



Mitigation That Works

GMAP Report

January 26, 2010

Topics

- Follow-up from May 2009 GMAP
- Wetland Banking Rule and Program Status
- Wetland Mitigation Compliance Program Status
- Puget Sound In-lieu Fee Program Development
- Puget Sound Watershed Characterization Project
- Flow Control and Floodplain restoration
- Mitigation that Works Road Map

Why wetlands and other aquatic resources are important to protect, restore, and create.



example of avoidance



example of mitigation



Mitigation That Works Goals & Objectives



Two major goals

- 100% success rate for mitigation projects.
- Improved predictability and efficiency for permit applicants.

Objectives

- Establish and sustain a credible wetland banking program.
- Ensure 100% of mitigation projects are assessed for compliance with permits.
- Establish watershed characterization as a standard approach to mitigation.
- Develop new mitigation tools to improve environmental outcomes and increase permit predictability.
- Expand training, outreach, and technical assistance.

What are we doing to reach our goals and objectives?

- Implementing Forum's Recommendations Report. 
- Adopted mitigation banking rule. 
- Continued focus on compliance.
- Significant partnering with state and federal agencies, such as the Puget Sound Partnership, WDFW, EPA, and the Corps.
- Providing technical assistance and grant funds to local governments for watershed characterizations.

These actions support Ecology strategies by

- Increasing our accountability, flexibility, and transparency.
- Protecting our resources.
- Improving coordination among governments.



Follow Up to the May 2009 GMAP

Action	Update
<p>Wetland Banking Rule: Rule needs to clearly address how banks will be handled on prime agricultural lands.</p>	<p>Language was added to the rule which outlines considerations for when proposals are located on designated agricultural lands of long term commercial significance. Impacts to designated prime farmland soils must be avoided and minimized to the greatest extent possible.</p>
<p>Wetland Banking Credits: Consider the option of using the available credits for sites that have failed in the past. As an enforcement or follow up tool to sites that have failed, can we use the capacity of available credits to direct people to banks?</p>	<p>Use of a bank can be an effective approach to resolving enforcement cases and failed mitigation sites. We have the ability and authority to direct applicants to fulfill failed mitigation requirements. We must give them a variety of solutions, and cannot direct applicants to only use banks or a specific bank. For example, we can suggest they use a bank, an in-lieu fee program, or build a different project.</p>
<p>Sharing the successes of Mitigation that Works: We need to spread the word to local governments, the Corps, and businesses about the tools we have been applying to increase mitigation success.</p>	<p>We hosted a six month update (July 2009) for Forum members, and have been presenting at local planner forums and Ecology sponsored shoreline planner meetings. We are providing materials through listservs and our web site. We are coordinating significantly with our sister agencies. To facilitate implementation at the local level, we are providing technical assistance. We will make the watershed characterization results available through the Coastal Atlas and the Puget Sound Data Exchange project.</p>



Wetland Banking Rule and Program Status

THE WETLAND BANKING RULE WAS ADOPTED SEPTEMBER 4, 2009

The Rule includes sections for: tribal banks, banks on agricultural lands and sideboards for setting bank service areas.

Program Status

- Eight banks certified and operating statewide.
- Six are in process for certification.
 - One bank, if certified, will be the first multi-resource bank in the state addressing both wetlands and ESA resources.
- We instituted a suspension of credits at one bank due to compliance issues. The bank is back in compliance.

