

Welcome

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



Adaptive Management Interactive Workshop

MARCH 24, 2021



2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

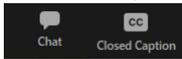


Welcome to
Adaptive Management Interactive Workshop

2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

Click to see
Closed Caption text

Chat is
turned on



Rename self
Name, Jurisdiction or Organization

Participants (63)

Q Find a participant

Marie, Commerce (she/her) (Me)



2021 Critical Areas and Shoreline Monitoring & Adaptive Management Online Workshops

The screenshot shows a webinar slide with a dark blue background. On the left, the title "How to Successfully Protect Critical Areas and Shorelines: A Step-by-Step Introduction to Monitoring and Adaptive Management" is written in white. Below the title, it says "JANUARY 13, 2021". On the right, there are logos for the Washington Department of Fish and Wildlife, Washington State Department of Commerce, and the Department of Ecology, State of Washington. To the right of the logos is a video feed showing two participants: a woman named Maria Schmidt and a man named Scott Kupper. An arrow points to the video feed with the text "Click in between to change size".

5

Visit Project Website for More Information

https://www.ezview.wa.gov/site/alias_1992/37576/overview.aspx

The screenshot shows the website for "Critical Areas Adaptive Management Training Workshops". The page has a header with the "ez view" logo and navigation tabs for "Overview", "Contacts", "Events", "2021 Workshops", and "Library". The main content area is titled "2021 Workshops" and contains the following text:

Do you want to know if your critical areas and shoreline regulations are working as intended? Or how to effectively track special permit conditions and mitigation requirements?

Please join us for an in depth review of best practices, case studies, resources, and tools to enhance monitoring and adaptive management efforts for your critical areas and shorelines.

As a follow-up to our 2018 workshops, this 11-week webinar series features expert guest speakers, opportunities for peer-to-peer learning, information sharing, and individual technical assistance.

Earn AICP continuing education credits for your attendance!

Click on a link below to register. (Most sessions are 90 minutes. A couple sessions may go up to 2 hours.)

- Adaptive Management Workshop 1 – How to Successfully Protect Critical Areas and Shorelines: A Step-by-Step Introduction to Monitoring and Adaptive Management
- Adaptive Management Workshop 2 – Setting the Stage: Successful adaptive management and critical areas monitoring opportunities
- Adaptive Management Workshop 3 – Wetlands
- Adaptive Management Workshop 4 – Geologically Hazardous
- Adaptive Management Workshop 5 – Fish and Wildlife Habitat Conservation Areas
- Adaptive Management Workshop 6 – Frequently Flooded Areas
- Adaptive Management Workshop 7 – Critical Aquifer Recharge Areas (CARAs)
- Adaptive Management Workshop 8 – Shoreline
- Adaptive Management Workshop 9 – Permit Implementation Monitoring Tools
- Adaptive Management Workshop 10 – CAO Performance Indicators
- Adaptive Management Workshop 11 – Adaptive Management Interactive Workshop

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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 (CARAs)



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.
CAO 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/](https://planning.org/events/eventmulti/9210027/)

The screenshot shows the American Planning Association (APA) website. The header includes the APA logo, the tagline 'Creating Great Communities for All', and navigation links for 'About APA', 'Join', and 'Log In'. A search bar is located below the header. The main navigation menu includes 'Membership', 'Knowledge Center', 'Education and Events', 'AICP', 'Policy and Advocacy', 'Career Center', 'In Your Community', 'Connect with APA', and 'APA Foundation'. The left sidebar lists 'Education and Events' with sub-links for 'Online Education', 'Educational Events', 'National Planning Conference', 'Policy and Advocacy Conference', 'Speaker Directory', 'Burnham Forum', and 'Calendar of Events'. The main content area displays the event title '2021 Critical Areas and Shorelines Monitoring and Adaptive Management Online Workshops' and identifies it as an 'APA Washington Chapter' event. The event details include the ID #9210027 and dates: Wednesday, February 3, 2021, 9 a.m. and Wednesday, March 24, 2021, 11 a.m. PDT in Olympia, WA, United States. An 'OVERVIEW' section states that the event is in partnership with the Washington State Department of Ecology and the Washington State Department of Fish and Wildlife, and is an 11-week webinar series.

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Land Acknowledgment

Discover which tribal lands you reside on text your zip code to (855) 917-5263.



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Poll



What size jurisdiction do you work with?

What is your role?

How long have you worked on critical areas?

How useful did you find the information you received during this series?

11

Meet Your Presenter



Dave Andersen serves as the Managing Director for the Washington Department of Commerce, Growth Management Services office. Dave has been with the Department of Commerce since 2001, starting as the agency's transportation policy specialist.

Dave is an adjunct lecturer in the Urban and Regional Planning program at Eastern Washington University. Dave is also past president of the Inland Empire section of the American Planning Association.

Dave managed the review and update of the agency's administrative rules implementing the Growth Management Act. In 2010, Dave was awarded the Washington APA's Meyer Wolfe Award for Professional Achievement for his work on the rule update. Dave was also the principle author in the 2012 update to the department's transportation element guidebook.

Prior to joining Commerce, he spent seven years as a transportation planner at Pierce Transit. Dave holds a Masters in Urban and Regional Planning from the University of Iowa, and a Bachelor's Degree in Planning from Augustana College.

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Meet Your Presenter



Tim Gates has three decades experience in shoreline and growth management planning. He is currently Policy and Operations Manager for the Washington Department of Ecology Shorelands & Environmental Assistance Program. Prior to his current position he worked for nine years as land use planner for the Washington Department of Commerce Growth Management Services program, where he provided technical and financial assistance to local governments. He worked for Ecology's shoreline program from 1989 through 2005 developing state rules, preparing guidance and providing technical and financial assistance.



**Shoreline Management Act (SMA): 50th Anniversary
Growth Management Act (GMA): 30th Anniversary**

The next 30 years

**Monitoring & Adaptive Management
of shoreline and critical area
regulations**



Tim Gates, AICP

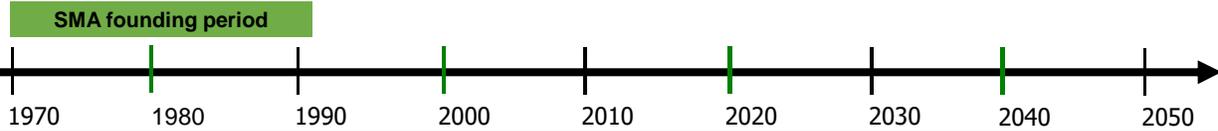
Policy & Operations Manager

Shorelands & Environmental Assistance Program

1971-1991: founding phase



Tailored SMPs for 260 diverse communities



1991-2003: transition phase

The challenge of population growth

One of the biggest challenges affecting any plan to save salmon in Washington's rapidly growing population. Forecasters predict one million new residents will move here in the next 10 years. That rate of growth will require new construction equivalent to the size of Seattle, Tacoma, Spokane, and Vancouver combined - developments that could cost us 30,000 acres of fish and wildlife habitat.

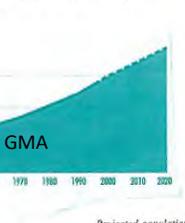
The water in 250 streams in Washington is already overallocated. Some 5,000 applications for water right permits are pending. Thousands of small exempt wells (withdrawing fewer than 5,000 gallons per day) are drilled into Washington's diminishing aquifers each year (see story, page 12).

Almost 700 water bodies fail to meet state water quality standards, and the pollution is largely the result of the diffuse activities of an

expanding population (see article, page 8).

Governor Locke's state-of-the-state speech painted a vision of the 21st century as one "in which our rivers and streams are alive with fish" and "in which a growing population protects and cherishes the cleanliness of our air and the open spaces that nourish our spirits."

"But we will not realize this vision if we allow today's economic abundance to make us complacent, selfish, or short-sighted," said Locke. "We cannot afford to coast into the 21st century."



Projected population growth for Washington State. Source: Office of Financial Management

Washington COASTAL CURRENTS

VOL. XX No. 1 Winter 1995/1996

Shoreline Management: The Next Generation

Ecology invites you to join in shaping Washington State's next generation of shoreline management rules.

The 1995 Legislature adopted a number of laws that require Ecology to revise the rules that guide local governments' management of rivers, lakes, floodplains and wetlands (see sidebar on page 2).

Over the next year and a half, Ecology will be working with citizens and interest groups to implement these regulatory reforms. Now is the time to get involved!

Why should you care?

Whether you have a business that depends on a waterfront location, or just enjoy strolling the beach on hot summer days, these changes are about your future. These rules affect how your community plans for the use and protection of shoreline, wetland and flood plain areas - areas that provide irreplaceable environmental, recreational, and economic values.

Since Washington voters approved the Shoreline Act in a 1972 referendum, citizens have actively shaped the direction of the law to meet the needs of their communities by helping to write and amend local shoreline master programs. However, statewide shoreline rules have changed very little over the past twenty-five years, until now.

Although the 1995 Legislature has not changed the basic policy or governing structure of the Act, Ecology's shoreline regulatory reform coordinator Tom Mark believes the new rules will modify nearly every

aspect of SMA administration. "We encourage you to learn about the issues and join Ecology in improving Washington's approach to shoreline management," said Mark.

SMA integrated with CMA
The "big picture" context for many of the 1995 regulatory reforms is the requirement that local governments integrate shoreline planning and growth management planning.

The policies contained in local shoreline master programs are now considered elements of local comprehensive plans required under the Growth Management Act. The regulations contained in local shoreline master programs are now considered part of local governments' development regulations.

Many of the new Shoreline Act rules described below will help local

governments blend shoreline plans into comprehensive plans and development regulations. The overall aim is to create a more efficient, streamlined land use regulatory process.

Three categories of rules
The rules being changed fall into three categories:

- New guidelines for updating shoreline master programs, and
- Streamlining procedural rules, and
- Clarifying jurisdiction and definitions for wetlands, streams, and lakes.

Ecology is proposing to consolidate the current set of eight Shoreline Management chapters of the Washington Administrative Code (WAC) into three chapters, based on these categories.

(continued on page 2)

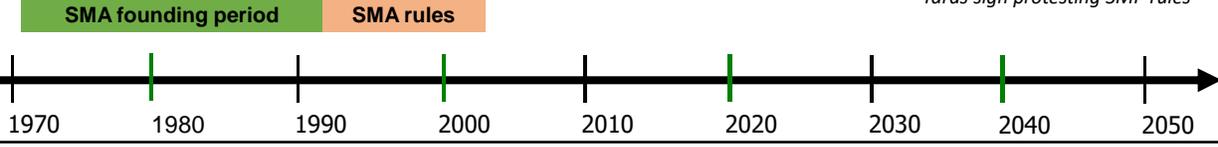


The Skagit River at flood stage, December 1995. Photo: Tim Giese

Washington State Department of Ecology Shorelands and Water Resources Program



Salmon recovery focus

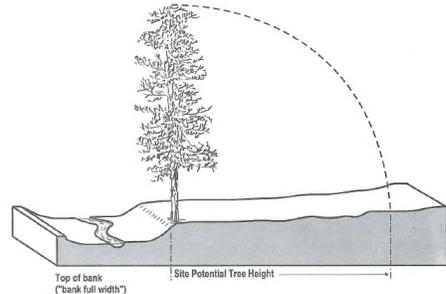


Managing shoreline plants

The existing guidelines do not include measures for protecting shoreline plants. Plant roots keep banks from eroding and create habitat for fish, and their leaves shade the water, keeping it cool and rich in

Slowing bulkhead sprawl

Under the proposed guidelines, local master programs would need to take stricter measures to slow the spread of bulkheads and other "hard" shoreline armoring.



Yards sign protesting SMP rules

2001: Adoption of Path A and Path B



Ecology adopts new shoreline master program guidelines

On November 29, Ecology adopted new shoreline master program guidelines (Chapter 172-26 WAC). With his signature, Ecology Director Tom Fitzsimmons concluded a three-year effort to review and update the state rule.

The guidelines provide details on how local governments can achieve the level of protection required by the Shoreline Management Act (SMA).

The new guidelines will limit the amount and types of development allowed adjacent to streams, lakes and marine waters in Washington state.

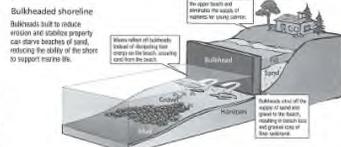
In the future, new structures or activities that are not "water dependent" will have to occur farther back from the edge of those water bodies, partly to protect the quality and natural functions of the shoreline, but also to protect people and businesses from flooding and erosion.

Natural vegetation along shorelines also will need to be preserved to help prevent erosion and to provide habitat for aquatic life, such as endangered salmon.

Bulkheads, docks and other shoreline structures that harm the natural functions of shorelines will be discouraged. Bulkheads, in particular, are a problem because they deflect wave energy and increase erosion elsewhere. In the future, property owners will have to consider environment-friendly alternatives for stabilizing shorelines.

Fitzsimmons said the revised shoreline guidelines will apply only to new development or re-development. They will not apply to existing homes, businesses or farming practices, nor to shoreline projects that have already been approved for development by cities and counties under their existing shoreline master programs.

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Shoreline rule adopted

reforms in response to these comments. Ecology mailed a *Revisions Summary* to everyone who commented on the draft rule.

Two-path approach

A key feature of the final guidelines is a two-path approach that gives cities and counties a choice in how they write and implement their shoreline master programs.

The default "Path A" allows local governments flexibility and creativity in how they meet the standards of the SMA, while the optional "Path B" contains specific measures for protecting shoreline functions.

The National Marine Fisheries Service and the U.S. Fish & Wildlife Service have agreed that any local master program that complies with Path B will automatically get an exception under the Endangered Species Act (ESA).

This will shield cities and counties from federal penalties and criteria lawsuits if an ESA-listed fish is harmed or its habitat disturbed as the result of an activity covered by the exception.

Ecological functions

At the heart of both paths of the proposed rule is a requirement that local officials identify the ecological functions performed by shorelines and protect them based on what the local environment needs.

Path A allows local governments to comply with this requirement through a variety of means. For example, a local government might analyze a stream to determine key stretches where riverbanks abut floodwaters and prevent flood damage downstream. They could then use buffer requirements or wetland protection provisions to prevent inappropriate development in those areas.

Path B of the rule is more detailed in its requirements for protecting ecological functions. It requires local governments to protect and restore "properly functioning conditions" (or PFC) for ESA-listed fish populations.

The term PFC was coined by federal agencies to describe the level of specific functions that are necessary to recover threatened and endangered species populations. The conditions that species need varies by the type of shoreline.

For example, the conditions salmon

need to survive in marine waters may be different than what they need to spawn in streams. Path B explains PFC and describes an analytical process that local governments may use to ensure that PFC is maintained where it exists, and is restored over time where it has been degraded. The Path B approach includes a default vegetative buffer width (see below).

Shoreline vegetation

Both paths in the rule require local governments to protect shoreline plants that keep banks from eroding, shade the water, and create habitat for fish. Path A allows local governments to use a variety of means, such as clearing and grading standards or setback and buffer standards, to protect vegetation.

The Path B approach sets a default buffer of one site-potential tree height (the maximum height that a tree potentially could grow at a particular site) along rivers where trees naturally grow. The default buffer is 60 feet along rivers where trees don't grow, such as in arid areas of the state.

The rule also sets a buffer of one-half site-potential tree height, or 100 feet

(whichever is greater), along lakes and marine shorelines. These standards are based on studies that document the contribution that vegetation makes to shoreline functions.

The buffers, or vegetation conservation areas, are not "no-build" areas. The guidelines do allow some development within them in specific situations. For example, development would be allowed on an existing legal residential lot where it is not feasible to locate the primary structure outside the buffer, or when ecological functions are not diminished. Removing noxious weeds and limiting trees is also allowed.

Bulkhead provisions

Under the new guidelines, local master programs need to establish articles that measure to slow the spread of bulkheads and other "hard" shoreline armoring.

Scientists have found that these structures degrade fish and wildlife habitat and can accelerate erosion on neighboring properties.

Both paths of the rule require that applicants demonstrate a need for new bulkheads and other shoreline armoring before getting approval. The rule also

Channel Migration Zones

Both paths of the new rule add new requirements for local governments to manage river "channel migration zones," or CMZs.

The CMZ is the area where rivers naturally meander over time. They are not only recreational areas to fish, but fish and wildlife also depend on the habitat created when a river is allowed to migrate.

Borrowing from recently adopted forestry rules, the guidelines define the CMZ as the area along rivers where there has been evidence of channel movement over the past 100 years, excluding urban areas that have been separated from the active channel by dikes.

The rule prohibits new structural flood control measures and restricts most new developments



53 parties cross- appealed to Superior Court

1000 Friends of Washington		Rose Ranch
Adams County		Save a Valuable Environment
Associated General Contractors of Washington		Skagit County
Association of Washington Business		State of Washington, Department of Ecology
Basta Marine, Inc.		Stevens County
Benella Caminita		Thurston County
Black Hills Audubon Society		United Property Owners of Washington
Building Industry Association of Washington	Friends of Grays Harbor	Wahkiakum County
Chris Brown	Friends of the San Juans	Washington aggregates and Concrete Association
Chelan County	Grant County	Washington Association of Realtors
Citizens for Sensible Development	Hood Canal Environmental Council	Washington Cattleman's Association
Citizens Growth Management Coalition	Independent Business Association of Washington	Washington Conservation Voters – Island County Chapter
City of Hoquiam	Island County	Washington Contract Loggers Association
City of Ocean Shores	Jefferson County	Washington Environmental Council
City of South Bend	Kettle Range Conservation Group	Washington Public Interest Research Group
Clark County Natural Resources Council	Kittitas Audubon Society	Washington State Farm Bureau
Columbia County	League of Women Voters of Washington	Washington State Grange
Doug Camenzind	Mason County	Whitman County
Fred Ellis	National Association of Industrial and Office Properties	Wildlife Forever of Grays Harbor
Ferry County	National Audubon Society	
Franklin County	National Federation of Independent Business	
	Northwest Marine Trade Association	
	Pacific County	
	Pend Oreille County	
	People for Puget Sound	

2002

Gov. Gary Locke Announces Important Agreement on Shoreline Guidelines

OLYMPIA – Dec. 20, 2002 – Gov. Gary Locke today announced that the state has reached a long-awaited agreement on Washington's shoreline management guidelines. Locke was joined at a news conference in Olympia by representatives of business, environmental groups and local government who participated in the negotiation.

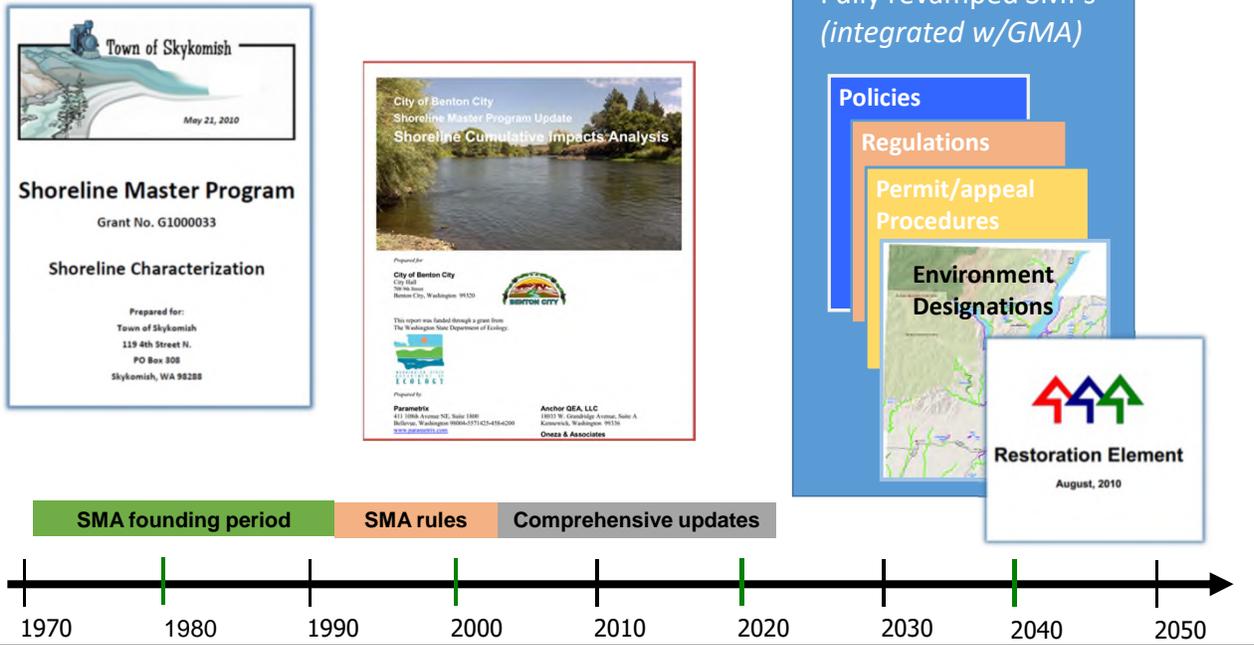
"This important agreement will help us move forward to protect our shorelines," Locke said. "By bringing businesses and environmentalists together, we have proven that we can achieve consensus on even the most controversial issues."

The state's Shoreline Management Act directs the Department of Ecology to adopt guidelines for how to satisfy the protection standards contained in the act, and requires cities and counties to adopt local shoreline ordinances that comply with the state guidelines.

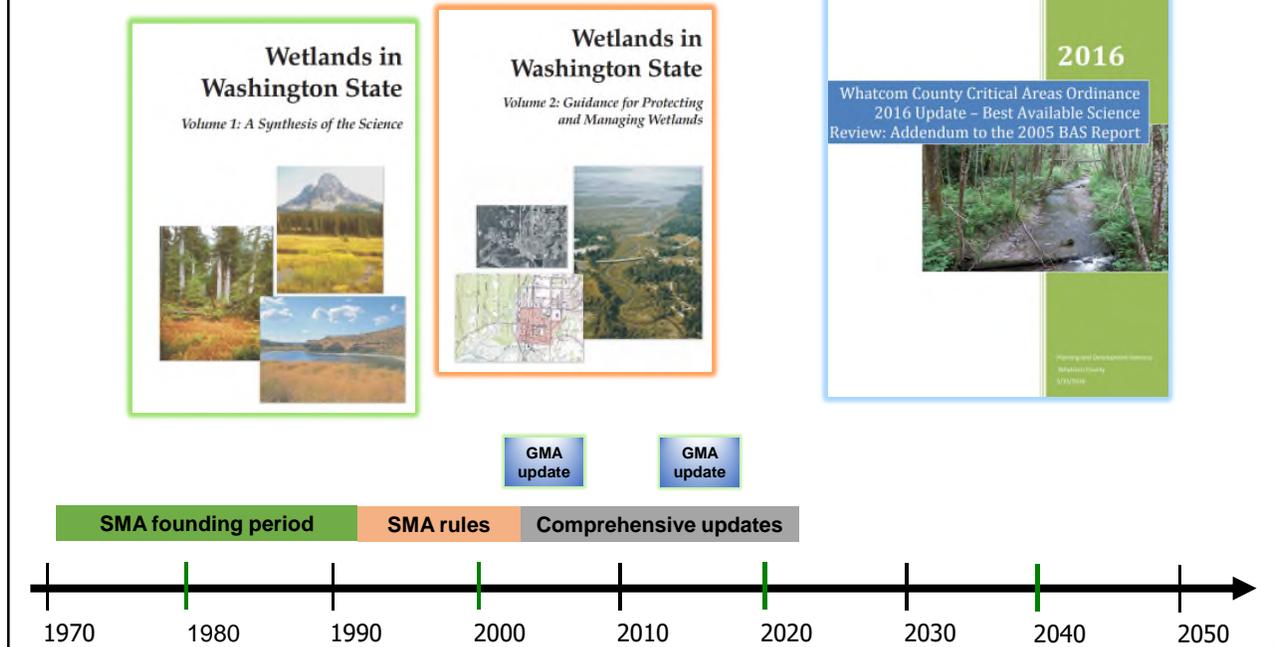
Two years ago, the state Department of Ecology updated the state's shoreline management guidelines for the first time since 1972. However, a coalition of business groups and local governments challenged the guidelines, and the Shoreline Hearings Board subsequently invalidated them. Ecology Director Tom Fitzsimmons asked Locke and Attorney General Christine Gregoire to sponsor mediation talks aimed at reaching a legal settlement.

"The successful mediation avoided further litigation that would have been costly and time consuming for all parties," Gregoire said. "This is an example of how business, environmentalists and local governments can work together to achieve their mutual goals."

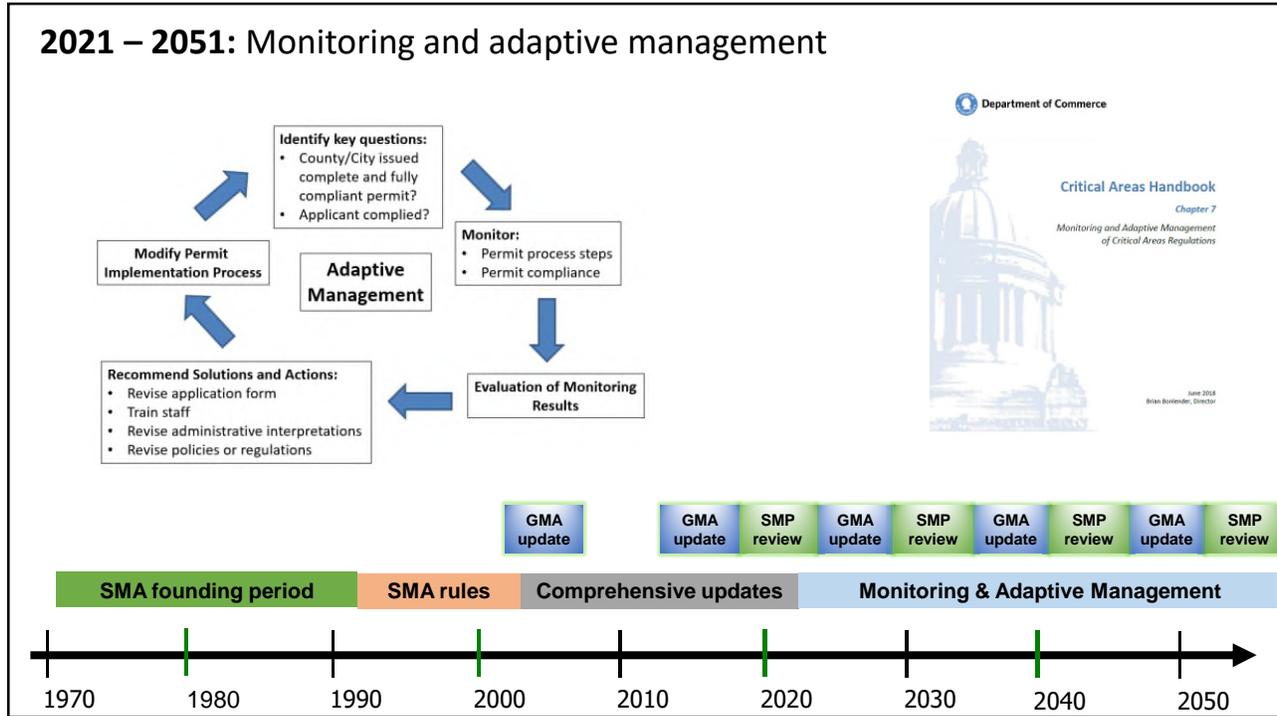
2003 – 2020: Comprehensive updates



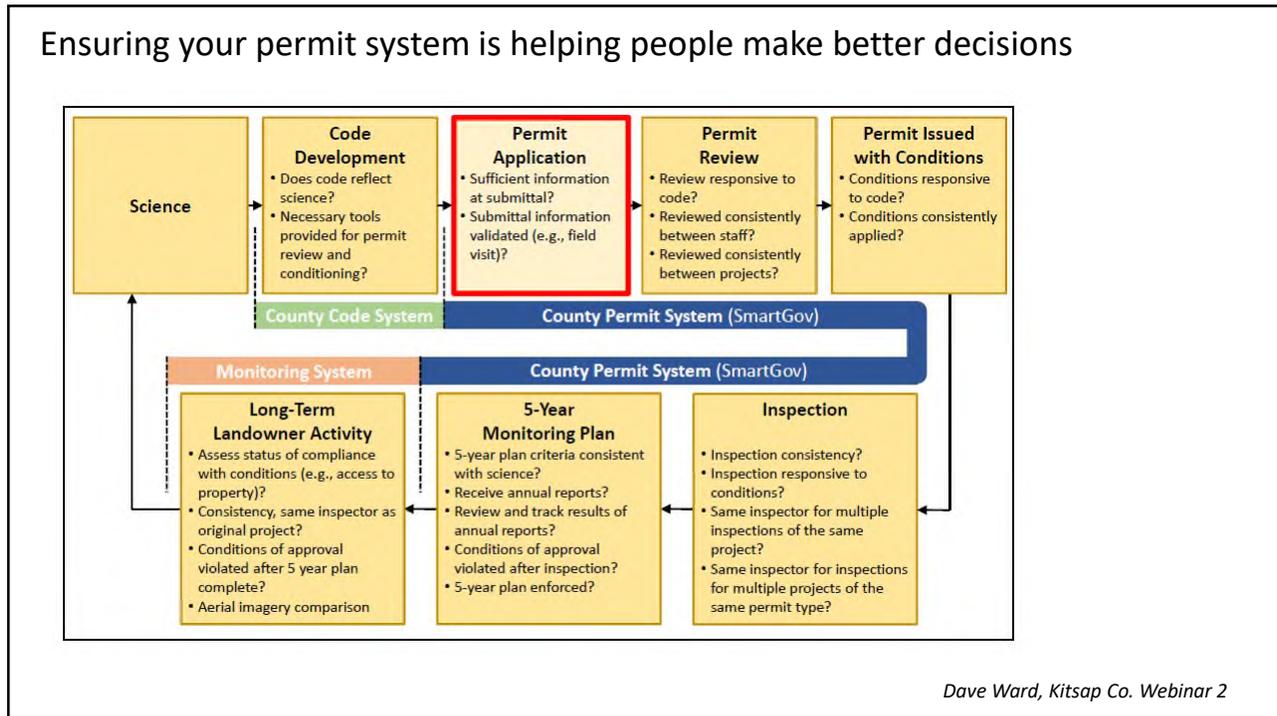
2003 – 2020: Best Available Science updates



