



Growth Management & Wetland Regulation in Washington

Rick Mraz, PWS - Wetland Policy Lead





WARNING

ACRONYMS

AHEAD

Acronyms & Abbreviations

GMA: Growth Management Act

CAO: Critical Areas Ordinance (local)

SMA: Shoreline Management Act (local and state)

RCW: Revised Code of Washington (laws)

WAC: Washington Administrative Code (rules for implementation of laws)

Wetlands in Washington are regulated at local, state, & federal level

Local – RCW 36.70A (GMA) critical areas ordinances (CAO) & RCW 90.58(SMA) shoreline master Programs

State- RCW 90.48, WAC 173-201A (Water Pollution Control Act)

Federal – Clean Water Act



Washington's Growth Management Act (GMA)

The Washington Legislature enacted the Growth Management Act (GMA) in 1990 to guide planning for growth and development in Washington State.

GMA requires local governments in fast growing and densely populated counties to develop and adopt comprehensive plans.

A decorative graphic on the left side of the slide. It features a dark green arrow pointing right at the top. Below it, several thin, curved lines in shades of green and grey sweep upwards and to the right, framing the text.

Uncoordinated and unplanned growth & a lack of common goals pose a threat to:

the environment,

sustainable economic development,

health, safety, and

quality of life.




GMA goals

- (1) Urban growth
- (2) Reduce sprawl
- (3) Transportation
- (4) Housing
- (5) Economic development
- (6) Property rights
- (7) Permits
- (8) Natural resource industries
- (9) Open space and recreation
- (10) Environment**
- (11) Citizen participation and coordination
- (12) Public facilities and services
- (13) Historic preservation



GMA Requirements – RCW 36.70A

- All counties and cities are required to:
 - **Designate and protect critical areas functions and values**
 - **Wetlands are one of the listed critical areas.**
- 



RCW 36.70A.172

- **Critical areas—Designation and protection—Best available science to be used.**
- Counties and cities shall include the **best available science** in developing policies and development regulations

The State of Washington has:

39 Counties

281 Incorporated Cities and Towns

~320 Critical Areas Ordinances (CAO)



Agency support for GMA

Counties and cities should (substantively) consider **wetlands protection guidance** provided by the **Department of Ecology**, including:

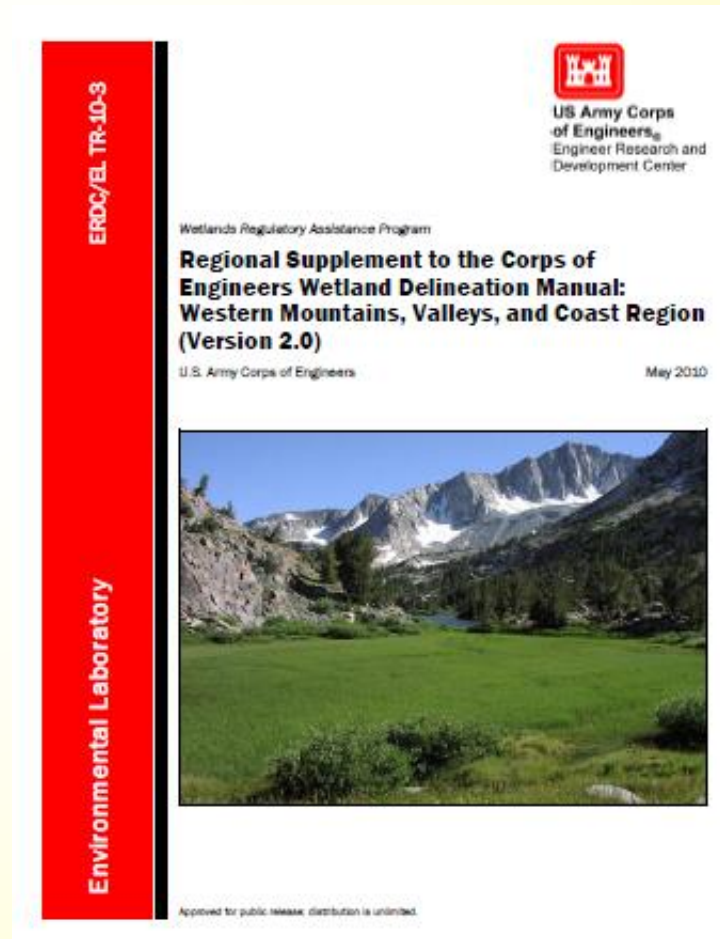
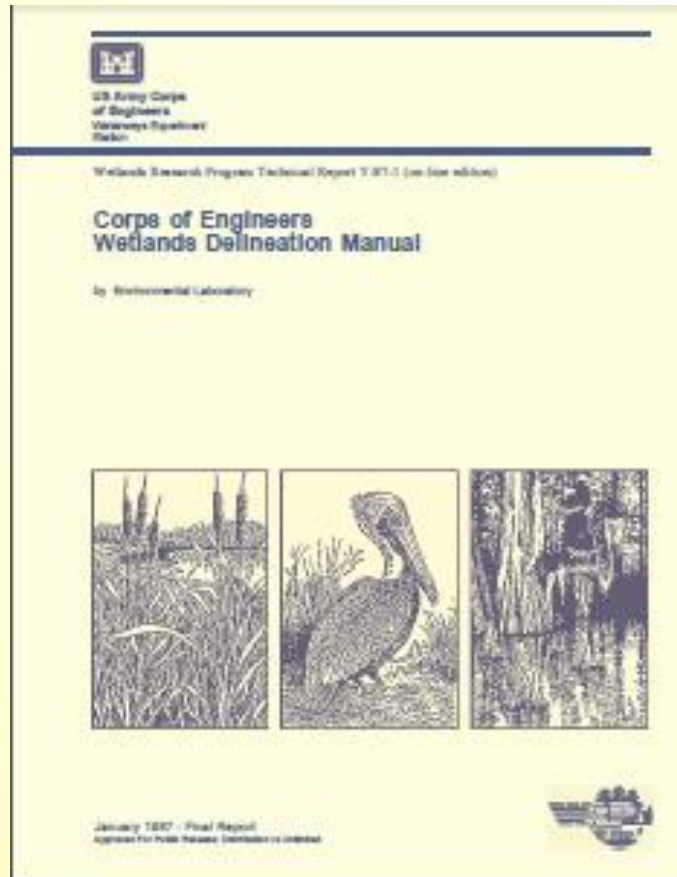
Management recommendations based on the best available science

Mitigation guidance

Wetlands: How to know one



A singular approach to Delineation



Wetland Functions



Store water during flood events and recharge groundwater during low flows



Remove pollutants (sediments, nutrients, toxics)



Provide habitat for a large number of plants and animals






Wetland values or...

The importance humans place on them

For some jurisdictions, flood storage may be really important

For others, it's all about water quality improvement

Some jurisdictions place high value on livability (green space, wildlife viewing)



How do we know what functions and values are present?



**Washington State
Wetland Rating System**

For Western Washington

2014 Update



October 2014 - Effective January 2015
Publication no. 14-06-029



Wetland Rating in Washington

Four Categories – based on functions, rarity, ability to replace through mitigation (Category 1 is highest)

Special Characteristic: Bogs, Estuarine, Alkali, Mature Forested, etc.



How do we protect these functions?



Landowner actions and incentives

Public acquisition and restoration

Watershed-level long range planning

Regulation/permitting



How much protection is enough?

There is no bright line

Science provides a range

How much risk is a jurisdiction willing to accept

The greater the reliance on site-specific regulations, the more stringent the regulations need to be to overcome the risk of wetland impacts.



DEPARTMENT OF
ECOLOGY
State of Washington



Wetland Guidance for CAO Updates

Western Washington Version

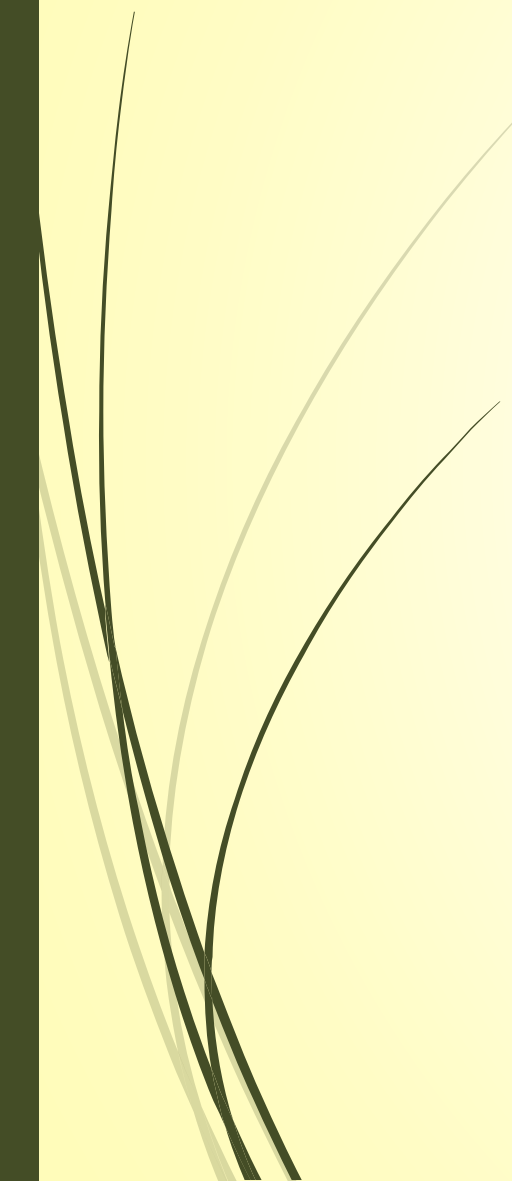
March 2016
Publication No. 16-06-001

Table of Contents

Summary	1
Introduction.....	2
Guidance on the Science of Wetland Protection.....	3
Relationship between the GMA and the SMA.....	4
Policy Discussion for Your Wetlands Chapter	4
PURPOSE	4
DEFINITIONS	4
IDENTIFYING, DESIGNATING, AND RATING WETLANDS	5
REGULATED USES AND ACTIVITIES	7
EXEMPTIONS	7
FOREST PRACTICES	9
AGRICULTURAL ACTIVITIES	9
Strategies for Protecting Wetlands from Impacts	10
WETLANDS INVENTORY	10
ABCs.....	10
BUFFERS	11
BUFFER AVERAGING.....	13
MITIGATION.....	13
MITIGATION ALTERNATIVES.....	14
<i>Mitigation Banking</i>	15
<i>In-Lieu Fee (ILF)</i>	15
<i>Off-Site Mitigation</i>	16
<i>Advance Mitigation</i>	16
Conclusion	16
Appendix A - Sample Wetlands Chapter	19
Appendix B - Wetland Definitions	51



Wetland Guidance for CAO Updates



Buffer tables

Mitigation language

Stormwater/LID language

Small wetland exemption language

Ag language



Buffers 101

Scientific literature is clear that buffers are critical to maintaining wetlands and their functions

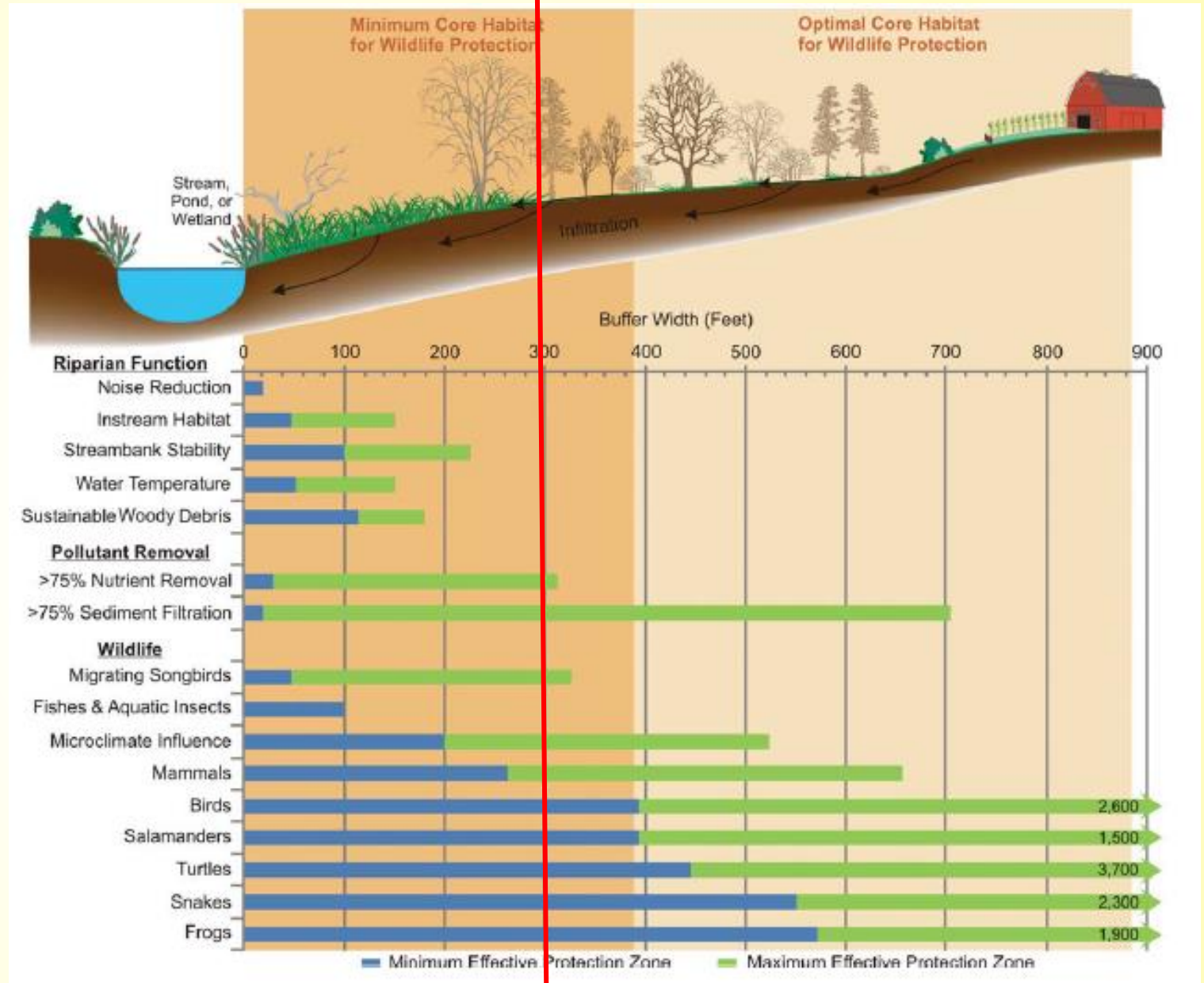
Width is only one of several factors that affect buffer effectiveness (adjacent land use, condition of buffer, etc.)

Width depends on what function you're protecting

Water quality 10-50 feet

Wildlife habitat 100-1200 feet

Buffers
 necessary
 to protect
 different
 functions



Courtesy of Southeastern Wisconsin Regional Planning Commission



Ecology's buffer approach

Ecology's guidance is a **moderate-risk approach**

Consider the cumulative effects of:

Exemptions

Exceptions

Averaging

Reduction

The bottom line: What buffer do you end up with and is it wide enough to protect the function present?



Buffer Tables in Wetland Guidance

Use rating scores and category descriptions from 2014 rating system

Emphasizes the importance of a corridor in protecting habitat function for some wetlands.

Table 1 (no corridor or minimization measures)

Wetland Category	Buffer width (in feet) based on habitat score			
	3-4	5	6-7	8-9
Category I: Based on total score	100	140	220	300
Category I: Bogs and Wetlands of High Conservation Value	250			300
Category I: Coastal Lagoons	200		220	300
Category I: Interdunal				300
Category I: Forested	100	140	220	300
Category I: Estuarine	200 (buffer width not based on habitat scores)			
Category II: Based on score	100	140	220	300
Category II: Interdunal Wetlands	150		220	300
Category II: Estuarine	150 (buffer width not based on habitat scores)			
Category III (all)	80	140	220	300
Category IV (all)	50			

Table 2 (w/ corridor & minimization measures)

Wetland Category	Buffer width (in feet) based on habitat score			
	3-4	5	6-7	8-9
Category I: Based on total score	75	105	165	225
Category I: Bogs and Wetlands of High Conservation Value	190			225
Category I: Coastal Lagoons	150		165	225
Category I: Interdunal				225
Category I: Forested	75	105	165	225
Category I: Estuarine	150 (buffer width not based on habitat scores)			
Category II: Based on score	75	105	165	225
Category II: Interdunal Wetlands	110		165	225
Category II: Estuarine	110 (buffer width not based on habitat scores)			
Category III (all)	60	105	165	225
Category IV (all)	40			

Table of measures to minimize the impacts from adjacent land use

(Appendix 8C and Table XX.2 in Wetland Guidance)

Disturbance	Required Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	<ul style="list-style-type: none"> • Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft of wetland • Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> • Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use Low Intensity Development techniques (for more information refer to the drainage ordinance and manual)
Change in water regime	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> • Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	<ul style="list-style-type: none"> • Use best management practices to control dust

Mitigation Guidance

Wetland Mitigation in Washington State Part 1: Agency Policies and Guidance



Washington Department of Ecology
US Army Corps of Engineers
Seattle District
Environmental Protection Agency
Region 10

Version 1, March 2006
Publication # 06-06-011a
Printed on recycled paper

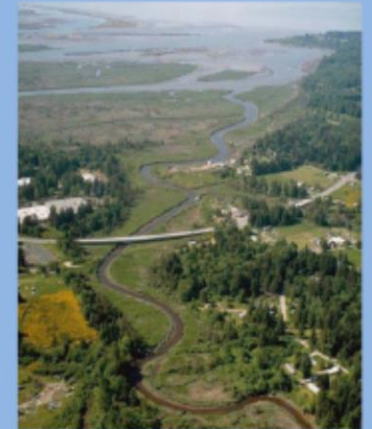
Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans



Washington State Department of Ecology
U.S. Army Corps of Engineers
Seattle District
U.S. Environmental Protection Agency
Region 10

Version 1, March 2006
Ecology Publication # 06-06-011b

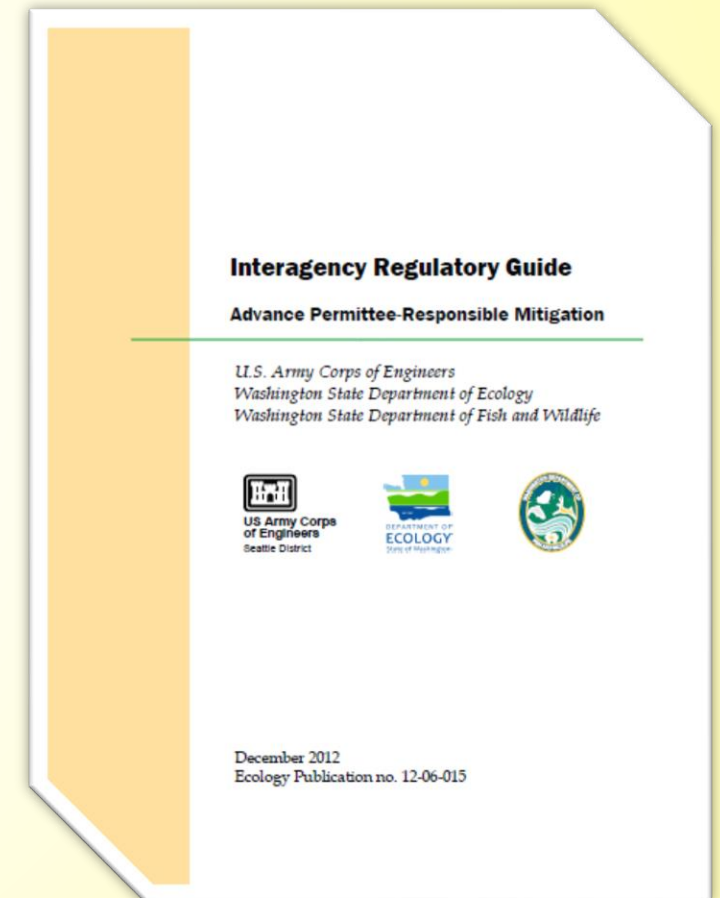
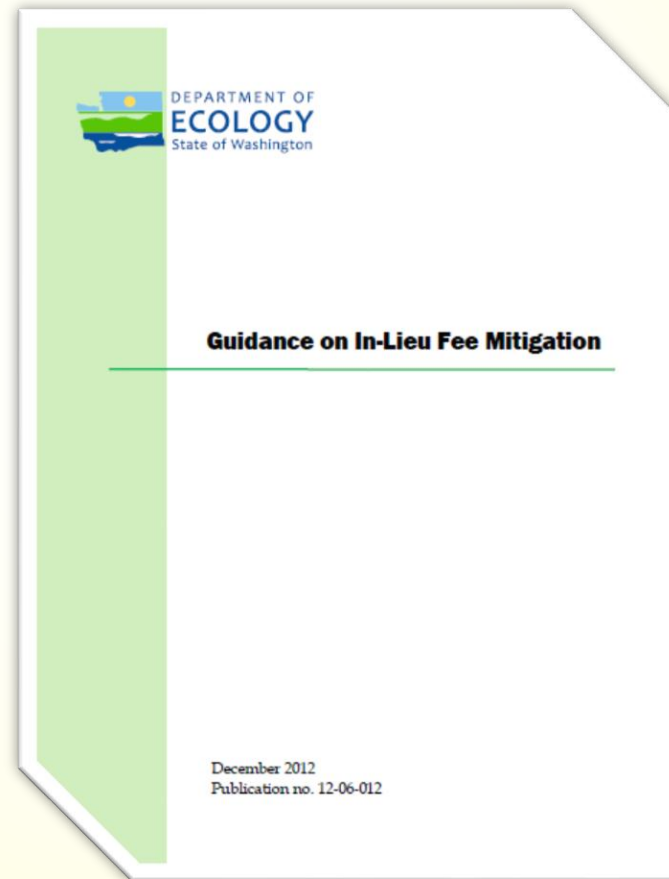
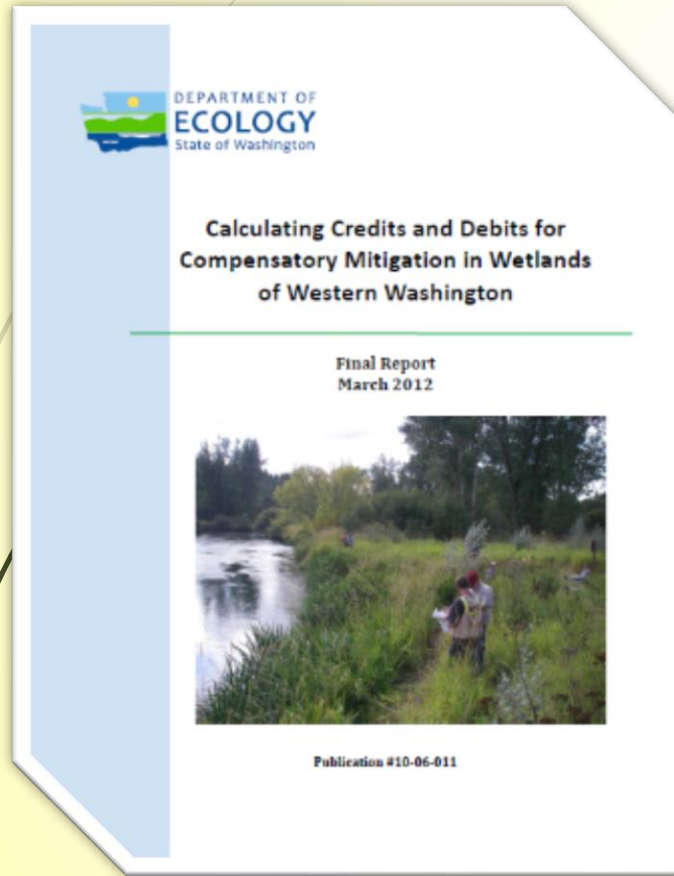
Selecting Wetland Mitigation Sites Using a Watershed Approach



