Welcome

YOU ARE IN THE RIGHT SPOT. WE WILL START AT 9:00 AM.

Permit Implementation Monitoring Tools

MARCH 10, 2021
2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

Welcome to
Permit Implementation Monitoring Tools

2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

If you have questions type in the Q&A box

Click to see Closed Caption text

Chat is turned off
2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

How to Successfully Protect Critical Areas and Shorelines: A Step-by-Step Introduction to Monitoring and Adaptive Management

January 15, 2021

Visit Project Website for More Information

2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC-01J2230116-05251 through the Washington Department of Fish and Wildlife.

The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency or the Washington Department of Fish and Wildlife, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Workshop Wednesday Series Lineup

Register using Zoom.

January 13 - 9:00 a.m. - 11:00 a.m.
How to Successfully Protect Critical Areas and Shorelines: A Step-by-Step Introduction to Monitoring and Adaptive Management

February 24 - 9:00 a.m. - 11:00 a.m.
Critical Aquifer Recharge Areas (CARA)

January 20 - 9:00 a.m. - 11:00 a.m.
Setting the Stage: Successful adaptive management and critical areas monitoring program basics

March 3 - 9:00 a.m. - 11:00 a.m.
Shorelines

January 27 - 9:00 a.m. - 11:00 a.m.
Wetlands

March 10 - 9:00 a.m. - 11:00 a.m.
Permit Implementation Monitoring Tools

February 3 - 9:00 a.m. - 11:00 a.m.
Geologically Hazardous Areas

March 17 - 9:00 a.m. - 11:00 a.m.
CAD Performance Indicators

February 10 - 9:00 a.m. - 11:00 a.m.
Fish and Wildlife Habitat Conservation Areas

March 24 - 9:00 a.m. - 11:00 a.m.
Adaptive Management Interactive Workshop

February 17 - 9:00 a.m. - 11:00 a.m.
Frequently Flooded Areas

Note: Workshop names may change but topic will stay the same.
American Planning Association
Education Credit

GO TO: HTTPS://PLANNING.ORG/EVENTS/EVENTMULTI/9210027/

American Planning Association
Creating Great Communities for All

Education and Events
Online Education
Educational Events
National Planning Conference
Policy and Advocacy Conference
Speaker Directory
Endorsement Plans
Calendar of Events

Home > Education and Events > Educational Events

2021 Critical Areas and Shorelines Monitoring and Adaptive Management Online Workshops

APA Washington Chapter

Support:
Wednesday, February 9, 2021, 9 a.m.
Wednesday, March 24, 2021, 11 a.m.

Microsoft, Inc., United States

OVERVIEW
In partnership with the Washington State Department of Ecology and the Washington State Department of Fish and Wildlife, the Washington State Department of Commerce is developing an 11-workshop series called "Critical Areas in a Changing Climate". The series will provide a framework for understanding critical areas and shoreline management and technical assistance for local governments planning to use or revise monitoring and adaptive management of the critical areas and shorelines in their jurisdictions.

Land Acknowledgment

Discover which tribal lands you reside on text your zip code to (907) 312-5085.
Poll

What size jurisdiction do you work with?

What is your role?

How long have you worked on critical areas?

Meet Your Presenters

Carolyn Chase is a planner with the Department of Ecology’s Shorelands and Environmental Assistance Program. Her work focuses on developing strategies and processes for understanding how effectively Shoreline Master Programs are being implemented across the state and supporting efforts to increase compliance. Previously, Carolyn has worked as an environmental and land use planner, transit planner, and Safe Routes to School program coordinator. She graduated from the University of Pennsylvania with a Master of City and Regional Planning degree and holds a B.S. in Environmental Science from Western Washington University. Carolyn is a native Washingtonian who is passionate about the state’s rural communities and natural beauty.

Misty Blair is the statewide Shoreline Management Policy Lead with the Washington State Department of Ecology. The Shoreline Management Policy Lead deals with complex shoreline management issues; researching, developing and implementing new shoreline planning policies, procedures and initiatives; coordinating shoreline planning and permitting activities to ensure statewide consistency; and providing technical support and guidance to SEA program planning staff statewide. Misty has been with Ecology for 6 years and previously worked in environmental planning/permitting for the City of Tacoma. She has a BS in environmental policy and land management from the University of California, Berkeley (2002).
Roadmap

1st Shoreline permit desk assessment tool

2nd Suite of SMP monitoring tools

3rd Tool for monitoring wetland buffer regulations

Download tools here:

Get creative

- Perfect plug-and-play tool may not exist
- Local CAO and SMP regulations vary
- Reasons for monitoring vary
- Tools can be adapted

Tools seen today help with:

1. **Permit implementation monitoring** asks: (1) whether the local government issued a permit consistent with the regulations; and (2) whether the projects as built comply with all of the conditions noted in the permit.