Performance Measure

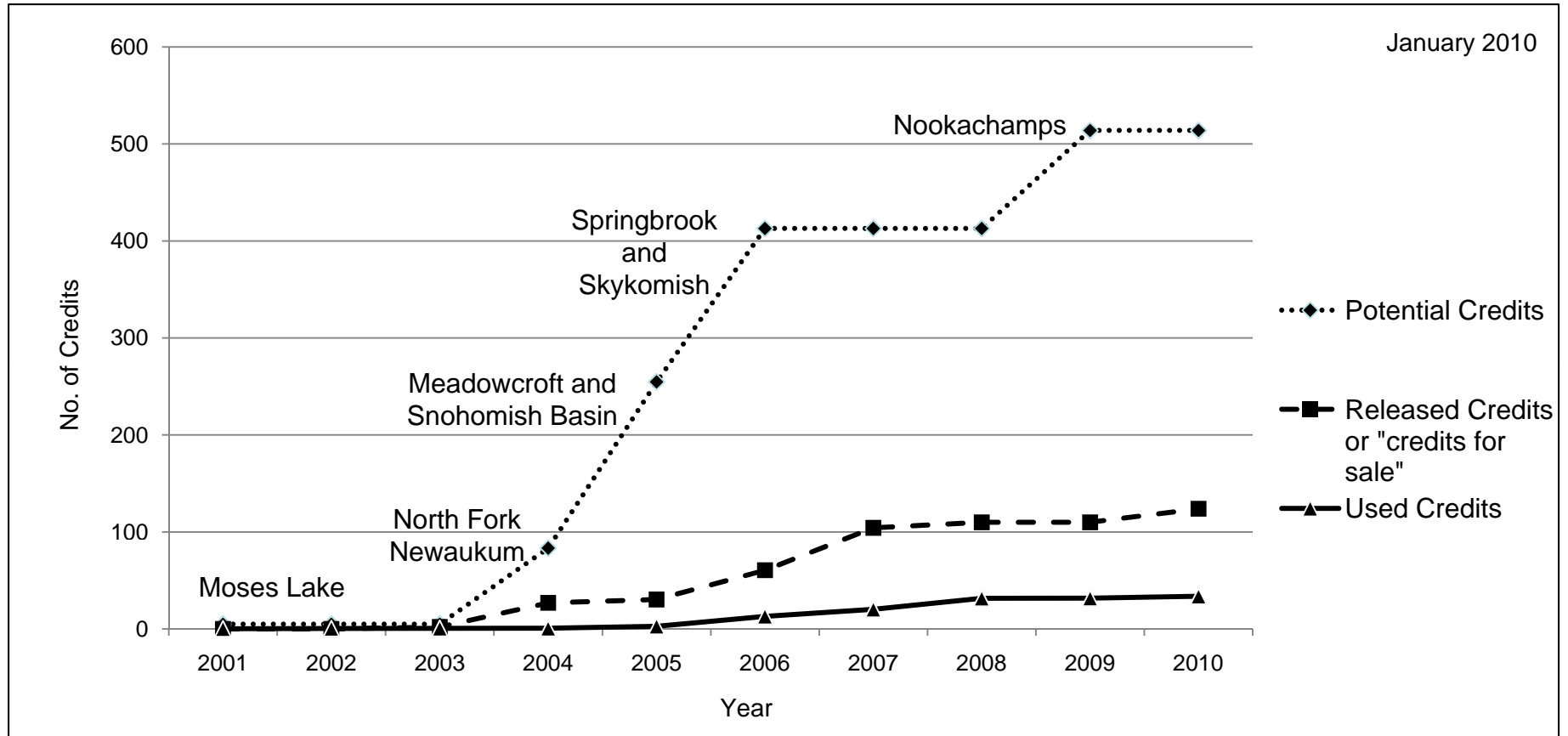
To gauge whether we are improving the predictability and efficiency of certifying banks:

75% of Ecology document reviews during the certification period completed within 30 days, with the exception of the Mitigation Banking Instrument, which will be completed within 90 days.

We are on track and attained 100% of reviews within the target timeframe for the first quarter of the biennium.



Status of Credits for Ecology Approved Wetland Banks

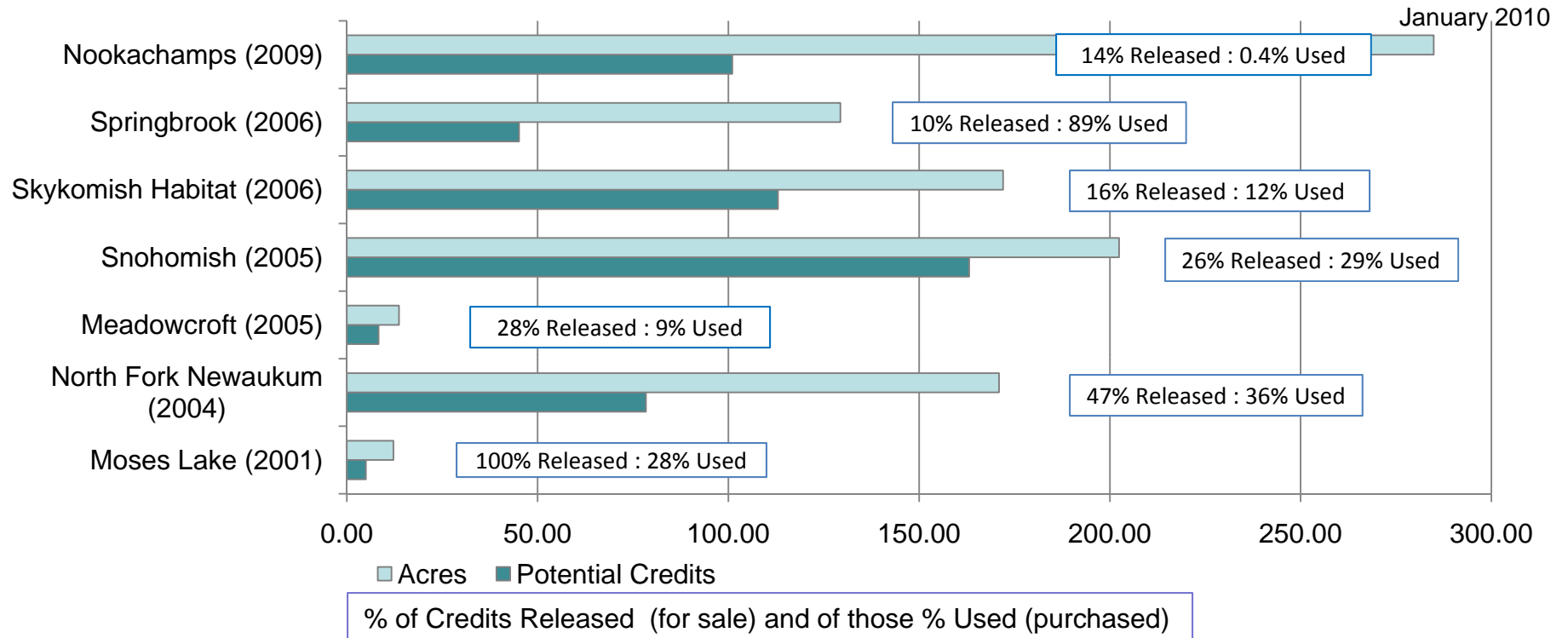


Potential credits = The total amount of credits the bank is worth once it meets all of its performance standards and reaches full ecological maturation.

Released credits (or credits for sale) = As a bank attains ecological benchmarks (performance standards), Ecology approves, or “releases”, that associated portion of credits for sale.

Used credits = Credits that have been bought by an applicant to mitigate for a wetland impact or proposed impact.

Relationship of Acres to Credits for Ecology Approved Wetland Banks



Each bank generates a unique amount of credits due to site specific conditions, regardless of the acreage. For example, a bank may have a lot of upland acreage but not a lot of high-functioning wetland acreage. Thus, banks are compared and tracked based on the number of credits they are worth, not the number of acres they encompass. Paine Field is not included in this graphic due to the complexity of its crediting system. It accounts for 60 of the total acres.

Total acreage = 1045 acres.

Total potential credits = 514. (The acres per credit ratio ranges from 1.2 – 2.9, with an average of 1.9.)

Total released to date = 124 credits. Total used to date = 34 credits, or 27%.



Wetland Mitigation Compliance Program

WE CONTINUE TO MEET OR EXCEED OUR PERFORMANCE MEASURES

Review 75% of sites within 18 months of receiving completed plans.

- Reviewed 100% of projects with completed plans.
- We were able to follow-up and request completed plans and perform site visits on additional sites.

Verify status of all projects within 2 years of permit issuance.

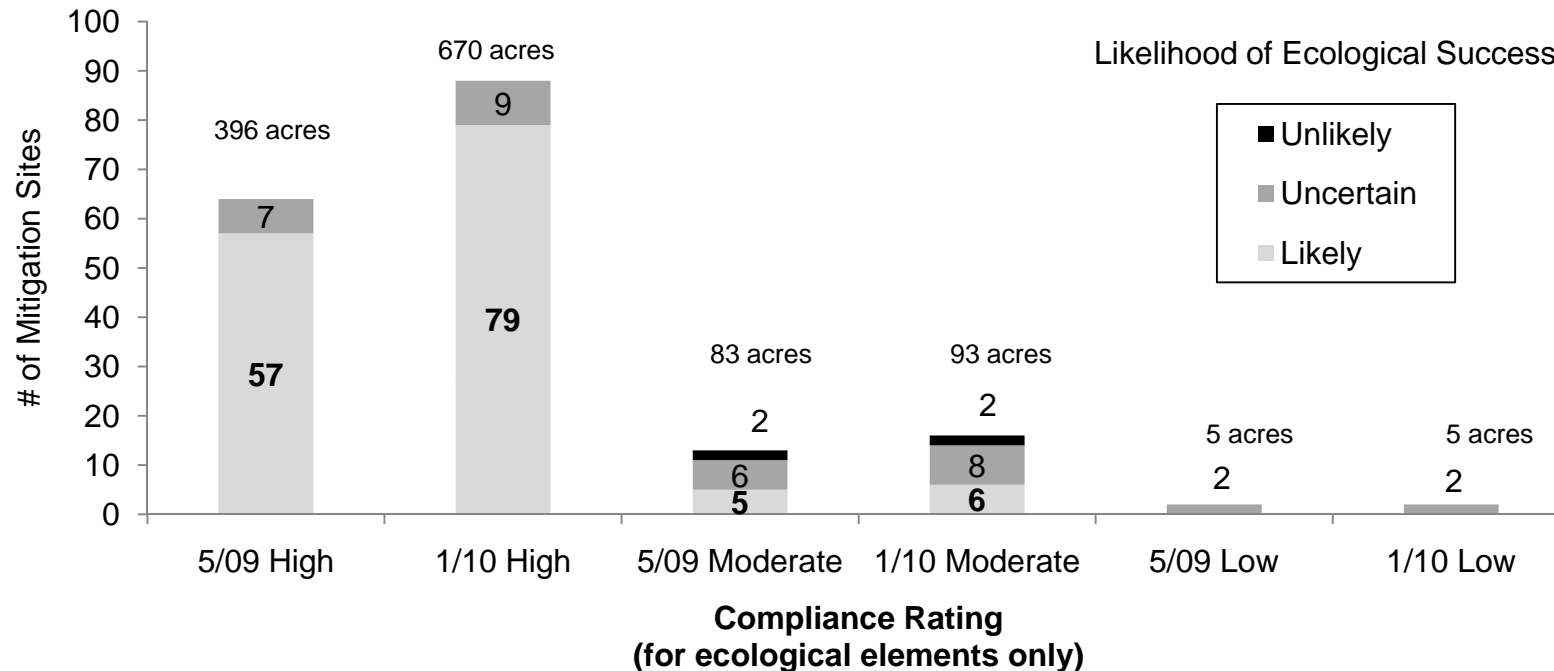
- We have determined status on 100% of permits issued (200 projects) from January 2004 through December 2007.
- We have also determined status on 33 projects permitted since December 2007.