Thomas Hruba, Kim Harper, and Stephen Stanley

Ecology Publication #09-06-032
December 2009

More Mitigation Guidance





Mitigation Sequencing

Washington State Environmental Policy Act (SEPA) and the federal Clean Water Act require:

Avoiding

Minimizing

Rectifying

Reducing

Compensating

Monitoring

Mitigation ratios

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I: Bog, Natural Heritage site	Not considered possible	Case by case	Case by case
Category I: Mature Forested	6:1	12:1	24:1
Category I: Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

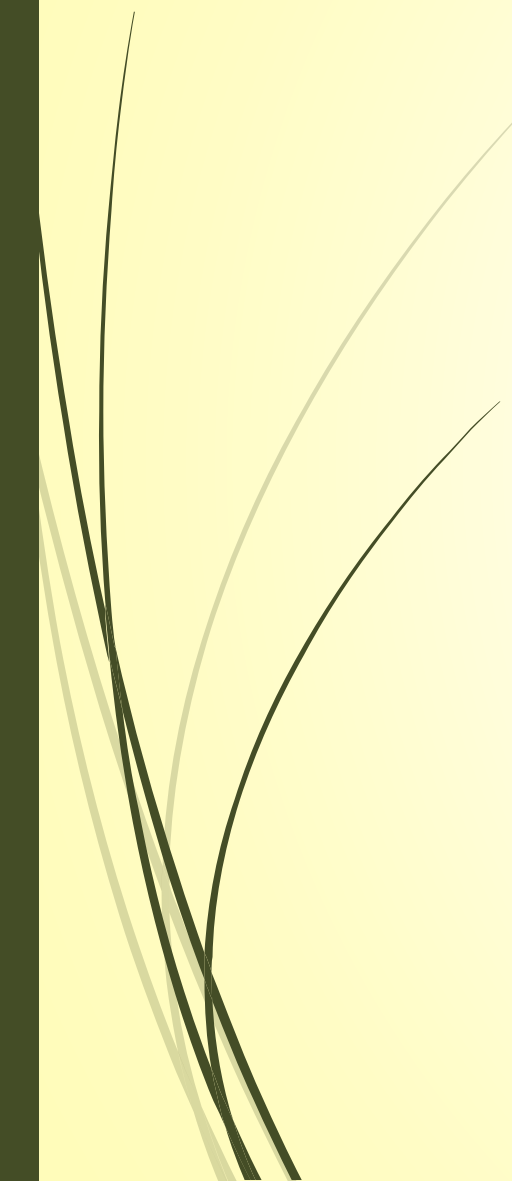
How's it all working so far?

2007 snapshot

Number that have adopted	123	Ecology commented	92		
Total	321		123		
% that have adopted	38%	% commented	75%		
adopted 2004 rating system	99	adopted our guidance	48	adopted our ratios	67
Number that have adopted	123		123		123
% that have adopted rating system (out of adopted)	80%	% adopted our guidance	39%	% ratios	54%



How's it all working so far?



Current snapshot

~90% of jurisdictions have some version of our guidance, and include mitigation provisions

Minor modifications to buffer averaging and reduction are the biggest departures from our recommendations

Generous exemption criteria can be another departure

~97% use our rating system



Challenges in implementation at the local level

Staffing (turn over, training)

Expertise (few wetland professionals)

Relationships

Politics

Tracking

County	City	Notes	SMP Updated	Rating System	Small Wetlands Exempted	Buffers Cat. I	Buffers Cat. II	Buffers Cat. III	Buffers Cat. IV	Buffer Comments
Clallam	Sequim	Need to update habitat scores in SMP	Yes		Isolated <1,000 if not part of mosaic; III<2,500; IV<4,356; IV between 4,356 and 10,000 w/mitigation	200-150	200-65 depending on habitat score	125-40 depending on habitat score	25	Impact reducing measures are required averaging of 25%;
Clallam	Forks	Need to revise category descriptions, habitat scores	No	2004	<1,000 exempt w/ criteria; ECY's guidance for ,1000-4,000 III & IV	Alt. 3	Alt. 3	Alt. 3	Alt. 3	Reductions w/ criteria/ min. of impacts. High/moderate/low-density residential not defined. Low-density res. is in both moderate & low impact categories. Averaging can't reduce area or reduce point width below 75% of standard.
Clallam		Refers to state delineation manual	No	Their own version		"class I" 200-100	"class II" 150-75	"class III" 75-50	"class IV" 50-25	Based on major-minor dev. Buffer averaging: "intent" is no net loss of area. No point width <50' unless exception.
Clark	Battle Ground	Need to update habitat scores in SMP	Yes	2004	Isolated II-III <2,500 sf & isolated IV <10,000 sf	Pierce Co. mod alt3	Pierce Co. mod alt3	Pierce Co. mod alt3	Pierce Co. mod alt3	High intensity includes > 4 units per parcel (not acre). Low intensity does not include residential. Moderate intensity includes no more than 1 home per 5 acres. Averaging can't reduce area of have point width <75% of standard. New roads and utilities allowed to cross buffers w/ few criteria. Fences allowed IN buffers w/ criteria.
Clark	Camas	Did rating system update	Yes	2014	III<2,500, IV < 4,350	Alt 3A	Alt 3A	Alt 3A	Alt 3A	
Clark	La Center	Need to update habitat scores	Yes	2004	Isolated < 4,356 sf with < 20 habitat points	300-50	300-50	150-40	50-25	Based on intensity and habitat score
Clark	Ridgefield	Need to update habitat scores	Yes	2004	<5,000 with criteria	Alt 3	Alt 3	Alt 3	Alt 3	Mod. Format
Clark	Vancouver	Need to update delineation manual and habitat scores	Yes	2004	no mention	Alt. 3	Alt. 3	Alt. 3	Alt. 3	Averaging can't be combined with reductions or minor exceptions, can't reduce total area, and can't reduce width by > 25% or to below 25'. Reductions possible for minimization of land use impacts. No limit on trail width.



Thank you!





