.

Small Wetland Exemption Language

The following wetlands may be exempt from the requirement to avoid impacts and they may be filled if the impacts are fully mitigated. If available, impacts should be mitigated through the purchase of credits from an in-lieu fee program or mitigation bank, consistent with the terms and conditions of the program or bank. In order to verify the following conditions, a critical area report for wetlands must be submitted.

1. All isolated Category IV wetlands less than 4,000 square feet that:

- Are not associated with riparian areas or their buffers

- Are not associated with shorelines of the state or their associated buffers

- Are not part of a wetland mosaic

- Do not score 5 or more points for habitat function based on the 2014 update to the WA Wetland Rating Systems (WWA Pub. # 14-06-029)

- Do not contain a Priority Habitat or a Priority Area for a Priority Species identified by the Washington Department of Fish and Wildlife, do not contain federally listed species or their critical habitat, or species of local importance identified in Chapter XX.XX.

2. Wetlands less than 1,000 square feet that meet the above criteria and do not contain federally listed species or their critical habitat are exempt from the buffer provisions contained in this Chapter.

Recommended Language Addressing Agricultural Activities in Wetlands

Existing and ongoing agricultural activities, provided that they implement applicable Best Management Practices (BMPs) contained in the latest editions of the USDA Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG); or develop a farm conservation plan in coordination with the local conservation district. BMPs and/or farm plans should address potential impacts to wetlands from livestock, nutrient and farm chemicals, soil erosion and sediment control and agricultural drainage infrastructure. BMPs and/or farm plans should ensure that ongoing agricultural activities minimize their effects on water quality, riparian ecology, salmonid populations, and wildlife habitat.

Mapping Tools

USFW NWI:

<http://www.fws.gov/wetlands/Data/Mapper.html>

For more info: <http://www.fws.gov/wetlands/>

Ecology Coastal Atlas:

<https://fortress.wa.gov/ecy/coastalatlas/tools/map.aspx>

For more info: <https://fortress.wa.gov/ecy/coastalatlas/pages/About.aspx>

WDFW PHS:

<http://apps.wdfw.wa.gov/phsontheweb/>

For more info: <http://wdfw.wa.gov/mapping/phs/>

Ecology Modeled Wetland Inventory

<http://waecy.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=22edd2e4e7874badbef2a907a3cd4de6>

For more info: <http://www.ecy.wa.gov/programs/sea/wetlands/StatusAndTrends.html>

WDFW High Resolution Change Detection

<http://www.arcgis.com/home/webmap/viewer.html?webmap=ea32b676a2de4c419939f9f70e05298c&extent=-125.3883,46.0985,-118.8185,49.2558>

For more

info: http://wdfw.wa.gov/conservation/research/projects/aerial_imagery/index.html

Other Mapping Tools

USFW Critical Habitat Mapper includes proposed critical habitat. Their proposed critical habitat for Oregon Spotted frogs was modeled using several of the above-mentioned mapping tools, including Ecology's modeled wetland inventory and NWI.

<http://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>

NRCS Web Soil Survey is helpful for identifying hydric soils which are an indicator that a wetland may be present.

<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Historical aerial photos and topo maps. Can also be helpful for identifying where wetlands might occur, where impacts to wetlands might have occurred, comparing past to current conditions. There are also private sources for these--you might have your own favorite aerial or satellite photo web site. The one shown uses government sources.

<http://wagda.lib.washington.edu/Aerials/AerialsViewer.html>

USGS historic topos: <http://historicalmaps.arcgis.com/usgs/>

BLM GLO—government land office maps

https://webmaps.blm.gov/Geocortex/Html5Viewer/Index.html?viewer=orwa_data_viewer

Link to Ecology Wetlands Page and Wetland Contacts

<http://www.ecy.wa.gov/programs/sea/wetlands/index.html>

<http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm>