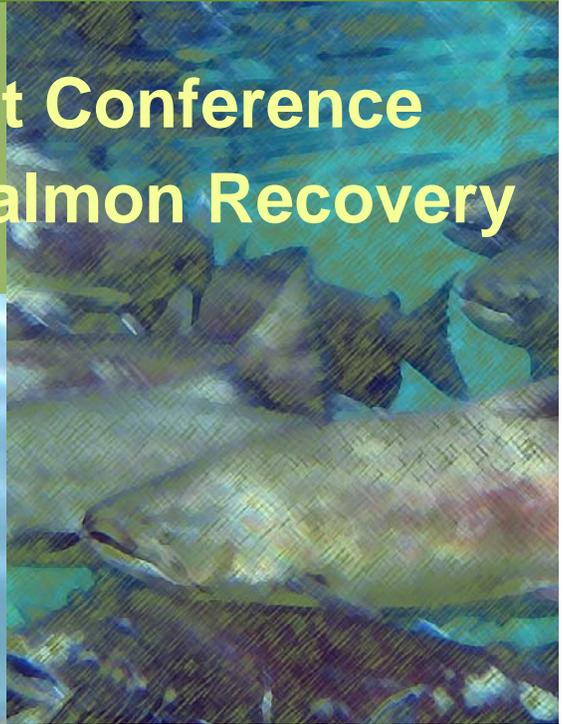


Salmon Habitat Conference

A Decade of Salmon Recovery



April 15-16, 2009
Little Creek Conference Center
Shelton, Washington

Building Better
Projects



SALMON

HABITAT CONFERENCE
Salmon Recovery Funding Board

Special Thanks

Washington Department of Transportation
Sound Native Plants

...for donating plants for table centerpieces.



Welcome



Building Better Projects is the second conference for Salmon Recovery Funding Board grant applicants. Since 2000, the Salmon Recovery Funding Board has awarded more than \$234 million in grants for nearly 1,200 projects statewide. Grant applicants have contributed another nearly \$144 million, bringing the total investment to \$378 million.

With that funding, you've made a difference.

- You have removed more than 220 barriers to fish passage, opening up more than 1,000 miles of new habitat.
- You have restored 543 acres of wetlands, nearly 6,000 acres of estuaries, and 2,521 acres of riparian areas.
- You have removed invasive plants from more than 3,700 acres of land along rivers and in wetlands and estuaries.
- You have installed 456 fish screens to keep fish in rivers and out of irrigation ditches.
- You have protected more than 28,400 acres of quality habitat.

Today, we celebrate your success and gather together to learn from one another. Workshops, panel discussions, and displays have been designed with a "lessons learned" approach to sharing successful projects. The schedule includes breaks and opportunities for you to meet your peers, hear their stories, and share information on how to make projects easier, faster, and more efficient in future years.



Agenda at a Glance



Wednesday, April 15

All Day	Exhibitors, Help Desks, and Bookstore		Event Center
8 A.M.	Registration and Breakfast		Event Center
9 A.M.	<p>Welcome Steve Tharinger, Salmon Recovery Funding Board Kaleen Cottingham, Recreation and Conservation Office</p> <p>Squaxin Island Tribe Welcome Video Message from Governor Chris Gregoire</p> <p>10 Years of Salmon Recovery William Ruckelshaus, Puget Sound Partnership Leadership Council</p>		Event Center
10 a.m.			
Marine Habitat Restoration	Assessments and Restoration in the Marine Environment	Pg 5	Sa-Heh-Wa-Mish
Fish Passage and Screening	Small Dam Removal and Fish Passage	Pg 6	T-Peeksin
In-stream Habitat	In-stream Wood Placement	Pg 7	Grand Ballrooms B-C
Restoration	Riparian Restoration	Pg 9	Grand Ballroom A
Floodplain Reconnection	Reconnecting and Restoring Floodplains and Off-channel Habitat	Pg 11	Little Skookum A-B
Habitat Protection	Thinking Big: The Benefits of Large Scale Habitat Protection Projects	Pg 12	Squi-Aitl
12:15 P.M.	<p>Lunch 21st Century Salmon Steelhead Initiative Phil Anderson, Washington Department of Fish and Wildlife</p>		Event Center
1:45 P.M.			
Marine Habitat Restoration	Large Scale River Delta Restoration	Pg 13	Grand Ballroom A
Fish Passage and Screening	Small Dam Removal and Fish Passage Continued	Pg 14	T-Peeksin
In-stream Habitat	Take Me to the River: A Look at In-stream Work	Pg 15	Grand Ballrooms B-C
Restoration	Sediment Reduction	Pg 16	Squi-Aitl
Floodplain Reconnection	Reconnecting and Restoring Floodplains and Off-channel Habitat Continued	Pg 18	Little Skookum A-B
Habitat Protection	Buying a Fixer-upper: Lessons in Acquiring and Restoring Salmon Habitat	Pg 19	Sa-Heh-Wa-Mish
4 p.m.	Afternoon Wrap-up		Event Center
5:30 P.M.	<p>Dinner The Future of Salmon Recovery Congressman Norm Dicks</p>		Event Center

