

Guidance on 2014 Updates to Wetland Rating Systems and Buffers

June 3, 2014

Rick Mraz, PWS
Department of Ecology
Shorelands & Environmental Assistance Program



What's NOT Changing in 2014

- Overall, Ecology's recommended wetland buffer widths are unchanged.

What's Changing?

- Ecology is updating the Washington State wetland rating systems because the 2004 versions no longer represent the most current and best available scientific information.
- The update is based on the 2012 credit/debit method, which was peer reviewed and incorporates new concepts in managing wetlands.
- The credit/debit method was developed because the rating system was being incorrectly used to determine how much mitigation is needed for wetland impacts.

What's Changing?

- Landscape factors are more important than the previous science indicated in determining how a wetland functions.
- These factors have been incorporated into a new scoring system.
- The new rating systems use decision points that are more scientifically supportable.

What's Changing?

- As a result of updating the rating systems, any wetland buffer strategy that uses habitat scores to determine buffer width will need to be adjusted to use the new scores.
- Individual wetland ratings may change, and thus the buffers that apply may be affected.
- **Overall, Ecology's recommended wetland buffer widths are unchanged.**

Update of Wetland Buffer Science

- Ecology recently released an update of the science pertaining to wetland buffers:
- This update was sent out for agency and peer review in August 2013 and finalized in October 2013.
- <http://www.ecy.wa.gov/programs/sea/wetlands/bas/BufferUpdate.html>

Conclusions from Review of Buffer Science

- The new information on buffers provides a refinement of our knowledge.
- Wider buffers should still be more effective at protecting wetlands than smaller ones if all the other environmental conditions are the same.

Conclusions from Review of Buffer Science

- Width is only one of several environmental factors that affect how well a buffer protects a wetland. For example, width accounts for approximately 20% of the effectiveness of a buffer at removing nitrogen pollutants before they reach a wetland.
- Ecology's recommended buffers are protective of the majority of species using wetlands.

Conclusions from Review of Buffer Science

- Ecology will continue to review the science and management implications to determine whether changes to our buffer guidance are necessary.
- We will not introduce new buffer recommendations during the 2015-2018 GMA update.

Ecology's Buffer Publications

- Wetlands in Washington State, Volume 1: A Synthesis of the Science (Ecology Publication #05-06-006, March 2005)
- Wetlands in Washington State, Volume 2: Managing and Protecting Wetlands (Ecology Publication #05-06-008, April 2005)
 - Appendix 8-C for Western Washington
 - Appendix 8-D for Eastern Washington

Ecology's Buffer Publications

- Wetlands and CAO Updates: Guidance for Small Cities (Ecology Publications: Eastern Washington #10-06-001, Western Washington #10-06-002)
- Update on Wetland Buffers: The State of the Science (Ecology Publication #13-06-011, October 2013)
- <http://www.ecy.wa.gov/programs/sea/wetlands/index.html>

Updates to Wetland Rating Systems

- Conversion of scores for each function to ratings of High, Medium, or Low.
- Replacement of the Opportunity section with two new sections: Landscape Potential and Value.
- Range of possible scores based on function changed to a range of 9–27 (from 1–100) to better reflect the accuracy of the method.