2. **Effectiveness monitoring** continues to ask the two permit implementation monitoring questions above over a longer period of time. The data is not about the individual permit, but whether and how to adaptively manage the system.
Ongoing vs. occasional permit tracking and monitoring programs

• Occasional (i.e., a backwards assessment of permits issued over some period of time)
  • Examples: prior to CAO update, prior to SMP periodic update, established regular interval, before and after changes to public outreach and education, etc.

• Ongoing (i.e., monitoring incorporated into normal operations)
  • Examples: City of Kirkland (Webinar 1) and Clark County (Webinar 2)

• Ongoing, term-limited (e.g., internship duration, grant period, etc.)
  • Example: Jefferson County

Acronyms

• NNL – No Net Loss
• RUE – Reasonable Use Exception
• SMP – Shoreline Master Program
• SMA – Shoreline Management Act
• OHWM – Ordinary High Water Mark
Poll

If you had funds to start a new, or expand an existing, monitoring and adaptive management program, where would you prioritize spending?

- Staff time, Consultant services
- Program planning, Permitting software, Unsure
- Other – use Chat to share with the group

Shoreline desk assessment tool

Implementation and effectiveness monitoring
Tool collects qualitative data on . . .

1. Shoreline authorizations (exemptions & permits)
2. Uses & modifications
3. Permit processes
4. Pre-permit communications
5. Location
6. Public access

Tool collects qualitative data on . . . (continued)

7. The 5 categories of projects that may require documentation of NNL
8. Potential losses of shoreline ecological functions
9. Mitigation
10. Cumulative impacts
Live tool demonstration

The importance of good notes

• Add notes on “permit details” sheet
• Saves time by eliminating need to re-review records
• Allows trends to be identified
• Examples shown here
Tool considerations

1. Occasional monitoring tool
2. Recommend a timeframe that allows a census (100%) of shoreline authorizations (permits and exemptions)
3. Limit timeframe to authorizations issued under a Comprehensively Updated SMP
4. Desk assessment not performed by permit reviewer (bias)
5. Average review time: 1.5 hrs/permit

Two versions of the tool

• Ecology version → Local Gov’t version
  • What’s working?
  • Where are the gaps?
• Data-driven approach to supporting local SMP implementation.
• Question sets differ between two versions.
Populating the tool with questions

Strategies:
1. Limit subjectivity with neutral questions
2. Break down complex questions
3. Pre-defined responses for each question
4. Match complexity of question with appropriately nuanced response sets

Key question: no net loss

Did the project meet the no net loss standard required by the SMA?
Key question: no net loss

- Staff determination of NNL?
- In-buffer/water development?
  - Net new impervious surfaces in buffer?
  - Native vegetation clearing in buffer?
  - New sf over-water structure?
- Mitigation sequencing evident?
- Compensatory mitigation?
- Was there a permit condition requiring comp mit?
- Unavoidable impacts identified?
- Site-specific report?
- Mitigation in-kind?
- Monitoring of mitigations?

Did the project meet the no net loss standard required by the SMA?

Mitigation sequencing question and response

- If development is occurring waterward of the OHWM or within a buffer, is there evidence of mitigation sequencing in project design?