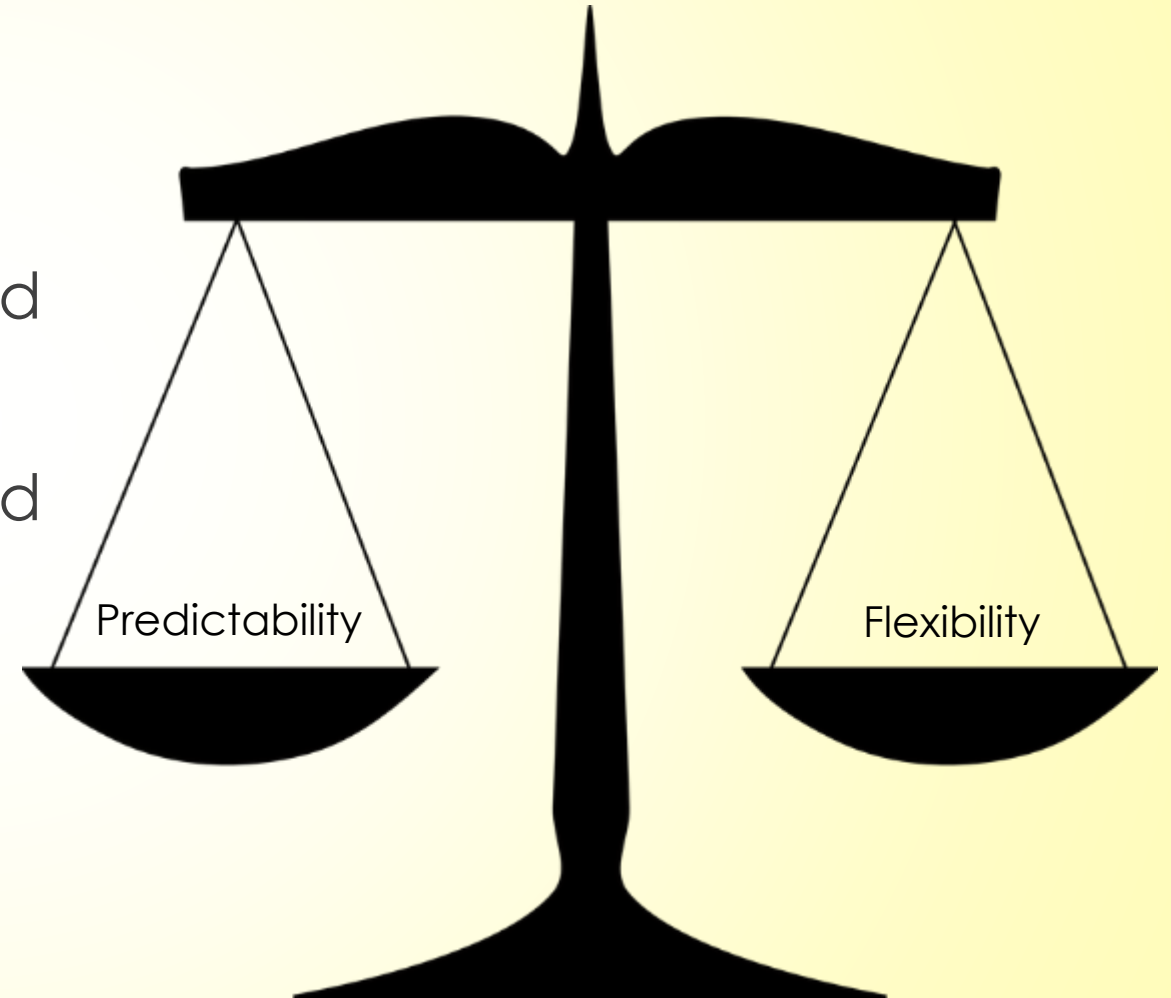
Why the different buffer strategies?

Alternatives 1, 2 and 3 from Appendix 8-C

1: Category only

2: Category and adjacent land use

3: Category and adjacent land use and habitat score



Land Use Intensity

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations *
High	<ul style="list-style-type: none"> • Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) • High-intensity recreation (golf courses, ball fields, etc.) • Hobby farms
Moderate	<ul style="list-style-type: none"> • Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Paved trails • Building of logging roads • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	<ul style="list-style-type: none"> • Forestry (cutting of trees only) • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.
<p>* Local governments are encouraged to create land-use designations for zoning that are consistent with these examples.</p>	

Example: Wetland Buffer Options

- Category II
- Moderate habitat function (habitat score of 6)
- Adjacent land use is single-family residential

Alternative 1
300 feet

Alternative 2
225 feet

Alternative 3
110 feet





How can I reduce a buffer?



Reduction

Reduce the intensity of the impact (buffer doesn't have to "work" as hard)



Averaging

Increase the width of the buffer in one area and decrease it in another

- To improve wetland function
- To allow reasonable use



Reducing Buffers

Buffers can be reduced by 25% if the applicant:

- Implements measures to minimize the impacts from adjacent land use
- AND, if the wetland scores 6 or more habitat points
 - Provides an undisturbed vegetated corridor at least 100 feet wide between the wetland and another priority habitat

A decorative graphic on the left side of the slide. It features a dark green arrow pointing right at the top, with several thin, curved lines in shades of green and grey extending downwards from the arrow's tail.

Ecology's A-B-C approach to protecting functions

- **A**void the wetland impact in the first place
- **B**uffer the wetland from impacts
- **C**ompensate for unavoidable direct and indirect impacts (i.e., mitigation)