WHAT	WHO	WHEN	STATUS
Send follow-up letter after each site visit. Perform follow-up inspections on sites that show early signs of not succeeding.	Compliance Team, Dana Mock	On-going	Follow-up occurs on all site visits. We have revisited a dozen or so problem sites a second or third time after the as-built visit to provide technical assistance.
Refine permit conditions based on lessons learned from follow-ups.	Wetlands subcommittee, Teri Granger	On-going	Updated conditions for 401 Water Quality Certifications are available for use by regional wetland specialists and 401 staff.
Review monitoring reports and visit sites at least two more times during monitoring period. Prioritize projects uncertain or unlikely to succeed.	Compliance Team, Dana Mock	On-going	Sites initially visited in 2006 are approaching the mid-point of their monitoring period (2 nd official visit needed).
Provide training on site selection, plan review, and design of compensatory mitigation projects.	Dana Mock, Patricia Johnson, wetland specialists	On-going	4 classes since April 2009. 1 class scheduled for March 2010. 8

Translating Compliance into Ecological Success

Mitigation Sites

January 2010



Predictions assume that follow-up and adaptive management will continue throughout monitoring periods.

Data Notes:

- 106 sites total: 92 sites received traditional post-construction visits between mid-2006 and December 2009, 14 sites used a pre-approved option such as a bank.
- 80% of all sites are predicted likely to succeed, 93% of those are in high compliance.
- 13% are projects that used bank or advance mitigation credits or in-lieu fee, all of which are in the high compliance category because of their unique approval processes. The in-lieu fee is categorized as uncertain to succeed because the mitigation project has yet to be built.
- 20% of all sites are unlikely or uncertain to succeed. We are focusing compliance efforts on these projects, working with the applicants and using adaptive management to improve likelihood of success.

Mitigation Site Example

(Compliance: Moderate, Ecological Success: Unlikely)

April 2008 Visit



Impacts: 1.9 acres

Mitigation: 2.91 acres wetland creation, 1.38 acres of upland buffer enhancement

Ecology Action: September 2006

Mitigation Site Built: End of 2007

Site Visits: April 2008/July 2009

Warning Letter: October 2009

July 2009 Visit



Major concerns

Lack of hydrology, and lack of maintenance and monitoring.

Successes

- Coordination with the Corps and local governments has paid off.
- Applicant is following through with monitoring and maintenance requirements.



Puget Sound In-Lieu Fee Program Development

Benefits

- Permittee can pay a fee to an approved in-lieu fee program sponsor instead of building a mitigation project.
- Provides a cost effective mitigation for small impacts to wetlands by reducing transactional costs.
- Sponsor assumes responsibility for mitigation success. The sponsor can combine the fees collected to build larger, more environmentally sustainable projects.
- Restoration of pilot sites will occur in advance of impacts to resources and the collection of fees. This will help ensure no net loss of ecological function.

Challenges

- Tribes have expressed significant concerns with the proposed program.
- Funds for pilot projects have not yet been obligated. The Puget Sound Partnership is working to identify suitable pilot sites so that funds can be obligated by the end of the fiscal year.

We received capital monies in July 2009 and are on schedule to have a program approved within one year of receiving the funds (June 2010)

WHAT	WHO	WHEN	STATUS
Draft prospectus submitted for regulatory review. Public comment period begins.	Patricia Johnson, PSP	February 26, 2010	Draft submitted to internal workgroup (Corps, Ecology, Partnership).
Approval of program by federal and state regulatory agencies.	Gail Terzi, Corps Lauren Driscoll	June 30, 2010	Not yet started.
Prospective mitigation projects within pilot watersheds identified.	Chris Townsend, PSP	March 31, 2010	On-going discussions with local governments and tribes. Site selection will involve 11 watershed stakeholders.



Puget Sound Watershed Characterization Project

Background

- Local governments need tools and information to develop land use designations, regulations, and development standards that effectively protect and restore Puget Sound ecosystems.
- Ecology in partnership with other individuals and agencies, has developed and piloted a method to conduct watershed characterizations and assist local governments in applying the results.
- So far, this method has been successfully but slowly applied jurisdiction by jurisdiction.

Need

- To protect and restore ecosystems successfully requires a watershed approach.
- To integrate landscape information for fish and wildlife, and water quality and quantity.
- A peer reviewed Puget Sound-wide characterization using consistent methods and data sources.
- Data analyzed and presented in a manner useful to local, state, federal governments, tribes, and NGOs in watershed management, planning and eventually permitting.