2021 – 2051: Monitoring and adaptive management

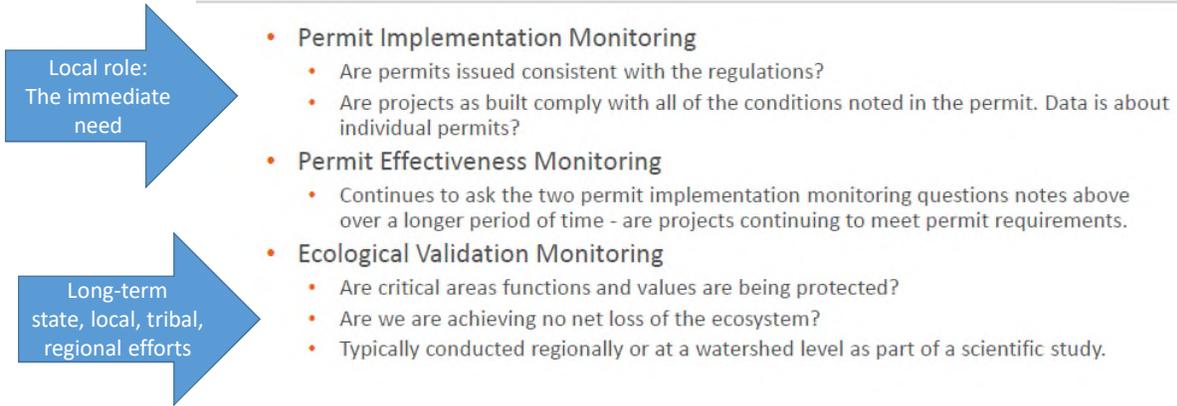


Ensuring your permit system is helping people make better decisions



Levels are a sequence: Local permit monitoring is the foundation

Levels of Monitoring



Scott Kuhkta, Webinar 1

Clear need: funds to help local permit implementation monitoring



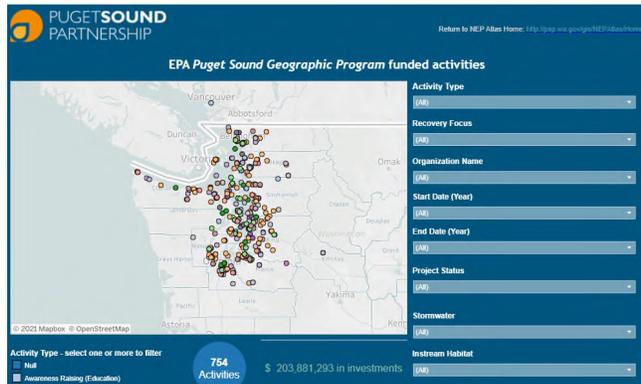
SMA grant program

Sep 2021-June 2023: \$800,000 (*pilot*)

July 2023-June 2025: \$3 Million

Priorities:

- 1) Implementation monitoring capacity
- 2) Planning for climate change



National Estuary Program (NEP) funds have been foundational for both state and local efforts to date

2021 – 2051: Guiding Principles for the next phase

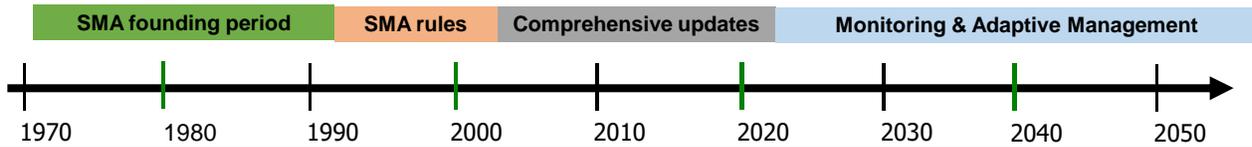
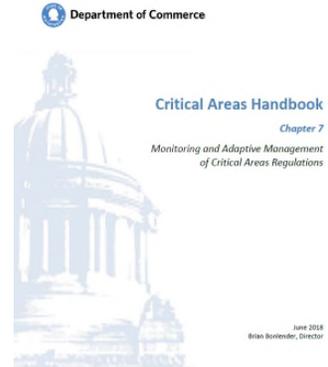
“We can know if we are achieving no net loss only through examining implementation over time.

We should proceed with **humility**, recognizing that there is always uncertainty in the face of the complexity of both natural science and human nature.

Curiosity should be our guide – we should be open to trying different approaches.

We should **respect** the perspectives of all involved.

The natural resources that we manage have many layers, so we must make sure to build **partnerships** to take advantage of our different roles and expertise.”



Thanks!

Tim Gates, AICP
 Policy & Operations Manager
 Shorelands & Environmental Assistance Program
tim.gates@ecy.wa.gov



Meet Your Presenter



Margen Carlson is the Habitat Program Director of the Department of Fish and Wildlife, providing vision and direction for staff and operations in Olympia and throughout Washington. Margen has worked for the Department for nearly 18 years and has had the opportunity to work on a variety of conservation issues including salmon and recovery, maintaining habitat connectivity in developed areas, and marine nearshore protection and restoration in Puget Sound. She is passionate about collaborative and creative conservation approaches, and helping her teams and partners to be successful. Margen explores the outdoors with her husband and young daughter in Olympia, WA, and beyond.



Meet Your Presenter



Don Gourlie loves being on, in, and around the water, particularly salt water. He has a marine science degree and a law degree and his past work has included environmental education, helping businesses reduce their use of toxic substances, working with pacific island nations to strengthen their environmental laws, and more. At the Puget Sound Partnership, he helps develop and write the Action Agenda for Puget Sound and analyze laws for their effect on Puget Sound recovery efforts.