2004 vs. 2014

D	<p>D1.4 Characteristics of seasonal ponding or inundation.</p> <p><i>This is the area of the wetland unit that is ponded for at least 2 months, but dries out sometime during the year. Do not count the area that is permanently ponded. Estimate area as the average condition 5 out of 10 yrs.</i></p> <p>Area seasonally ponded is $> \frac{1}{2}$ total area of wetland points = 4</p> <p>Area seasonally ponded is $> \frac{1}{4}$ total area of wetland points = 2</p> <p>Area seasonally ponded is $< \frac{1}{4}$ total area of wetland points = 0</p> <p style="text-align: right;">Map of Hydroperiods</p>	Figure ____
	<p>Total for D 1 <i>Add the points in the boxes above</i></p>	
D	<p>D 2. Does the wetland unit have the <u>opportunity</u> to improve water quality?</p> <p>Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes or groundwater downgradient from the wetland. <i>Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity.</i></p> <ul style="list-style-type: none"> — Grazing in the wetland or within 150 ft — Untreated stormwater discharges to wetland — Tilled fields or orchards within 150 ft of wetland — A stream or culvert discharges into wetland that drains developed areas, residential areas, farmed fields, roads, or clear-cut logging — Residential, urban areas, golf courses are within 150 ft of wetland — Wetland is fed by groundwater high in phosphorus or nitrogen — Other _____ <p>YES multiplier is 2 NO multiplier is 1</p>	(see p. 44)
	<p>TOTAL - Water Quality Functions Multiply the score from D1 by D2</p> <p style="text-align: right;"><i>Add score to table on p. 1</i></p>	multiplier

<p>D 1.4 Characteristics of seasonal ponding or inundation.</p> <p><i>This is the area of the wetland unit that is ponded for at least 2 months. See description in manual.</i></p> <p>Area seasonally ponded is $> \frac{1}{2}$ total area of wetland points = 4</p> <p>Area seasonally ponded is $> \frac{1}{4}$ total area of wetland points = 2</p> <p>Area seasonally ponded is $< \frac{1}{4}$ total area of wetland points = 0</p>	Provide map of hydroperiods	Figure ____
Total for D 1	Add the points in the boxes above	

Rating of Site Potential If score is: **12 - 16 = H** **6 - 11 = M** **0 - 5 = L** Record the rating on the first page

D 2.0 Does the landscape have the potential to support the water quality function at the site?		
D 2.1 Does the Wetland unit receive stormwater discharges?	Yes = 1 No = 0	
D 2.2 Is more than 10% of the buffer within 150 ft of wetland unit in land use generating pollutants?	Yes = 1 No = 0	
D 2.3 Are there septic systems within 250 ft of the wetland unit?	Yes = 1 No = 0	
D 2.4 Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3?		
Source _____	Yes = 1 No = 0	
Total for D 2	Add the points in the boxes above	

Rating of Landscape Potential If score is: **3 or 4 = H** **1 or 2 = M** **0 = L** Record the rating on the first page

D 3.0 Is the water quality improvement provided by the site valuable to society?		
D 3.1 Does the unit discharge directly (i.e., within 1 mile) to a stream, river, or lake that is on the 303(d) list?	Yes = 1 No = 0	
D 3.2 Is the unit in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0	
D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer YES if there is a TMDL for the basin in which unit is found)	Yes = 2 No = 0	
Total for D 3	Add the points in the boxes above	

Rating of Value If score is: **2-4 = H** **1 = M** **0 = L** Record the rating on the first page

Updates to Wetland Rating Systems

Western Washington

Category	2014	2004
I	23-27	70 or higher
II	20-22	51-69
III	16-19	30-50
IV	9-15	Less than 30

Updates to Wetland Rating Systems

Eastern Washington

Category	2014	2004
I	22-27	70 or higher
II	19-21	51-69
III	16-18	30-50
IV	9-15	Less than 30

Updates to Wetland Rating Systems

- Addition of interdunal wetlands with very high habitat scores to the list of Category I wetlands (western Washington).
- Addition of calcareous fens to Category I bogs (eastern Washington)
- Incorporating the annotations added as comments in the 2006 annotated version.
- Natural Heritage Wetlands are now called “Wetlands with a High Conservation Value.”

How Does This Affect Categories?

Comparison of wetland reference sites

Category	WWA 2014	WWA 2004	EWA 2014	EWA 2004
I	11	13	11	13
II	44	52	36	36
III	49	39	33	35
IV	7	7	6	6

How Does This Affect Categories?

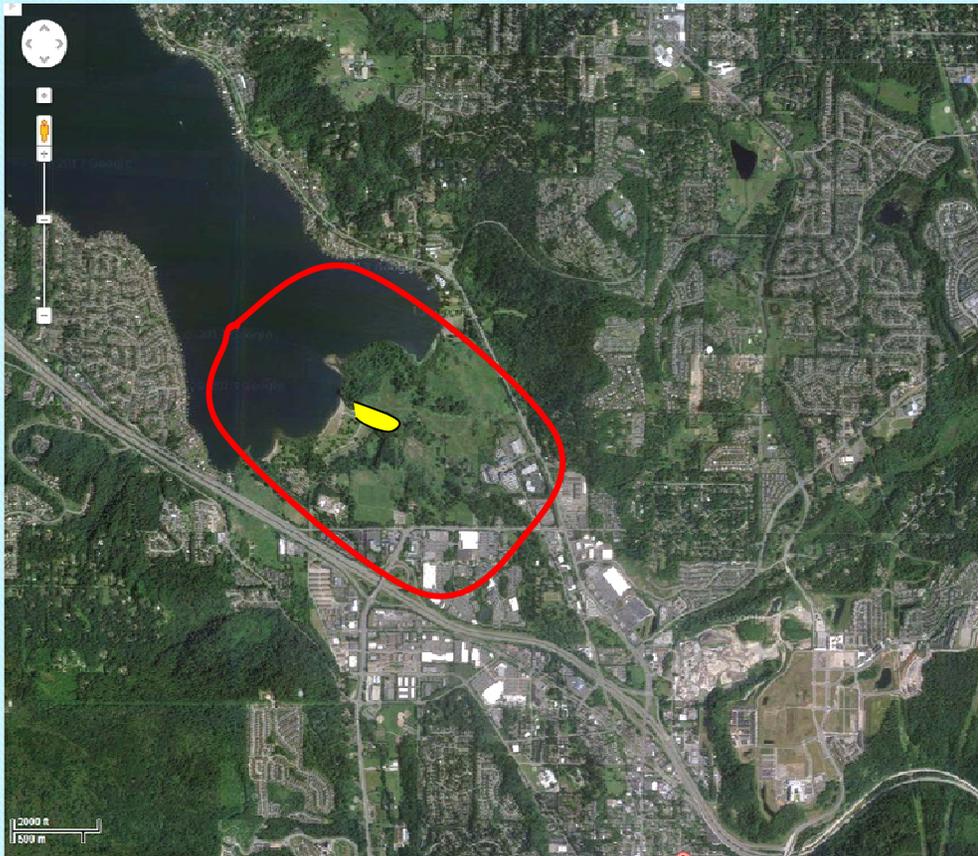
Western Washington

- 60 sites remain unchanged
- 30 sites had a lower category
- 21 sites had a higher category

Eastern Washington

- 36 sites remain unchanged
- 31 sites had a lower category
- 19 sites had a higher category

Lake Sammamish State Park, Issaquah



- Changed from Category II to a Category I
- Landscape potential and value for habitat resulted in a higher score
- 2004 habitat questions did not assess the full range of factors

Potholes Area



- Changed from Category I to Category II
- Value part of water quality and hydrologic functions is now determined by three questions
- No longer a YES/NO question

When is 2014 Rating System Going Into Effect?

- Final publications will be released in early June; trainings begin in early June
- State permits: January 1, 2015
- Local governments: Depends on your CAO/SMP language.
 - If it says “as revised,” your CAO/SMP will require the new rating system as soon as Ecology publishes the document.

Note: Since this webinar, Ecology has changed the effective date of the updated rating systems to January 1, 2015. Therefore, if a CAO says "as revised," use of the updated rating systems will likely be required by the local government as of January 1, 2015.

Trainings on 2014 Rating System

- Two classes in June 2014 are full with waiting lists
- More classes will be scheduled in 2nd half of 2014
- If you have taken the training on the credit/debit method, you are already trained on the new aspects of the 2014 update (~150 people)

How Do New Habitat Scores Affect Buffers?

- We are revising the buffer tables in Appendix 8-C and 8-D of Wetlands in Washington State, Volume 2, to reflect the new habitat scores
- The new tables will be available on our web site soon:
 - <http://www.ecy.wa.gov/programs/sea/wetlands/gma/index.html>
- The following slides provide a few examples.

Buffer Alternative 1 – NO CHANGE

(based on wetland category only—impacts from land use and wetland functions are NOT incorporated)

Buffer Alternative 2 – NO CHANGE

(based on wetland category and adjacent land-use intensity—wetland functions are NOT incorporated)

Buffer Alternative 3 (WWA)

Category II wetlands (scoring ~~20-22~~ ~~51-69~~ points for all functions or having the “Special Characteristics” identified in the rating system)

Wetland Characteristics	Buffer Widths by Adjacent Land-use Intensity (Apply most protective if more than one criterion is met.)	Other Measures Recommended for Protection
High level of function for habitat (score for habitat 8-9 29-36 points)	Low - 150 ft Moderate – 225 ft High – 300 ft	Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 5-7 20-28 points)	Low - 75 ft Moderate – 110 ft High – 150 ft	No recommendations at this time
High level of function for water quality improvement and low for habitat (score for water quality 8-9 24-32 points; habitat less than 5 20 points)	Low - 50 ft Moderate – 75 ft High – 100 ft	No additional surface discharges of untreated runoff

Buffer Alternative 3 (EWA)

Category I wetlands (scoring ~~22-70~~ or more points or more for all functions or having the “Special Characteristics” identified in the rating system)

Wetland Characteristics	Buffer Widths by Adjacent Land-use Intensity (Apply most protective if more than one criterion is met)	Other Measures Recommended for Protection
Alkali	Low – 100 ft Moderate – 150 ft High – 200 ft	No recommendations at this time
High level of function for habitat (score for habitat 8-9 29-36 points)	Low – 100 ft Moderate – 150 ft High – 200 ft	Maintain connections to other natural areas Restore degraded parts of buffer

Buffer Alternatives 3 and 3A (WWA)

Step-wise scale vs. graduated scale for Category I, II, III wetlands
(assumes high land-use intensity, based on habitat score)
(old scores were **19-36**)

Points for Habitat from Wetland Rating Form	3 (Cat III/II)	4	5	6	7	8	9
Alternative 3	We are working on our recommendations for the buffer widths for Alternative 3A. We will post on our website when they are available.						
Alternative 3A							

Note: The numbers previously listed on this slide were incorrect. We are working on modifying this table and will repost the corrected version on our website.

Buffers in Small Cities Guidance (WWA)

Wetland Category	Standard Buffer Width	Additional buffer width if wetland scores X-X-21-25 -habitat points	Additional buffer width if wetland scores X-X-26-29 -habitat points	Additional buffer width if wetland scores X-X-30-36 -habitat points
Category I: Based on total score	75ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Bogs	190 ft	NA	NA	Add 35 ft
Category I: Natural Heritage Wetlands Wetlands with High Conservation Value	190 ft	N/A	NA	Add 35 ft
Category I: Coastal Lagoons	150 ft	N/A	Add 15 ft	Add 75 ft
Category I: Forested	75ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Estuarine	150 ft	N/A	NA	N/A
Category II: Based on score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Interdunal	110 ft	NA	N/A	Add 115 ft
Category II: Interdunal	110 ft	N/A	Add 55 ft	N/A
Category III (all)	60 ft	Add 45 ft	Add 105 ft	NA
Category IV (all)	40 ft	NA	NA	NA

Questions ???

- Regional Wetland Specialists
 - <http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm>
- Regional Shoreline Planners
 - <http://www.ecy.wa.gov/programs/sea/sma/contacts/index.html>
- Wetland CAO Coordinator
 - Donna Buntен (360) 407-7172 or donna.buntен@ecy.wa.gov