Benefits

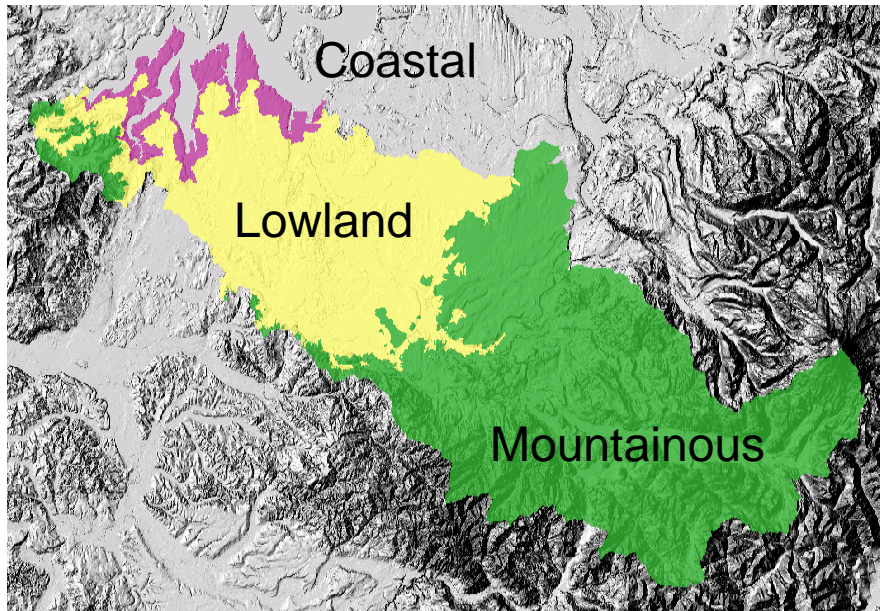
- Providing a much needed framework for planning at the watershed scale.
- Partnering with EPA and the Partnership furthers efforts to shift the land use planning paradigm.
- Supplying the tools and information to many local jurisdictions at once.

Challenges

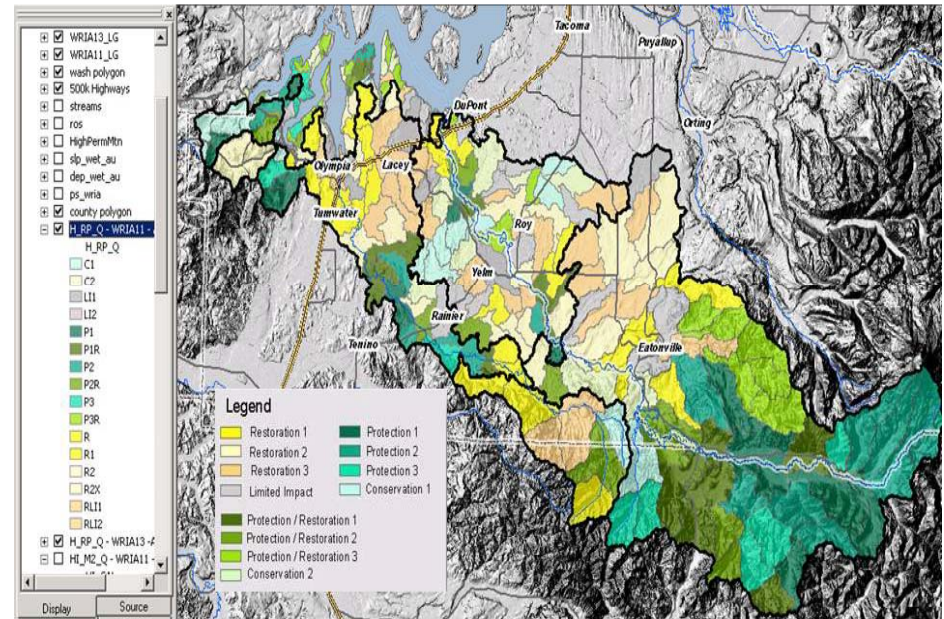
- Course scale data may not be directly applied to certain site specific actions.
- Supporting local governments with technical assistance.