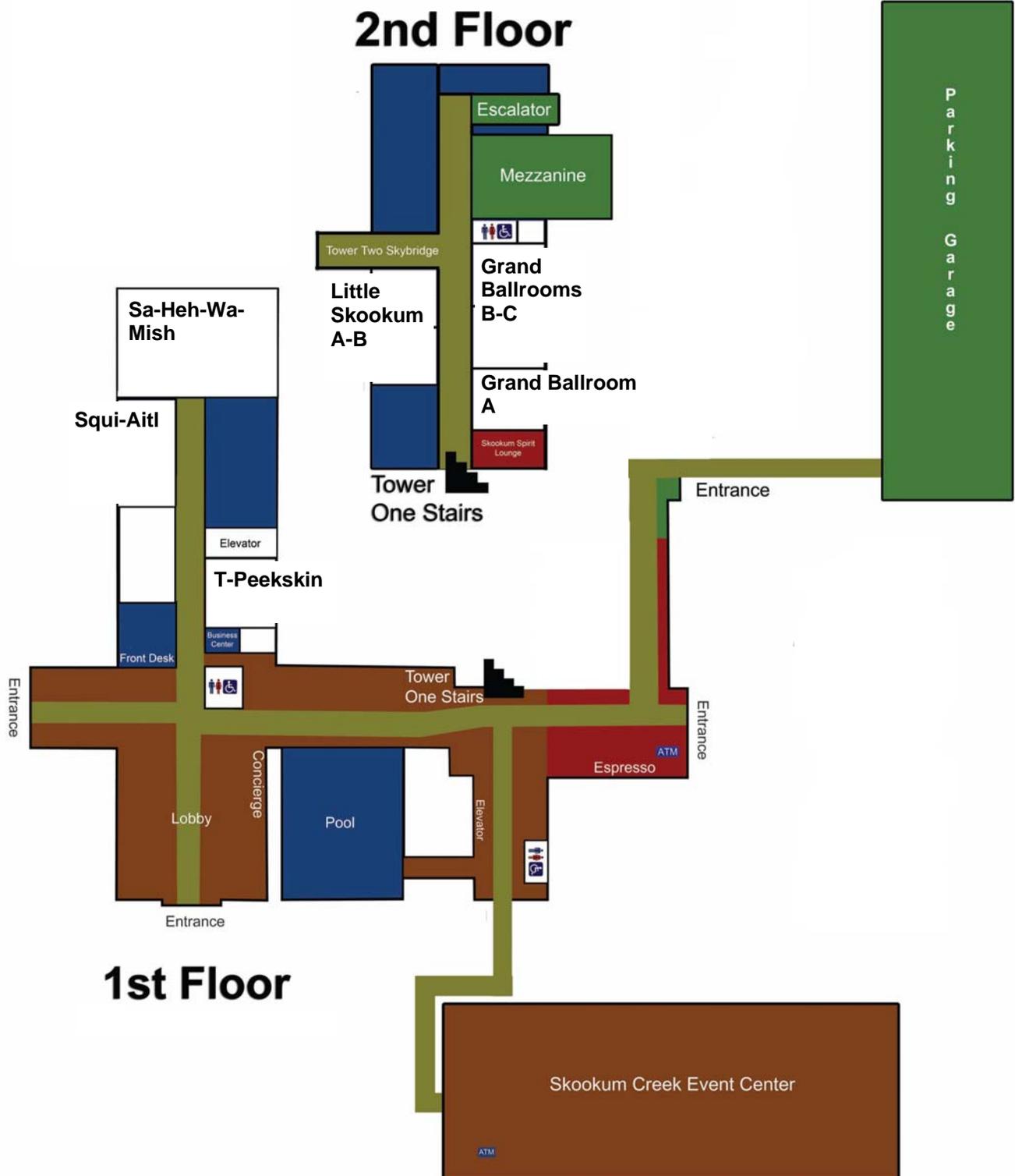
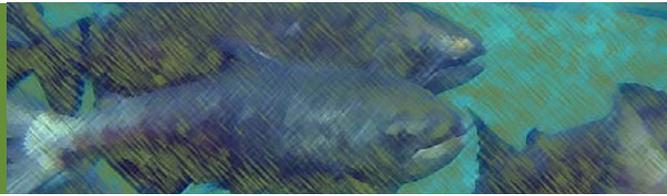
Agenda at a Glance



Thursday, April 16

7:30 A.M.	Breakfast		Event Center
8:30 A.M.	Second Day Orientation Steve Tharinger, Salmon Recovery Funding Board Kaleen Cottingham, Recreation and Conservation Office		Event Center
9 A.M.			
	What Recent Fish Utilization Studies Tell us about Salmon Habitat and Travel	Pg 21	Grand Ballrooms B-C
	Nutrient Enhancement: Another Tool for Salmon Recovery	Pg 22	T-Peeksin
	Monitoring for Salmon Recovery: Approaches, Tools, and Integration	Pg 23	Little Skookum A-B
	Got Match? Building a Sustainable Restoration Economy	Pg 24	Squi-Aitl
	Effectiveness of Different In-stream Techniques	Pg 25	Sa-Heh-Wa-Mish
	Appraising Habitat Lands for Conservation: Understanding the Appraisal Process	Pg 26	Grand Ballroom A
11:15 A.M.	Lunch Washington's Biodiversity: The Big Picture for Salmon Restoration Maggie Coon, Washington Biodiversity Council		Event Center
12:30 P.M.			
	How Fish Utilization Studies Can Help Us Restore and Protect Salmon Habitat	Pg 26	Grand Ballrooms B-C
	Making Small-Scale, Community Based Restoration Work	Pg 27	Little Skookum A-B
	Using Science to Guide Restoration Activities: NOAA Northwest Fisheries Science Center	Pg 28	Sa-Heh-Wa-Mish
	Hatchery Reform in Washington: An Overview of Process, Principles, Methods, and Observations	Pg 29	Squi-Aitl
	You've Protected the Land, Now What? How to Successfully Manage Habitat Lands Over the Long-term	Pg 30	Grand Ballroom A
2:45 P.M.	Conference Wrap-up		Event Center
3:30 P.M.	Adjourn		

Getting Around



10 A.M.-
12:15
P.M.

Wednesday
April 15, 2009

Assessments and Restoration in the Marine Environment

Marine Habitat Restoration Track

In this session, you'll see examples of successful marine and estuary restoration projects and assessments. Most restoration projects are complex but sometimes they turn out to be more complex than imagined at the start. Come and learn from others who have succeeded before you and pick up a few pointers about scoping projects, creating innovative partnerships, and leveraging resources to make your project more successful.

Sa-Heh-Wa-Mish Room

Moderator
Mike Ramsey
Salmon Recovery Funding Board

Salmon Creek Estuary Restoration

Rebecca Benjamin, North Olympic Salmon Coalition
Bob Barnard, Washington Department of Fish and Wildlife

This presentation will discuss the restoration of the Salmon Creek estuary, which began with the plan to remove lumber mill buildings and the fill material they were built atop. However, soil investigations led to new questions about hydrocarbons and sulfur loving bacteria, which project partners quickly learned could be indicators of wood waste toxins in the water. This presentation will cover the complexities of designing an estuary fill removal project and the complications wood waste can create for project design.

Putting Prioritization into Action to Restore Nearshore Habitat

Lance Winecka, South Puget Sound Salmon Enhancement Group

This presentation will summarize a project identification assessment completed in south Puget Sound and highlight the completion of a resulting project. The Pirate Cove project removed an intertidal access road built across the historic mouth of a lagoon and the restoration of a large breach in the spit that was created by a failed tidal weir. The result: Increased natural and functional nearshore habitat.

From Science to Stewardship: Applying Nearshore Habitat Assessment Results to On-the-ground Protection and Restoration of Priority Habitat in San Juan County

Shannon Davis, Friends of the San Juans

This presentation will explore the Friends of the San Juans' multi-pronged approach in its marine ecosystem recovery programs, which include habitat inventories to fill critical data gaps; spatially explicit analysis of biological, land use, and social data to identify and prioritize protection and restoration opportunities; innovative public-private partnerships to leverage resources and application of results; and complimentary educational and legal programs to foster improved voluntary and regulatory protection.

Wednesday
April 15, 2009

**Fish Passage
and Screening
Track**

Small Dam Removal and Fish Passage

In this session, you'll hear about a variety of efforts to remove barriers to fish migration from taking out dams to removing blocking culverts.

T-Peeksin Room

Removing the Shale Creek Fish Passage Barrier and Restoring the Creek

Dave King, Washington Department of Fish and Wildlife

Moderator
Pat Powers
Salmon Recovery
Funding Board
Technical Review
Panel

During the early 1980s, the depressed wild Queets coho stock was considered the driver stock for development of ocean harvest levels. In 1987, an in-stream coho brood stocking facility was built in Shale Creek, a Clearwater River tributary in the Queets River watershed. The facility was abandoned in 1997 due to budget cuts. Being unmanned, the facility, which spanned the creek, began to collect debris and was developing into a fish passage problem. This presentation will discuss a multi-agency effort to remove all man-made structures from the creek and surrounding property and return the stream channel to as close to a natural state as possible.

Fulton Irrigation Dam Replacement: Managing a Complex Project with a Small Organization

Chris Johnson, Chewuch Basin Council

Greg Knott, Methow Valley Irrigation District

The Fulton irrigation dam on the Chewuch River blocked passage for three Endangered Species Act-listed salmon species during low flows. Replacing the dam with a more fish-friendly structure proved to be not only a challenging engineering problem but a lesson in social, environmental, and construction management issues. During the five years from conceptual design to project completion, the Methow Salmon Recovery Foundation, a small non-profit organization with no full-time employees, evaluated seven design alternatives, identified five funding sources, engaged more than 50 landowners in a public outreach campaign, issued four construction contracts, and managed three construction phases. Looking back on this experience has led to suggestions to funding and permitting agencies on ways they could help small organizations successfully manage complex restoration projects.

Removing Barriers to Salmon and Restoring a Stream

Ron Craig, Willapa Bay Regional Fisheries Enhancement Group

This presentation will discuss the objectives, partnerships, design development process, construction, monitoring, remote site incubators, and nutrient restoration for Oxbow Creek. The creek's spawning and rearing habitat was destroyed by the long-term effects of two sets of undersized culverts.

10 A.M.-12:15 P.M.

Historically, the stream supported large numbers of coho, steelhead trout, and chum but stream surveys showed few if any spawning salmon existed above the blocking culverts. The culverts blocking access to 4.3 miles of spawning and rearing habitat were removed and replaced with bottomless concrete arches and, in addition, about 1 mile of stream was restored. The presentation will show how the design development process worked and the importance of lessons learned being integrated into the development process. Results from three years of monitoring will show how well the objectives were accomplished.

Family Forest Fish Passage Program

Michael Ahr, Washington Department of Natural Resources

The Family Forest Fish Passage Program is a partnership between Washington Department of Natural Resources, Department of Fish and Wildlife, and the Recreation and Conservation Office. The program helps small forest landowners correct fish barriers associated with forest roads on their land. The program has funded the correction of 182 barriers, opening more than 400 miles of habitat throughout the state. This presentation will detail accomplishments and future goals, provide information on how organizations can get involved in managing these projects, and discuss opportunities on reaching out to the family forest owner – a key partner in salmon recovery.

In-Stream Wood Placement

In this session, presenters will discuss projects that placed large woody materials in streams to create salmon habitat. Come learn about the different techniques used and the results they are seeing.

Hoko River Restoration Project

Mike McHenry, Elwha Klallam Tribe

Eric Carlsen, Washington Department of Natural Resources

This presentation describes reach-scale stream restoration efforts conducted in a historically complex floodplain of the Hoko River at its confluence with two major tributaries. The project included the removal of two log bridges and their road fills, removal of a fish passage barrier, abandonment of a road adjacent to the floodplain, and the addition of large woody material using both ground-based constructed logjams and free placed materials using a helicopter. The project has resulted in improved in-stream habitat complexity, floodplain connectivity, side channel availability, salmonid tributary access, and riparian function. The presentation also will discuss impacts from a 30-year flood event immediately following restoration.

In-stream Habitat Track

Grand Ballrooms
B-C

Moderator

Lloyd Moody

Governor's

Salmon Recovery

Office

Wednesday
April 15, 2009

**In-stream
Habitat Track,
continued**

Restoring Hyas Creek Large Woody Material

Frank Geyer, Quileute Tribe

A 1951 fire and resulting salvage logging operation devastated the stream and banks of Hyas Creek. Salvage operations removed all the merchantable timber not only along the banks but from within the stream leaving a system ripe for mass wasting, scour, and sediment flows. The result was a stream almost completely void of wood. The Quileute Tribe will discuss a project done in partnership with the U.S. Forest Service and Rayonier Timberlands that restored large woody material function to Hyas Creek using donated wood and helicopters.

A Low-Cost Approach to Large Wood Replenishment

Scott Nicolai, Yakama Nation

In-stream restoration involving large woody material has been used in many habitat projects in the Pacific Northwest. Because of limitations on material availability and equipment requirements for transportation and placement, project costs typically are high, resulting in lost opportunities for further restoration. This presentation describes an approach to wood replenishment that uses trees from local, overstocked stands. Placement is via manual tools. This approach meets multiple objectives, including improved in-stream complexity, forest stand conditions, and carbon sequestration.

Flood Fencing: What It Is and What It Does for Rivers

Paul DeVries, R2 Resources Consulting

In this presentation, the speaker will give an overview of innovative flood fencing, a bioengineering technique used in large river channels to reduce flood damage and debris deposition in farmers' fields. Consisting of upright cottonwood boles augered into the floodplain and arrayed in three rows, the structures provide floodplain roughness and emulate the hydraulic effects of mature floodplain forests, trapping wood debris near the channel margin during floods. Flood fencing also is being developed to help channel migration and maintenance of juvenile side channel habitat. Come learn about this new approach, its application, and what challenges it might create.

10 A.M.-12:15 P.M.

Riparian Restoration

In this session, you'll learn techniques and tips for creating healthy riparian areas that contribute to the survival of salmon. Learn how others removed invasive plants and replanted with native plants to create healthy riparian areas, as well as how to prepare a site for planting. You'll also hear about innovative programs to help landowners keep their riverbanks healthy.

Riparian and Upland Restoration Track

Sustainable Management of Restoration Soils for Improved Tree and Shrub Survival

Linda Chalker-Scott, Washington State University Puyallup Research and Extension Center

The presentation will discuss how to prepare planting sites for permanent restoration installations. Participants will learn about the three types of soils—ideal, urban, and designed—and how they change over time and how these changes impact tree and shrub health. Finally, the use of amendments and mulches in permanent landscapes will be contrasted to help define better “best practices.”

Grand Ballroom A

Moderator

*Tom Slocum
Salmon Recovery
Funding Board
Technical Review
Panel*

Urban Riparian Restoration Efforts

Alison Bower, Walla Walla County Conservation District

Water quality and salmon recovery can be greatly impacted by urban streams. Urban landowners have few opportunities for restoration assistance, yet their impact on streams continues to grow. This presentation will discuss the Creating Urban Riparian Buffers (CURB) program, which educates landowners about stream stewardship and provides assistance to install native plant buffers on the four major creeks that flow through Walla Walla in southeastern Washington.

Turning Cobble into Functioning Floodplain along the Lower Klickitat River

Will Conley, Yakama Nation

In 2006, the Yakama Nation and Mid-Columbia Fisheries Enhancement group initiated a cooperative effort to turn bare gravel and cobble deposited by 1996 floods into functioning riparian and floodplain habitat. Crews used a 20-ton excavator, ripping tooth, and hydraulic stinger attachment to plant 10.6 acres of trees at nine different sites with survival averaging about 73 percent through the first growing season. This presentation will provide an overview of project rationale, site identification, installation method, and plant material selection, and discuss lessons learned in the course of efforts to increase bank cover, long-term woody material recruitment, and floodplain roughness.

Wednesday
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**Riparian and
Upland
Restoration
Track,
continued**

Restoring Fish Habitat in the Prairie Creek Sub-watershed: A Pilot Project for the Control of Invasive Knotweed

Jim Plampin, Quinault Indian Nation

The Prairie Creek sub-watershed is an important winter steelhead, Chinook, and coho system with a stream network of more than 15 linear miles. Prairie Creek is considered the most important winter steelhead spawning tributary in the lower Quinault River watershed. Many areas including streambanks, logjams, and gravel bars, are infested by non-native Japanese knotweed, which has simplified the plant community and formed dense stands impervious to recolonization by native vegetation. A concerted first-time effort by fisheries and forestry staff focused on the control of knotweed. This presentation will describe the treatment, approach, techniques, results, and improvements that will restore the productivity of an important tributary to the Quinault River system.

Controlling Salmon-impeding Noxious Weeds in the Chehalis Basin

April Boe, The Nature Conservancy

This presentation will focus on a multi-agency effort to improve riparian habitat function along the Chehalis River by controlling knotweed and other salmon-impeding noxious weeds. The presentation will cover knotweed control and riparian restoration by The Nature Conservancy, a survey of the Chehalis River and its tributaries for knotweed in partnership with the Washington Department of Fish and Wildlife and the Quinault Indian Nation, and treatment of Brazilian elodea in the Chehalis River in partnership with Thurston County Noxious Weed Board and the Confederated Tribes of the Chehalis Reservation. This session will discuss the methodology, successes, and lessons learned from five years of knotweed treatments in the Chehalis basin.

The Big Picture of Invasive Species in Washington

Wendy Brown, Washington Invasive Species Council

The Washington Invasive Species Council's mission is to provide policy direction, planning, and coordination to empower those engaged in the prevention, detection, and eradication of invasive species. This presentation will offer a brief policy-level overview of the council's 2008 strategic plan as it relates to the restoration of riparian habitat and a discussion of the council's top five priorities for addressing invasive species.

10 A.M.-12:15 P.M.

Reconnecting and Restoring Floodplains and Off-channel Habitats

Floodplain Reconnection Track

In this session, presenters will give you insights into the challenges and opportunities they experienced when reconnecting and restoring floodplains and off-channel habitats as well as practical tips to help you succeed on your next project.

Little Skookum A-B Rooms

Moderator

Steve Toth
Salmon Recovery Funding Board

A Simple Approach to Restoring a Complex River

Josh Latterell, King County Department of Natural Resources and Parks

King County is implementing process-based restoration projects in rivers. In one example from the Green River, the County is removing rock armor so the river can, on its own, sculpt a new channel and floodplain and form logjams from the abundant supplies of wood provided by an eroding terrace. The goal is to restore a complex, dynamic river with productive and self-sustaining habitat.

Okay, Just Put it Over There: Building Consensus on Floodplain Reoccupation

Brent Lackey, Seattle Public Utilities

The City of Seattle is leading a collaborative, multi-departmental effort to remove an historic levee and restore natural river processes and salmon habitat at the confluence of the Tolt and Snoqualmie Rivers. This presentation will walk you through the history of this technically and politically complex project, and attempt to highlight the most salient lessons from a near-decade of work. The presentation will pay specific, technical attention to the importance of restoring ecosystem processes rather than more temporary structures. Organization issues will focus on the intricacies of multi-agency partnerships, working through public misperception and apprehension, and meeting multiple project goals in tandem.

Implementing the Lower Wenatchee River Channel Migration Zone

Alan Schmidt, Chelan County Natural Resources Department

Joy Juelson, Chelan County Natural Resources Department

The presentation will show how the Chelan County Natural Resources Department constructed a series of side channels on the Wenatchee River, providing off-channel habitat for Endangered Species Act-listed juvenile salmonids. The project included ponds with back channels, and flow through and groundwater-fed channels. Project monitoring has provided insight on project effectiveness and future project implementation. Specific details about the design concepts, landowner negotiations, and site challenges will be covered.

Wednesday
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10 A.M.-
12:15
P.M.

Habitat
Protection
Track

Thinking Big: The Benefits of Large Scale Habitat Protection Projects

Squi-Aitl Room

This session will look at multiple approaches to large scale projects to protect salmon habitat and why it pays to think big.

Moderator
Bob Bugert
Chelan-Douglas
Land Trust

Seeing the Forest Instead of The Trees: A Holistic Approach to Conservation and Salmon Recovery in the Methow

John Sunderland, Methow Conservancy

This presentation will describe several principles of conservation used by the Methow Conservancy: Conservation planning based on priority habitats, looking beyond artificial boundaries, using effective partnerships, implementing comprehensive strategies, and developing community trust and support. The presentation will offer perspectives on what has worked, what hasn't, and how salmon recovery efforts can be better served by reach-based and watershed-based efforts in the future.

Cedar Rapids Floodplain Acquisition and Restoration Project

Andy Levesque, King County

Nancy Faegenburg, King County

During more than ten years, King County Water and Land Resources Division partnered with multiple agencies to acquire 35 acres of riparian land, remove two flood-prone homes and setback levees, and reconnect the river's historic floodplains to restore natural functions and processes along nearly a half mile of the lower Cedar River. This is the most ambitious restoration effort to date on the lower Cedar River, and was rated one of the highest priority projects for Chinook recovery within this watershed. Record flooding arrived on the heels of construction, demonstrating the incredible power of a river to recover, as well as teaching us valuable lessons for future projects. This presentation will focus on the benefits of long-range, landscape scale planning; multi-objective partnerships; and the pros and cons of taking risks.

Protecting the Nooksack River: Lessons Learned

Gordon Scott, Whatcom Land Trust

The Whatcom Land Trust will take you on a tour of 900 acres along the lower south fork of the Nooksack River that it has protected successfully. The river is home to spring Chinook, which are listed under the federal Endangered Species Act and considered an important run of Puget Sound Chinook that provides geographic and genetic diversity for the entire region. The Whatcom Land Trust has worked with the Lummi Nation, Nooksack Indian Tribe, Washington Department of Fish and Wildlife, Whatcom County, and Nooksack Salmon Enhancement Association to protect the best remaining habitat and restore critical reaches in an effort to stave off extinction of the south fork Chinook.

1:45-3:45 P.M.

The land trust will review the history of the protection actions, focusing on the challenges and opportunities each project presented. A brief discussion of planned projects that were not successful, with emphasis on lessons learned, also may be presented.

Large Scale River Delta Restoration

In this session, you'll get a glimpse at what it takes to pull off large scale restoration projects, the kind that make the news, are most complex, have multiple partners, and often take the biggest risks. Get a glimpse of these projects in their beginning stages and get your mind thinking about what your big project might look like.

Climbing Up from Near Defeat, Again and Again: The Story of the Willapa Bay Estuary Restoration

Greg Schirato, Washington Department of Fish and Wildlife

Nearly 10 years in the making, the restoration of the Willapa Bay estuary encompassed 422 acres of diked pasturelands and 35 acres of tidelands on the left bank of the Willapa River. This presentation will review how the Washington Department of Fish and Wildlife traveled from concept, through six state and federal agencies and \$6 million, to restoration completed last year. The project restored tidal inundation and estuarine functions to 300 acres that had been diked for 90 years; restored off-channel rearing and refuge habitat for Chinook, chum, and coho salmon, as well as cutthroat trout and other native fish species; provided public access for educational opportunities and wildlife-oriented recreation; raised a 1.4-mile section of State Route 101; built a highway pull-off, interpretive signs, and a dike to protect neighboring properties from flooding; and restored 60 acres of wetlands.

Nisqually National Wildlife Refuge Estuary Restoration: The Future of the Nisqually Delta

Jean Takekawa, Nisqually Wildlife Refuge

Nisqually National Wildlife Refuge, working with key partners, Ducks Unlimited and the Nisqually Indian Tribe, is restoring 762 acres of the Nisqually estuary. This is the largest estuary restoration project ongoing in the Pacific Northwest, and combined with recent smaller restorations by the tribe, will result in the almost complete re-creation of an estuary. Identified as the top priority to recover Chinook salmon in the Nisqually watershed, the project will increase salt marsh habitat in south Puget Sound by 50 percent and provide substantial benefits to the entire Puget Sound region. Project construction began in 2008. This presentation will describe the planning and science behind the project, benefits expected, the partnership helping to make the project a reality, and the construction progress.

Marine Habitat Restoration Track

Grand Ballroom A

Moderator

*Paul Cereghino
National Oceanic
and Atmospheric
Administration
Restoration Center
and Washington
Department of Fish
and Wildlife*

Wednesday
April 15, 2009

**Marine Habitat
Restoration
Track,
continued**

Skokomish River Delta (West) Restoration: From Neglect to Respect

Rich Geiger, Mason Conservation District

The Skokomish River is the largest salmon producing system in Hood Canal. The river delta was diked and used for agriculture production many decades ago. This presentation will describe the first of two projects that restored 104 acres of estuarine habitat. Work included removing a seawall, developing a channel, re-filling man-made ditches, and installing a boardwalk. The newly exposed acreage provides greater opportunity for salmonid refugia, shellfish use, and mudflats for migratory waterfowl and insects as well as increased opportunities for harvesting sedges and rushes used in basket making by tribal members. The project already is showing reduced flooding hazards, restoration of natural river geomorphology and habitat, reduction of nutrient loading in Hood Canal, and natural restoration of shellfish habitat.

**Fish Passage
and Screening
Track**

Small Dam Removal and Fish Passage Continued

T-Peeksin Room

In this session, you'll hear about several innovative approaches to solving fish passage problems and learn about how others have solved tough challenges to help salmon migrate home.

Moderator

*Pat Powers
Salmon Recovery
Funding Board
Technical Review
Panel*

Flood Control and Salmon Passage in the City: A Modeling Approach to a Complex Passage Problem

Brian Burns, Tri-State Steelheaders Inc.

A half-century ago, the Mill Creek channel through Walla Walla was engineered to prevent flood damage to the city with little or no consideration for fish passage. The fish must navigate through hundreds of barriers in 7 miles as the creek flows through downtown Walla Walla. This presentation will describe the result of the Mill Creek Fish Passage Assessment, which created an innovative approach that melded fish bioenergetics and conventional passage criteria while maintaining flood capacity.

How to Move Fish from Here to There: The Curl Lake Experience

Bruce Heiner, Washington Department of Fish and Wildlife

Curl Lake is used to acclimate Endangered Species Act-listed, artificially produced spring Chinook as a critical element in the regional salmon recovery effort. However the diversion structure used to feed the lake has been a partial barrier to bull trout, spring Chinook, and steelhead. This presentation will look at how the passage problem was addressed in a unique way—a roughened channel—with a twist!

1:45-3:45 P.M.

The Basics of Culvert Replacements

Lance Winecka, South Puget Sound Salmon Enhancement Group

This presentation will look at the replacement of a culvert on Case Inlet that reestablished fish passage to a small watershed. Earlier fish passage efforts included a failed in-stream channel project and adding baffles to an existing culvert. These temporary fixes did not provide long-term fish passage. The presentation will describe a project to install a 20-foot stream simulation arch culvert and upgrade the channel complexity downstream to maintain and enhance fish passage.

Take Me to the River: A Look at In-stream Work

In-stream Habitat Track

In this session, presenters will discuss a variety of work in rivers, from adding gravel to building logjams to reducing sediment, all to create salmon habitat. Come learn about the challenges and successes of a range of project types.

Grand Ballrooms
B-C

Upper Quinault River Restoration: Engineered Logjams

Bill Armstrong, Quinault Indian Nation

This presentation will describe the Quinault Indian Nation's Alder Creek Side Channel Pilot Project, which included construction of 12 engineered logjams and augmentation of one natural logjam. The Alder Creek side channel is in the upper Quinault River watershed and provides critical sockeye (blueback) salmon spawning habitat. The side channel is one of only five locations remaining for sockeye spawning in the upper Quinault River system. Come learn how partnerships were forged, what challenges were overcome, and how a dizzying number of logjams were built to improve salmon habitat.

Moderator
Lloyd Moody
Governor's
Salmon Recovery
Office

Restoring Doan Creek: A Lesson in Focused Cooperative Partnerships

Mike Denny, Walla Walla County Conservation District

This presentation will focus on the restoration of Doan Creek, a 3.8-mile-long cold water, spring-fed tributary to Mill Creek that was dumped in a ditch and pipe 75 years ago to accommodate landowners. The restoration partnership that rehabilitated this stream is comprised of private landowners, the National Park Service, two colleges, two state agencies, the Tri-state Steelheaders, and Cooperative Resource Management. The presentation will cover surveying, permitting, engineering, design, and construction of a new meandering stream channel. Presenters will explain water right protections, construction of a new mouth, engineering a functioning design for a low gradient stream, whether fish have returned, and what's next.

Wednesday
April 15, 2009

**In-stream
Habitat Track,
continued**

Reversing Channel Incision and Enhancing Steelhead Habitat in Tepee Creek

Will Conley, Yakama Nation

This presentation will discuss a multi-element project that restored a reach of Tepee Creek that was incised, frequently dry, and had poor habitat. The project included importing gravel, reconstructing pool-riffle sequences to raise the bed by an average of 3 feet, and adding 300 pieces of large woody materials. In the two years since project completion, the pool habitat has been maintained, fish now have winter access to four side channels, there's a 65 percent increase in pool abundance, two wetlands have been created, and more fish are spawning in the reach.

Dungeness River Railroad Bridge Engineered Logjam Project

Byron Rot, Jamestown S'Klallam Tribe

Until the early 1980s, log drives were often held on the Dungeness River with bulldozers piling wood on bars to be burned. While the habitat is recovering, stable logjams are infrequent in the lower 10 miles of the river. The Jamestown S'Klallam Tribe, partnering with a private landowner and funding partners, installed nine logjams near the railroad bridge on the Dungeness River. This presentation will focus on the lessons learned and practical tips for selecting contractors and constructing engineered logjams.