Adaptive Management of Critical Areas and Shorelines (Puget Sound perspective)



March 24, 2021

Don Gourlie

Outline

- **Intro to Puget Sound Partnership**
- **Puget Sound recovery perspective on critical areas and shorelines**
- **Resources to assist with AM of critical areas and shorelines**
- **Legislative happenings on critical areas and shorelines**



Puget Sound Partnership

The Puget Sound Partnership is the state agency tasked with coordinating the region's collective effort to restore and protect Puget Sound



Puget Sound Goals and Vital Signs



GOAL
Healthy Water Quality

- Freshwater
- Marine Water
- Toxins in Aquatic Life



GOAL
Protected and Restored Habitat/ Abundant Water

- Beaches and Marine Vegetation
- Estuaries
- Forests and Wetlands
- Streams and Floodplains



GOAL
Thriving Species and Food Web

- Birds
- Forage Fish
- Groundfish & Benthic Invertebrates
- Orcas
- Salmon
- Zooplankton



GOAL
Vibrant Quality of Life

- Cultural Wellbeing
- Economic Vitality
- Good Governance
- Sense of Place
- Sound Stewardship



GOAL
Healthy Human Populations

- Air Quality
- Drinking Water
- Local Foods
- Outdoor Activity
- Shellfish Beds



Managing Critical Areas/Shorelines (PSP perspective)

- Focus development away from ecologically important areas
- Prevent conversion of working lands
- Protect frequently flooded areas from development and restore floodplains
- Protect nearshore areas and shorelines, especially sensitive areas like eelgrass beds and bluff-backed beaches
- Protect stream health, by protecting riparian areas and using low impact development
- Help working farms contribute to recovery through the Voluntary Stewardship Program
- Prevent new shoreline armoring, remove existing armoring, promote soft shore alternatives
- Designate protection and recovery areas as fish and wildlife habitat critical areas, and establish policies to protect them

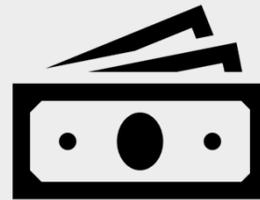


Adaptively Managing Critical Areas/Shorelines (PSP support and resources)

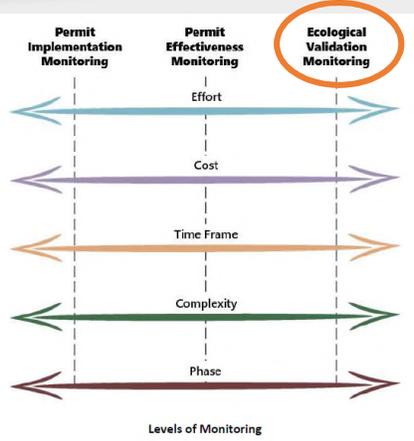
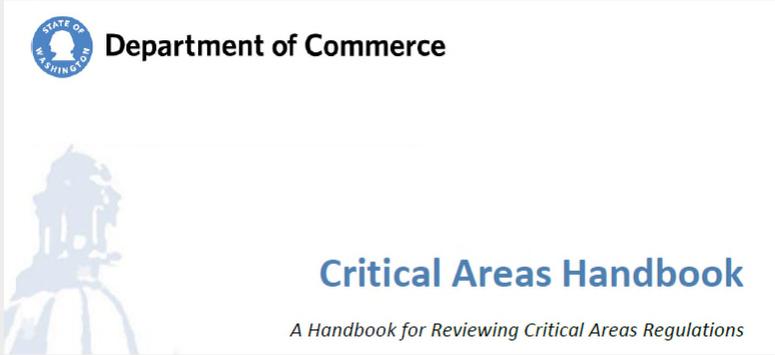
**Partnerships, science, and
technological innovation**