Puget Sound Watershed Characterization Project

Each Water Resource Inventory Area divided into three landscape groupings



Results: Protection and Restoration Maps



WHAT	WHO	WHEN	STATUS
Phase 1: watershed condition index for water flow processes, user's guide, technical documentation	Technical Team, Stephen Stanley, Susan Grigsby, Dan Saul, Michelle Wilcox	Ongoing - Early 2010	Technical Team wrapping up. GIS model is being finalized and results are being produced. Documentation is being drafted.
Phase 2: integrate process models for water flow, wildlife, water quality and Puget Sound Nearshore Ecosystem Restoration Project's change analysis; conduct characterizations at finer scale	Technical Team, Stephen Stanley, Susan Grigsby, Dan Saul, Michelle Wilcox, WDFW, EAP	Spring 2010 – Summer 2011	Planning work is beginning.

Background

- For stormwater flow, WA Dept. of Transportation and some local entities have interest in using floodplain restoration as an alternative to vaults.
- WA Dept. of Transportation and Clark County have received a few permits for demonstrative approaches in floodplains.
- All done case-by-case. No clear structure for applicants or permit staff.
- Stormwater Manual's existing wetland flow control standards were defined to protect closed depression wetlands and are not the appropriate standard for floodplain or degraded wetlands.

Need

- Guidance:
 - On how to model or quantify the required flow control for treatment methods constructed within floodplains.
 - On how applicants are to demonstrate compliance.
- Flow standards for demonstrative approach.
- Stormwater Manual to include guidance and revised technical standards.



Flow Control and Floodplain Restoration

Benefits

- Using more natural solutions for flow control generates a host of environmental benefits and reduces construction and long-term maintenance costs.
- Unified agency position.
- Synergy gained from combining stormwater flow requirements and wetland mitigation.
- Reduces complicated and time consuming case-by-case project review.

Challenges

- Most likely will require more sophisticated modeling.
- Training staff on the sophisticated floodplain models and determining when the models apply.
- How to track projects if the Shorelands program regulatory review (401 or Shoreline Management Act) is not triggered.

WHAT	WHO	WHEN	STATUS
Project specific coordination between SEA and WQ.	Bobb Nolan, Sandi Manning, Mark Cline, Ed O'Brien	ongoing	In process on a Clark County project.
Guidance development to institutionalize a more programmatic approach.	Sandi Manning, Bobb Nolan, Mark Cline, Ed O'Brien	2010	In preliminary discussion.
Development of technical standards for floodplains and degraded wetlands.	Tom Hruby, Ed O'Brien	Dec. 2010	Work not started.
SEA staff to participate in Stormwater Permit Manual update process.	Tom Hruby, Penny Kelly	Spring 2011 - 2012	Work not started. 15



Mitigation that Works Road Map

Institutionalizing successes, continuing to deliver on Forum recommendations:

- ✓ Institutionalize the banking and compliance programs – Done. Now need secure funding.
- Develop Puget Sound in-lieu fee program and begin implementing – June 2010
- Complete Puget Sound watershed characterization project
 - Phase 1 – March 2010, Phase 2 – June 2011
- Submit no net loss (wetlands change analysis mapping) project for funding – scoping WDFW collaboration, will submit for EPA funding
- ✓ Mitigation site selection guidance – Done. Now providing trainings and technical assistance.
- Craft advance mitigation inter-agency policy and guidance – Summer 2010
- Support Corps avoidance and minimization checklist – on hold
- Provide trainings, materials, and presentations on the variety of mitigation tools and guidance - ongoing FY 09 – 11 via EPA funding
- Explore a process for customer feedback.

Future reporting proposal:

- Post progress reports and work products on the web
- Present at planning forums, annual conferences, and other like efforts
- Report semi-annually to Ecology's Senior Management Team