**Riparian and
Upland
Restoration
Track**

Sediment Reduction

In this session, you'll hear about a variety of restoration projects aimed at reducing sediment delivery by treating forest roads and containing landslides. You'll also hear about a project to restore a stream that was piped and ditched to a more natural state.

Sui-Aitl Room

Taking Out the Roads: The Willow Creek Aquatic Restoration

Jill Cobb, U.S. Forest Service, Priest Lake Ranger District

Moderator
Tom Slocum
Salmon Recovery
Funding Board
Technical Review
Panel

This presentation will review the restoration of Willow Creek, which included obliterating more than 10 miles of logging roads in the Idaho Panhandle National Forest, removing 85 culverts, re-contouring the slopes, and planting 3,000 trees. Before the work, mass failures and failed culverts occurred over the length of the road, posing a constant threat to streams and fisheries. In addition to the restoration work, two studies were completed under this project that documented the amount of sediment suspended during and after a culvert was removed and another that noted the effectiveness of various erosion control mediums. The results of both studies were published in scientific journals and will be briefly summarized. Finally, there will be a review of lessons learned from this and other road decommissioning efforts in the area.

1:45-3:45 P.M.

Roads to Success for Sediment Reduction

Roger Nichols, U.S. Forest Service, Mount Baker National Forest, Mount Baker Ranger District

This presentation will cover a 12-year effort to decrease upland sediment sources and their impact on Chinook salmon. Sedimentation has been identified as one of the factors limiting egg to fry survival for Chinook salmon. The presentation will illustrate the programmatic type of problems encountered and the scale of the work that partnerships have fostered, based on watershed recovery goals and objectives for the Stillaguamish, Skagit, and Nooksack Rivers, and their tributaries. The presentation also will discuss how to work with the U.S. Forest Service, how to prioritize the highest risk areas, how to systemically implement projects, and why road treatment categories vary.

Treating a Landslide to Create a Salmon and Steelhead Haven

*Pat Stevenson, Stillaguamish Tribe
Tracy Dury, Anchor Environmental*

This presentation will discuss how the Stillaguamish Tribe built a 1,400-foot-long wooden crib-wall at the toe of a glacial landslide to prevent sediment from entering the north fork of the Stillaguamish River. The landslide, around since the 1930s, was one of the principal factors limiting salmon production in the north fork. Below that point, heavy silt deposits covered most of the gravel riffles, making them unsuitable for spawning and egg incubation. It also inhibited the natural cycles of aquatic insect growth, reducing food and lowering the holding and rearing capacity of the stream below. After construction of the wall, sediment input to the river has been reduced dramatically, allowing increased successful spawning for the first time in several decades.

Combining Multiple Approaches to Sediment Reduction

Darin Houpt, Wahkiakum Conservation District

This presentation will take a look at a successful combination of woody material placement, logjams, bank shaping, and riparian restoration that was used to reduced the delivery of fine sediment, restore habitat structure, and stabilize stream banks along Skamokawa Creek. You'll get a look at the history of land use and limiting factors within the creek basin as well as what the conservation district has done to address the limiting factors through a series of recent projects.

Wednesday
April 15, 2009

**Floodplain
Reconnection
Track**

Little Skookum A-B
Rooms

Moderator
Steve Toth
Salmon Recovery
Funding Board

Reconnecting and Restoring Floodplains and Off-channel Habitat Continued

In this session, you'll hear about multiple projects to reconnect and restore floodplains and off-channel habitat. The presentations discuss many of the typical challenges of these types of projects, from conceptual design through engineering and construction, to monitoring and partnerships.

Investigating Chum Recovery Projects

Al Latham, Jefferson County Conservation District

This presentation will discuss multiple salmon recovery projects in the lower reaches of Salmon and Snow Creeks in the Discovery Bay watershed. Project partners (the Chumsortium) have generated a suite of summer chum recovery projects including stock supplementation, erosion control, habitat protection through conservation easements and acquisition, channel remeander, riparian planting, and innovative project monitoring. This presentation will focus on the remeander of a channelized reach of Salmon Creek and touch on the other Salmon Recovery Funding Board projects undertaken by the Chumsortium. Lessons learned include length of time for a channel to stabilize, design and engineering considerations, contracting, construction, monitoring, and partnerships.

Reconnecting the Morse Creek Floodplain

Rebecca Benjamin, North Olympic Salmon Coalition

Morse Creek was a very productive system, supporting multiple species of salmonids. Development pressure and land use changes led to a channelized creek that has eroded down to bedrock. With almost no habitat features in the lower half mile, a project is being designed to reconnect the historic floodplain and abandon the incised channel. This presentation will outline the challenges the project partners faced once the original feasibility and conceptual design were complete and how they chose to move ahead to design a fundable project.

Rebuilding Paradise Pond

Carl Chastain, Pacific Coast Salmon Coalition
Tom Smayda, Smayda Environmental Associates

Paradise Pond is an open-water wetland built by two state agencies in the 1980s for coho rearing habitat in the rainforest of the Clearwater River drainage. Its original 4-foot-tall fish ladder decayed and blocked fish passage, so the Pacific Coast Salmon Enhancement Group installed a 300-foot-long roughened channel to replace the fish ladder. This presentation will give a brief history of the original construction of Paradise Pond and a more extensive overview of the reconstruction, focusing on how the project evolved from original concepts to construction as well as the technical aspects of project engineering.

1:45-3:45 P.M.

Buying a Fixer-upper: Lessons in Acquiring and Restoring Salmon Habitat

Habitat
Protection
Track

This session will examine why fixer-uppers sometimes are a better deal. Presenters will discuss several projects that combined land acquisition with habitat restoration, as well as provide tips on how to ensure water rights come in the deal.