Financial resources



Regional resources for BAS



Regional resources for BAS

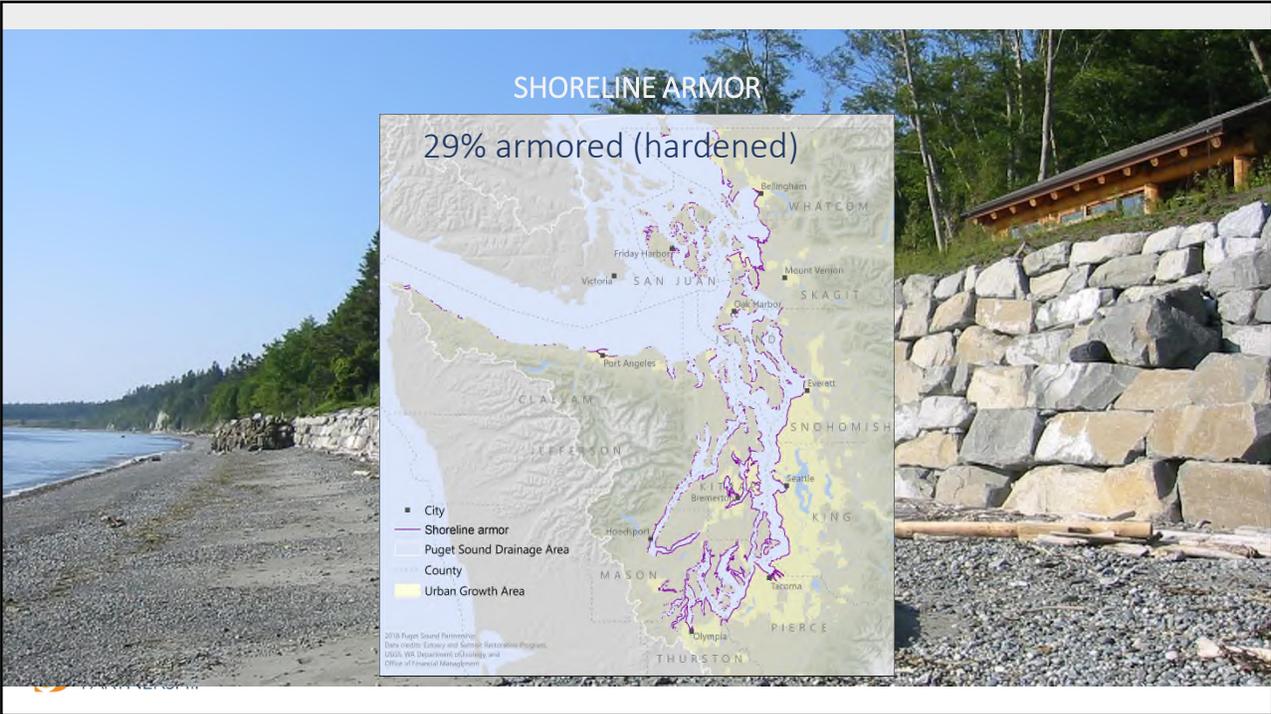


www.pugetsoundinfo.wa.gov



www.psp.wa.gov/PSEMP-overview





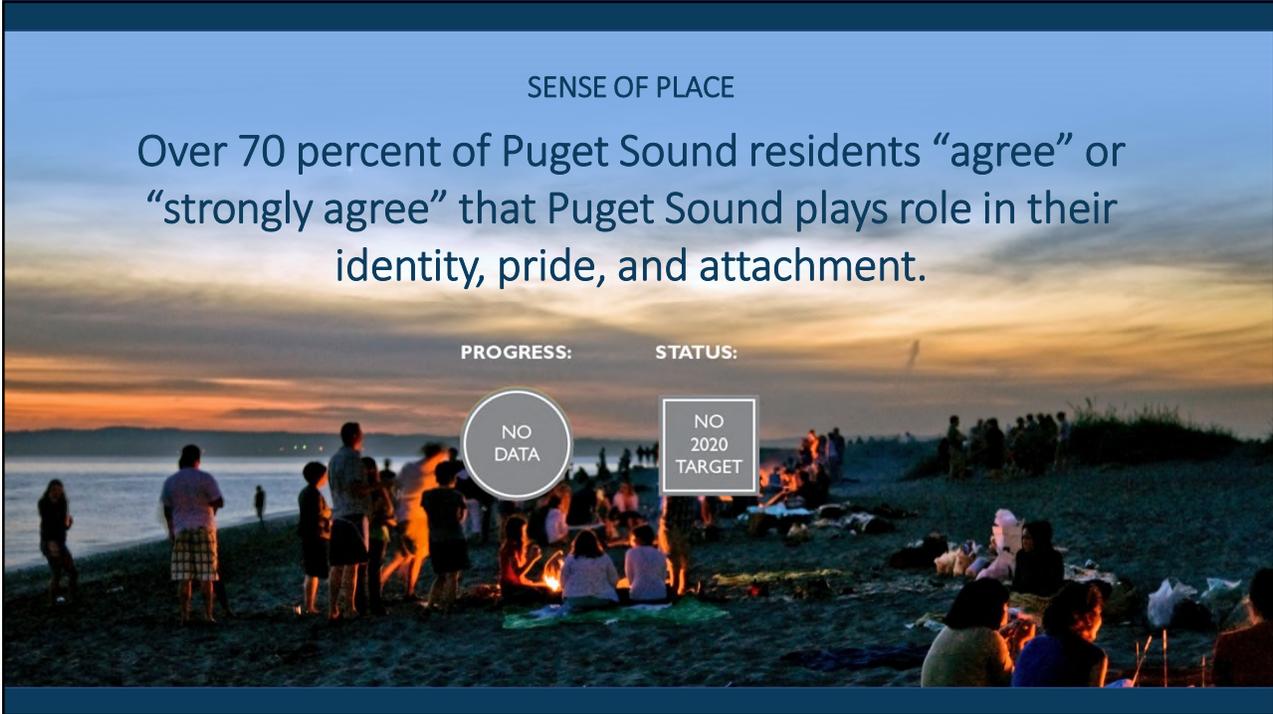
SENSE OF PLACE

Over 70 percent of Puget Sound residents “agree” or “strongly agree” that Puget Sound plays role in their identity, pride, and attachment.

PROGRESS: **STATUS:**

NO
DATA

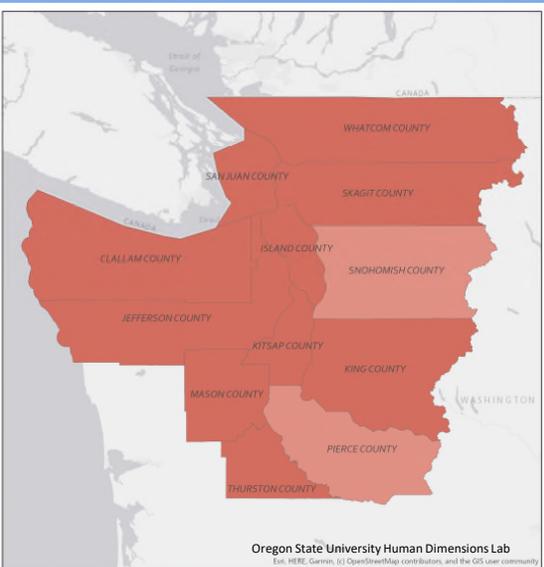
NO
2020
TARGET



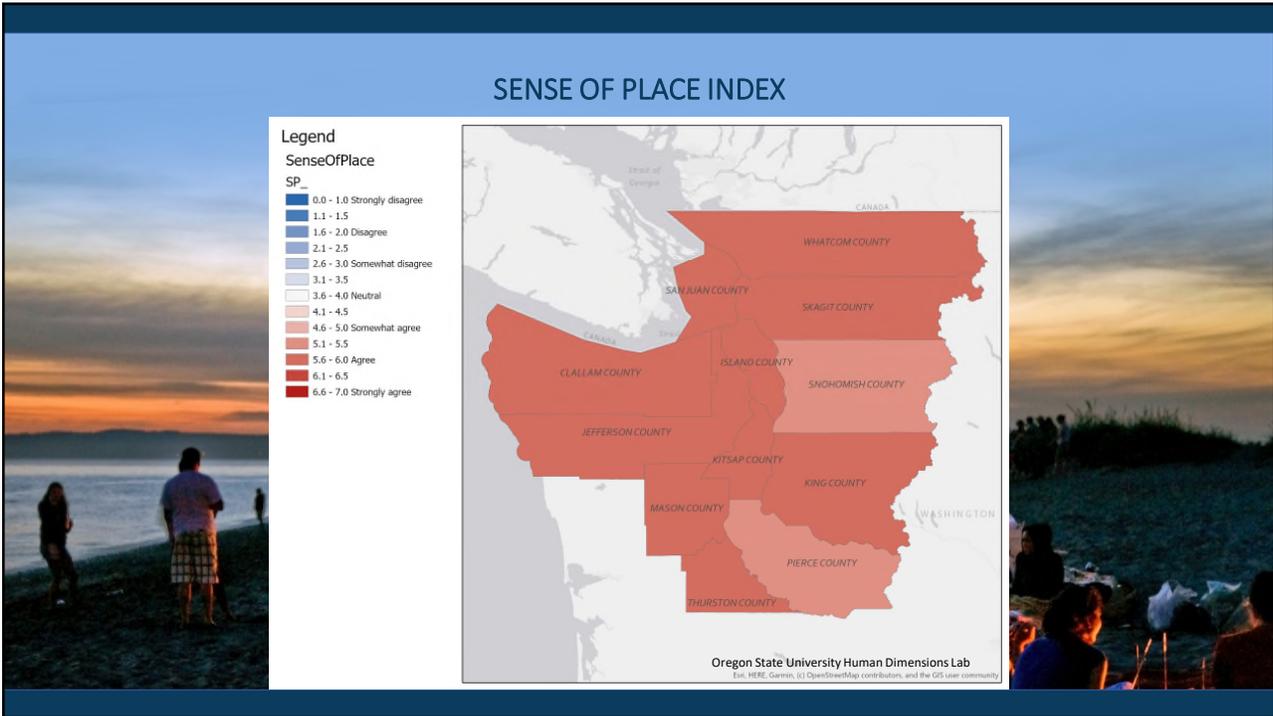
SENSE OF PLACE INDEX

Legend
SenseOfPlace
SP_

0.0 - 1.0	Strongly disagree
1.1 - 1.5	
1.6 - 2.0	Disagree
2.1 - 2.5	
2.6 - 3.0	Somewhat disagree
3.1 - 3.5	
3.6 - 4.0	Neutral
4.1 - 4.5	
4.6 - 5.0	Somewhat agree
5.1 - 5.5	
5.6 - 6.0	Agree
6.1 - 6.5	
6.6 - 7.0	Strongly agree



Oregon State University Human Dimensions Lab
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community



Inventory of fund sources and relevant programs

DATA CENTER

Welcome to the Puget Sound Info Data Center, the main repository for restoration, protection and recovery data across Puget Sound Info programs.