<table>
<thead>
<tr>
<th>Y</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak Application</td>
<td>Unpersuasive attempt to avoid and minimize impacts</td>
</tr>
<tr>
<td>N</td>
<td>No</td>
</tr>
<tr>
<td>CNBD</td>
<td>Cannot be determined</td>
</tr>
<tr>
<td>NA</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Challenges and opportunities

- Outdated permit database
- Paper files stored across state
- Coronavirus sped up acceptance and storage of digital submittals

Status of tool development

- 70 permits reviewed
- Opportunity sample
- Methodology considerations moving forward:
  - Random sample
  - Geographic spread
  - Result validation (second reviewer to ensure same results)
- Preliminary “test” phase results
### Results: Development type

*Was development typified by new development, replacement, etc.?*

<table>
<thead>
<tr>
<th>Dev. Type?</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV RSTR</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>NA</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>NEW</td>
<td>32</td>
<td>46%</td>
</tr>
<tr>
<td>NEW RPLC</td>
<td>15</td>
<td>21%</td>
</tr>
<tr>
<td>RDEV</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>REPAIR</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>REPAIR &amp; RPLC</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>RPLC</td>
<td>10</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Results: Variances

*For permits that included a variance, how often was mitigation sequencing evident?*

<table>
<thead>
<tr>
<th>Permit Issued</th>
<th>(Multiple Items)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mitigation sequencing?</strong></td>
<td>Count</td>
</tr>
<tr>
<td>CNBD</td>
<td>2</td>
</tr>
<tr>
<td>N</td>
<td>2</td>
</tr>
<tr>
<td>NA</td>
<td>1</td>
</tr>
<tr>
<td>Y</td>
<td>8</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>
## Results: Cumulative impacts

*For CUPs and VARs, how common was it for cumulative impacts to be assessed?*

<table>
<thead>
<tr>
<th>Permit Issued</th>
<th>Cum. Impacts Assessment</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CNBD</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>11</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>18</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td><strong>31</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

## Results: Mitigation sequencing

*For permits that included development waterward of the OHWM or within a buffer, how often was mitigation sequencing evident?*

<table>
<thead>
<tr>
<th>In-buffer/water DEV'T?</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>25%</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>21%</td>
</tr>
<tr>
<td>Y</td>
<td>26</td>
<td>50%</td>
</tr>
<tr>
<td>Weak Application</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>52</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Results: Mitigation implementation

For permits that included compensatory mitigation, how many included a permit condition requiring mitigation implementation?

<table>
<thead>
<tr>
<th>Permit cond req comp mit?</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Mit Plan Req</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>16%</td>
</tr>
<tr>
<td>Y</td>
<td>24</td>
<td>77%</td>
</tr>
<tr>
<td>Blanket</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>31</td>
<td>100%</td>
</tr>
</tbody>
</table>

Results: Mitigation monitoring

How often was monitoring required for permits that included mitigation planting?

<table>
<thead>
<tr>
<th>Monitoring?</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNBD</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>24%</td>
</tr>
<tr>
<td>Y</td>
<td>19</td>
<td>58%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>33</td>
<td>100%</td>
</tr>
</tbody>
</table>
Next steps

1. Complete desk assessments in 2021
2. Identify solutions and actions to address compliance needs

Poll

Does your community create a digital or paper record of shoreline exemptions to document review?

- Yes, always
- Sometimes
- No, Unsure, N/A to my role
WAC 173-26-191(2)(a)(iii) SMP Administrative provision requires documentation of your review

(D) Documentation of project review actions and changing conditions in shoreline areas.

- Master programs or other local permit review ordinances addressing shoreline project review shall include a mechanism for documenting all project review actions in shoreline areas.
- Local governments shall also identify a process for periodically evaluating the cumulative effects of authorized development on shoreline conditions.
- This process could involve a joint effort by local governments, state resource agencies, affected Indian tribes, and other parties.

Focus on implementation

- Monitoring & adaptive management
- Implementation guidance
- Training, tools, and resources
- Voluntary compliance

Track and monitor
Evaluate and adaptively manage
Collaborate
Ecology’s possible adaptive management strategies

1. New or updated guidance
2. Development of additional compliance tools & resources for local governments
3. New and expanded training opportunities
4. Outreach and education products
5. Rulemaking

Current adaptive management outcomes

- Tool development has influenced:
  - Implementation guidance

Yakima River (Source: Department of Ecology)
Current adaptive management outcomes

Tool development has influenced:
• Shoreline permit tracking system updates

Problems identified with our current system –
• Not being able to search for or filter lists of permits based on certain attributes.
• Need to be able to upload and store permit related documents.
• Does not capture enough of the useful information contained in the permit file – qualitative data.
Q&A

TYPE YOUR QUESTIONS IN THE Q&A BOX IN YOUR TOOLBAR
Poll

To avoid bias, it may be necessary to find an individual to assess records who is not involved in shoreline application reviews. Is that something that could be accomplished where you work?

- No, our Department is too small
- Yes, with additional staff training
- Yes, without additional staff training
- Unsure or N/A to my role

Jefferson County’s Monitoring Tools

Accessible Tools for Monitoring NNL Indicators
Planning context

Source: https://everycounty.org/tag/fort-worden/

Funding and approach

• Puget Sound Partnership grant
• Regional approach
• Jefferson County developed tools to help assess compliance with NNL standard

Source: WA Coastal Atlas
Suite of tools

1. **Worksheet for assessing issued permits are consistent with the SMP – “NNL Checklist”**
2. **Excel-based permit tracking tool – “Database”**
3. **Form for documenting as-built conditions – “Field Form”**

Grant and project details

[https://actionagenda.pugetsoundinfo.wa.gov/Project/Detail/12840](https://actionagenda.pugetsoundinfo.wa.gov/Project/Detail/12840)
Grant project details (continued)

**PHASE I:**
Monitored results of SMP policies designed to achieve NNL

Changes to system (permit outreach and compliance efforts)

Adaptive management

**PHASE II:**
Monitoring evaluates effectiveness of adjustments in permit outreach and compliance

Sample and duration

- **Pool:** 100% of Shoreline applications over 14-month period (January 2019 and March 2020)
- Applications tracked in Excel database
- Non-random selection of 80 authorizations (permits & exemptions)

Hood Canal, Duckabush Delta, WA Coastal Atlas, 2016
Sample (continued)

- All 80 permits and exemption authorizations assessed using the **no net loss checklist**.
- 30 of these permits will be followed up with a field visit where a **field form** will be completed.

Worksheets for assessing SMP compliance with NNL provisions
Primary NNL review (Page 2)

• Further review when project is within:
  • Standard shoreline buffer or setback
  • Critical area buffers and setbacks (wetlands, FWHCA, Geo Hazard, FFA)

• Further review needed when project includes:
  • Beach access structures
  • Boating facilities
  • Dredging activities
  • Filling or excavations
  • Flood control structure
  • In-stream structures
  • Restoration
  • Structural shoreline armoring
DETAILED HILL REVIEW

Complete the sections below if the answer is “Yes” to Preliminary SHS Review Question 1.

1. The proposed project will be constructed within a desirable buffer area (5-foot building setback). For the shoreline area, or will not meet the visual impact guidelines for new development.
   a. How much visible surface will be removed? __________ square feet
   b. How much ground disturbance will occur? __________ square feet
   c. Does the proposed work remove of land? Yes _____ No _____

   If yes, how deep (in feet) will the cut be? __________ square feet
   If no, describe the mitigation measures proposed to minimize impacts to the human energy values buffer area.

   __________

   a. Does the shoreline show the area of “free wave” within the shore buffer extending the width of the proposed development area or at least 10 feet of ocean frontage? Yes _____ No _____

   If no, describe how the shoreline protection requirements of 221-35-210(2) are met.

   __________

   b. Describe the topographic impacts or shoreline features that produce and direct protective measures to form RIR’s shoreline design based on visual impact and agency comment.

   __________

   Any additional comments relevant to shoreline buffer requirements and site for this project.
Detailed tool with unique benefits

- **Significant modification needed before it can be used by other local governments**
- **Tool benefits:**
  - Guides reviewer to applicable provisions
  - Cross-purpose use
  - Internship potential
### Excel database

<table>
<thead>
<tr>
<th>Sequence</th>
<th>MLA Number</th>
<th>Case Number</th>
<th>Parcel #</th>
<th>Shore Type</th>
<th>Waterbody</th>
<th>A-Design</th>
<th>S-Design</th>
<th>Proposed</th>
<th>Planner</th>
<th>Permit</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
</tbody>
</table>

**Color Key:**
- Permit not issued yet
- Try for site visit
- Construction not started yet
- No site visit - permit issued
- Additional permit review needed
- Site visit made
- No site visit access, per property owner
- Previous site visit for same/similar application

### Excel database (continued)

**Closed Canopy Forest in Buffer and Setback**

**Development Waterward of OHWM**

**Development Landward of OHWM**

**Site Visits**
Other ideas for quantitative data to track

• Shoreline stabilization (linear feet)
  • New (hard, hybrid, soft)
  • Removal
  • Repaired and replaced (hard, hybrid, soft)

• Mitigation
  • Area (sf) or number of trees and shrubs planted

• Restoration
  • Number of trees and shrubs planted, area of invasive removal, etc.

• Structural setback from OHWM (effective not regulatory)

• Trees removed

• Piles removal

Field form
**Field form, page 2**

<table>
<thead>
<tr>
<th>River/Stream Indicators</th>
<th>Pre-development</th>
<th>Post-development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riparian Vegetation: Approximate square footage of closed canopy forest cover within 150-foot shoreline buffer and 10-foot building setback (160 feet total).</td>
<td><strong>1,200 sf</strong></td>
<td><strong>1,200 sf</strong></td>
</tr>
<tr>
<td>Development Below OHWM: Number and type of overwater/in-water development in square feet. If feasible, describe percent of development below OHWM, percent light penetrating, materials used.</td>
<td><strong>0 sf</strong></td>
<td><strong>0 sf</strong></td>
</tr>
<tr>
<td>Development Above OHWM: Approximate square footage of vegetated areas to be converted to impervious surface.</td>
<td><strong>0 sf</strong></td>
<td><strong>300 sf</strong></td>
</tr>
</tbody>
</table>

Riparian Comments:

**Field form, pg. 3**

**INDICATORS OF SHORELINE FUNCTION**

1. Projects with riparian vegetation impacts – describe any variations from submitted application and/or permit requirements, and potential implications for ecological function:

2. Projects with development below OHWM impacts – describe any variations from submitted application and/or permit requirements, and potential implications for ecological function:

3. Projects with development above OHWM impacts – describe any variations from submitted application and/or permit requirements, and potential implications for ecological function:

4. Projects requiring mitigation for project impacts – describe any variations from submitted application and/or permit requirements, and potential implications for ecological function:

5. Projects approved as shoreline restoration – describe any variations from submitted application and/or permit requirements, and potential implications for ecological function:

Additional Comments:

Photo Log (include photo number and description):
Term-limited monitoring

- SMP implementation - What’s working well? What isn’t?
- Address gaps through adaptive management strategies.
- Program depends on grant fund.

Q&A

TYPE YOUR QUESTIONS IN THE Q&A BOX IN YOUR TOOLBAR
Poll

Using your permit record system, would you be able to easily identify projects that occurred on a site with a wetland or wetland buffer?

Yes, No, Unsure
N/A to my role

Monitoring tool for assessing wetland buffers

Tool for comparing issued permits to CAOs
Wetland buffer monitoring methodology

- View webinar #3 (Wetlands) here:
  - https://vimeo.com/511297165/e415b0684a
- Manual available here:
- Desk assessment followed by field verification
- Today’s focus is the desk assessment

Desk assessment

- 8 questions
- Help pinpoint CAO implementation strengths and weaknesses
- Ability to ID permits
- Created for wetland buffer monitoring but transferable to other monitoring efforts

Chuckanut Village Marsh, Whatcom County (Source: Department of Ecology)
### Full text version of 8 questions:

1. **Is the initial buffer (before any reductions or increases) specified in the permit the same as the standard buffer in the CAO for that type of wetland?**
2. **Are any changes in the buffer width in the permit consistent with the discretionary changes allowed in the CAO?**
3. **Is the justification for the change in buffer width documented in the permit?**
4. **Are the provisions for a buffer reduction under a Reasonable Use Exception (RUE) or variance in the permit consistent with the requirements in the CAO?**
5. **Are the requirements for active buffer vegetation management in the permit consistent with the requirements in the CAO?**
6. **Is the fencing of the buffer required in the permit consistent with the requirement in the CAO?**
7. **Are the signs for marking the buffer required in the permit consistent with the requirements of the CAO?**
8. **Overall, the buffer width requirement in the permit is the same, more protective or less protective than the basic buffer width requirements in the CAO.**
Instructions and worksheets for answering questions

• Appendix B provides instructions and worksheets for answering the 8 questions.

Sample size: How many permits?

• Census – 100% of permits issued within a period of time.
  • Select a manageable timeframe.
  • Consider a timeframe that doesn’t span a code change (i.e., permits issued both before and after a CAO update).

• Manual includes a sampling methodology.
Scenario

- CAO requires 80’ buffer for Category III wetlands with low habitat score
- CAO allows 25% buffer reduction with minimization measures
- CAO allows RUE if project meets criteria

- Permit requires buffer ranging from 5-15’
- RUE granted but no documentation of how it meets RUE criteria

Scenario and tool modification

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Is buffer same as standard CAO</th>
<th>Buffer consistent with CAO</th>
<th>Justification for changes documented</th>
<th>RUE provisions consistent with CAO</th>
<th>Buffer vegetation management consistent with CAO</th>
<th>Fencing consistent with CAO</th>
<th>Signs consistent with CAO</th>
<th>Overall width requirement the same, more or less protective than requirements in CAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N</td>
<td>N/A</td>
<td>?</td>
<td>?</td>
<td>&lt;</td>
</tr>
</tbody>
</table>

Fencing required?  Signage required?

Y = Yes  N = No  NPD = Not possible to determine  N/A = Not applicable  <= = Less protective than CAO  >= = More protective than CAO
Interpreting results

A jurisdiction may want to review its policies, regulations, and procedures to determine where improvements in wetland protection are needed.

Audience engagement scenario

• Desk assessment complete
• 3 years worth of records assessed
• 35% resulted in RUEs that allowed wetland buffers to be developed

Are the provisions for a buffer reduction under a Reasonable Use Exception (RUE) or variance in the permit consistent with the requirements in the CAO?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
</table>

Comments:

Staff report states project is consistent with RUE criteria w/o explanation.
Site plan and file documents do not substantiate. No minimization evident in design. No documentation of why encroachment was the minimum necessary.
Pop quiz

Given this scenario, what would you recommend as a next step?

- Additional staff training.
- A field assessment to evaluate buffer effectiveness.
- Adding an application requirement to document RUE criteria consistency.
- Attempt to understand if there is a barrier to effective CAO implementation such as political pressure to approve permits, a lack of technical expertise, or poorly written code.
- All of the above.
- Other. Use Chat to share with the group.

Ecology contacts:

Is your local government interested in using this tool to monitor wetland buffer regulations?

Dr. Amy Yahnke
Shorelands & Environmental Assistance Program
ayah461@ecy.wa.gov

Rick Mraz, PWS
Wetland Policy Lead
Shorelands & Environmental Assistance Program
rmra461@ecy.wa.gov
360-407-6924 (desk) / 360-810-0024 (cell)

Nate Brown
Critical Areas Ordinance Specialist
Shorelands & Environmental Assistance Program
Nate.Brown@ecy.wa.gov
Q&A

TYPE YOUR QUESTIONS IN THE Q&A BOX IN YOUR TOOLBAR

Summary

1st Shoreline desk assessment tool (occasional monitoring)

2nd Suite of SMP monitoring tools (comprehensive monitoring program)

3rd Methodology for monitoring buffer regulations (occasional monitoring)
Wrap up

- **All communities are different. So, it’s important to consider:**
  - Reasons for monitoring
  - Key questions
  - What information is available
  - How tools will help collect and synthesize information and if/how tools will be modified to answer key questions
  - Who will monitor
    - Training needed?
    - Avoid bias
    - Validation (checking results)

---

**Conceptual representation of how implementation monitoring can be used to improve the permit process**

- Identify key questions:
  - County/City issued complete and fully compliant permit?
  - Applicant complied?

- Modify Permit Implementation Process

- Adaptive Management

- Recommend Solutions and Actions:
  - Revise application form
  - Train staff
  - Revise administrative interpretations
  - Revise policies or regulations

- Monitor:
  - Permit process steps
  - Permit compliance

- Evaluation of Monitoring Results
Join us next week!

• The discussion on monitoring tools continues next week.

March 17 - 9:00 a.m. - 11:00 a.m.
High Resolution Change Detection

Contact information:

Thank you

Carolyn Chase
SMA Compliance Program Planner
Washington Department of Ecology

(360) 706-4981 (cell)
cach461@ecy.wa.gov
Thank you!

CAROLYN CHASE
SMA COMPLIANCE PROGRAM PLANNER
WASHINGTON DEPARTMENT OF ECOLOGY
cach461@ecy.wa.gov
Cell: 360-706-4921

MISTY BLAIR
SHORELINE MANAGEMENT POLICY LEAD
WASHINGTON DEPARTMENT OF ECOLOGY
misty.blair@ecy.wa.gov
425-649-4309