 ACTIVITIES	 PROGRESS MEASURES	 ORGANIZATIONS
 FUNDS	 ONGOING PROGRAMS	 WEB SERVICES



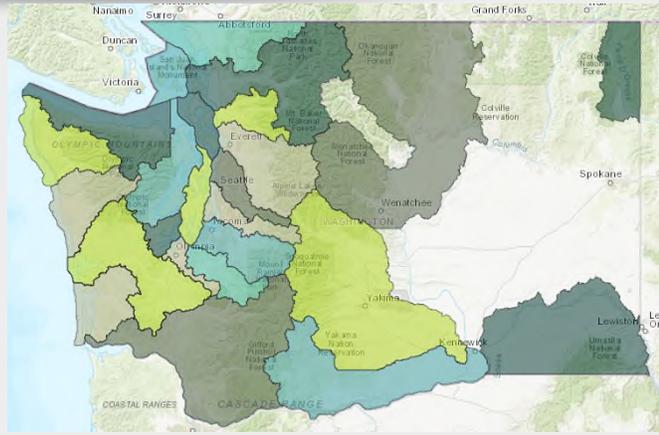
www.pugetsoundinfo.wa.gov

Local resources for BAS



[Local Integrating Organizations](http://psp.wa.gov/LIO-overview.php)

psp.wa.gov/LIO-overview.php



[Salmon Recovery Lead Entities](http://rco.wa.gov/salmon-recovery/managing-organizations/lead-entities/)

rco.wa.gov/salmon-recovery/managing-organizations/lead-entities/

Support at all levels

Action Agenda

Recovery strategies

- Protect and restore ecologically important lands
- Protect working lands
- Reduce barriers and provide incentives to accommodate development within Urban Growth Areas

State - Growth Management Act

Puget Sound region – Action Agenda

County/watershed – County-wide planning policies

City – Comprehensive Plan

Neighborhood or parcel

Action Agenda

Recovery actions

- Information and tools to support land use planning in Puget Sound
- CAO effectiveness for Kitsap Cnty
- Identify infill sites in Everett, Edmonds, Bothell.



Example Tools for AM of Critical Area/Shoreline

DFW Priority Habitat and Species volume on riparian – [Riparian Ecosystems: Science and Management Implications \(2020\)](#)

Ecology's Puget Sound Watershed Characterization - [Watershed Assessment – Map](#)

Washington Coastal Hazards Resilience Network sea level rise projections - [SLR Visualization Tools](#)

Analysis of growth relative to UGAs - <https://pspwa.box.com/s/x16e54snehe90we4uuct6b342x9ve1d5>

Puget Sound Mapping Project - [Puget Sound Mapping Project](#)

Shoreline monitoring toolbox - [Shoreline Monitoring Toolbox](#)

High resolution change detection - [High Resolution Change Detection \(arcgis.com\)](#)

Department of Commerce Critical Areas Guidebook - [Growth Management Guides and Resources](#)

Shorefriendly program resources for landowners – [Protect Your Property and Puget Sound - Shore Friendly](#)

[Nearshore Summit](#) hosted by PSEMP and ESRP

Climate Change										
	Warmer Air	Heavier Rain Events	Higher Peak Flows	Lower Summer Flows	Earlier Streamflow Timing	Altered Sediment Dynamics	Warming Streams	Sea Level Rise	Ocean Warming	Ocean Acidification
<p>Prevent climate change</p> <ul style="list-style-type: none"> Prevent conversion of undeveloped land and working lands. Focus new growth in existing urban growth areas or other previously developed areas. <p>Adapt to climate change</p> <ul style="list-style-type: none"> Consider how climate change will affect critical areas and shorelines <p>Climate science literature review for Puget Sound https://pspwa.box.com/s/m065vv0z31qgdbm920v55a9xib2v2rgg</p>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cultural Wellbeing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Estuaries			✓	✓	✓	✓	✓	✓	✓	
Marine Water Quality									✓	✓
Shellfish Beds		✓						✓	✓	✓
Floodplains		✓	✓	✓		✓	✓	✓		
Land Dev. and Cover	✓	✓	✓	✓				✓		
Eelgrass						✓		✓	✓	✓
Chinook Salmon		✓	✓	✓	✓	✓	✓		✓	
Shoreline Armoring						✓		✓		
Freshwater Quality		✓	✓	✓		✓	✓			
Toxics in Fish		✓	✓	✓						
Summer Streamflows				✓						



2021 Session – Critical Areas/Shorelines (status as of 3/19)
<p>HB 1099 (Duerr) - Improving the state's climate response through updates to the state's comprehensive planning framework <u>Status:</u> S. Housing & Local Gov't. – Hearing 3/16 – Exec: 3/24, 10:30 AM (House passed 2nd Substitute 56-41 on 3/5.)</p> <p>HB 1117 (Lekanoff) – Promoting salmon recovery through revisions to the state's comprehensive planning framework. <u>Status:</u> S. Housing & Local Gov't. – Hearing 3/16, 8:00 AM – Exec: 3/24, 10:30 AM (House passed Engrossed 2nd Substitute 58-38 on 3/2)</p> <p>HB 1241 (Duerr) - Planning under the growth management act. <u>Status:</u> S. Housing & Local Gov't. – Hearing 3/16 – Exec: 3/24, 10:30 AM (House passed engrossed substitute 56-41 on 3/8.)</p> <p>SB 5273 (Salomon) - Concerning the replacement of shoreline armoring. <u>Status:</u> H. Rules R (H. Rural Dev., Ag, & NR passed with amendments: 3/16 (Senate passed substitute 28-21 on 2/18)</p>



2021 Session – Climate Change

(status as of 3/19)

HB 1099 (Duerr) - Improving the state's climate response through updates to the state's comprehensive planning framework

Status: S. Housing & Local Gov't. – Hearing 3/16 – Exec: 3/24, 10:30 AM (House passed 2nd Substitute 56-41 on 3/5.)

SB 5126 (Carlyle) – Concerning the Washington Climate Commitment Act. (Gov Request)

Status: S. Ways & Means – Hearing: 3/15 – Exec: 3/18, No action taken (S. Environment, Energy, & Tech. passed substitute, 2/25) (NTIB – exempt from cutoff resolution) (cap and trade)

SB 5373 (Lovelett) – Concerning carbon pollution (“Washington Strong”)

Status: S. Environment, Energy, & Technology – Hearing, 3/4 (likely NTIB – exempt from cutoffs) (carbon tax)



Thank you for your
contributions to Puget
Sound recovery!



Q&A

TYPE YOUR QUESTIONS IN THE CHAT BOX IN YOUR TOOLBAR

@NAME YOU WANT TO ASK (@GEN)



Poll



In Chat
Where should we
commit resources next?

Questions for Breakout Session



What recommendations can you offer others to start or maintain a successful adaptive management program?

Share your success stories.

Would you be willing to speak with other jurisdictions to offer support?

59

Questions for Breakout Session



What do you wish you were doing or would you like to do in your jurisdiction for adaptive management?

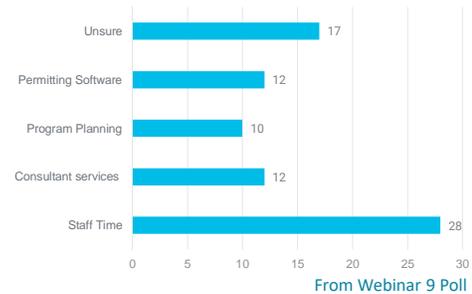
60

Questions for Breakout Session



What tools/technology/resources do you use to support your monitoring and adaptive management efforts?

Or for those not currently doing monitoring and adaptive management, which tools/technology would you pursue first if you had the resources?



61

Questions for Breakout Session



Is there one tool or resource from the webinar series you can take home and implement?

62

Questions for Breakout Session



What was your key takeaway from the series you would share with others you work with?

63

Poll



Did you learn something new that will advance your monitoring and adaptive management program?

Is your jurisdiction ready to initiate new ideas and elements into your monitoring and adaptive management efforts?

Did the webinar series increase support from your leadership for critical areas monitoring and adaptive management program enhancements?

64

Poll



In Chat
If we offered more training what would you like to see?

How helpful were the breakout sessions for peer to peer interaction?

65

Thank You