Sa-Heh-Wa-Mish
Room

Protecting Willow Grove Wetlands

Ian Sinks, Columbia Land Trust

The Willow Grove area along the Columbia River contains some of the last remnants of intact, intertidal wetlands. The wetland complex offers productive off-channel habitat for a number of salmonid species originating from local creeks as well as migrants from throughout the Columbia River basin. This presentation will focus on the Columbia Land Trust's process to successfully acquire 320 acres of wetlands and channel habitat through public involvement, coordination with regulatory agencies on mitigation credit analysis, and sale of publically owned land. A result of this project has been the development of an organizational policy regarding land trust involvement in mitigation.

Moderator
Bob Bugert
Chelan-Douglas
Land Trust

Quilcene Bay Restoration

Neil Werner, Hood Canal Salmon Enhancement Group

The Quilcene Bay Restoration Program is a multi-year, multi-project, long-term process to return Quilcene Bay to conditions similar to those in 1883. Few, if any, areas transformed by man remain that can be restored to full estuary, wildlife habitat, and tidal functions. The presentation will focus on process, purpose, and the results to date of the project as well as the many issues faced implementing a large project in a small, rural community.

Restoring Habitat in the Sauk River

Devin Smith, Skagit River Systems Cooperative

The Sauk-Suiattle Indian Tribe, working with the Skagit River System Cooperative and Skagit County, recently purchased four residential parcels in the floodplain of the Sauk River with the goal of restoring more than 50 acres. The Sauk River is the largest tributary of the Skagit River and is used by all five salmon species, cutthroat trout, steelhead, and native char. For more than a decade, the Sauk River has been migrating toward the west, threatening to erode property, homes, and the county road. Government agencies have responded by placing rip-rap in the river to prevent erosion. This presentation will discuss the restoration project, which includes relocating homes, utilities, and other developments; removing rip-rap to restore flow to an historic side channel; and replanting the area.

Wednesday
April 15, 2009

1:45-
3:45
P.M.

**Habitat
Protection
Track,
continued**

Connecting Water Rights with Land Deals

Peter Dykstra, Washington Rivers Conservancy

When land is acquired through conservation easements or direct purchase, it is important to consider what water rights come with the land, and to protect those water rights so that they are not lost through non-use. Washington Rivers Conservancy has partnered with many land trusts, agencies, and conservation districts across Washington and will talk about the tools and mechanisms they use to ensure successful projects that combine water rights with land deals.



What Recent Fish Utilization Studies Tell us about Salmon Habitat and Travel

This presentation will discuss the results of six recent assessments aimed at determining out-migrating fish habits and migration patterns in Puget Sound. A major data gap exists on the distribution, migration patterns, and habitat-type-specific priorities of juvenile salmonids once leaving their natal rivers and streams in Puget Sound. This data gap limits the ability to focus site-specific salmon protection and restoration actions within Puget Sound's estuarine environment. To begin filling this data gap, the Salmon Recovery Funding Board funded six nearshore fish utilization assessments throughout Puget Sound. The assessments use a series of protocols, through beach seining and sometimes tow netting, to collect out-migrating fish in spring and summer from a range of locations, times, and estuarine habitat types.

Grand Ballrooms
B-C

Moderator
Mike Ramsey
Salmon Recovery
Funding Board

Assessment of Juvenile Salmon Use in the Islands of North Puget Sound

Eric Beamer, Skagit River System Cooperative

Resource managers only generally understand linkages between nearshore habitat and salmon in the northern Puget Sound archipelago. General knowledge doesn't translate into strategic restoration or protection actions by habitat type or place within a diverse landscape like the Islands. This presentation will provide first-year data results from two, 2-year assessments that will complete analysis to make habitat-type-specific and place-specific priority for Puget Sound listed Chinook salmon.

Juvenile Salmon Prey Source Monitoring

Russel Barsh, Kwiaht, Center for the Historical Ecology of the Salish Sea

This presentation looks at the prey resources that Chinook use in preferred habitats. The techniques used are a combination of visual identification and biogeochemical (isotopic) methods to determine which prey in the San Juan Islands were being used by the Chinook collected in the Skagit River System Cooperative study; in particular, the extent to which juvenile Chinook depend on more human-influenced prey resources during their residence. Prey utilization data will be used to devise more concrete prescriptions for protection and restoration projects where salmon congregate.

West Sound Nearshore Fish Use Assessment

Paul Dorn, Suquamish Tribe

Doris Small, Washington Department of Fish and Wildlife

This presentation provides the first-year beach seining results that measured the relative abundance and timing of all species and large invertebrates



collected in selected sites along east Kitsap County. The primary focus of the assessment is on salmonids and forage fish. The information will be used in the prioritization of protection and restoration of healthy habitat conditions along Kitsap shorelines. This project has an important public education component and is coordinated with past, present, and future Puget Sound nearshore monitoring initiatives.

South Puget Sound Beach Seine Assessments

Scott Steltzner, Squaxin Island Tribe

This presentation provides the first-year results from two, 2-year assessments that conduct beach seines in the inlets and passages of south Puget Sound. A specific emphasis is placed on exploring the use of pocket estuaries that are hypothesized to be used by Nisqually River Chinook. The goal is to identify which conservation and restoration sites are used the most in order to rank sites, that when rehabilitated or maintained, will provide high quality rearing and migration corridors for juvenile salmonids.

Nutrient Enhancement: Another Tool for Salmon Recovery

T-Peeksin Room

Moderator

Hal Michaels

In this presentation, speakers will discuss the science supporting the application of nutrients to streams across the Pacific Northwest including examples of various techniques used by non-profit organizations in Washington. Topics include the scientific rationale for nutrient treatment, the results of a recent study that documented the ecological response to carcass analogs, and tips on how deal with landowner complaints, logistics, partnerships, and funding for nutrient enhancement program.

Dr. Kenneth I. Ashley, University of British Columbia, will discuss the scientific rationale for nutrient treatment and review examples of nutrient enhancement projects around the Northwest and elsewhere.

Dr. Matthew Mesa, U.S. Geological Service, will discuss the results of a recently completed carcass analog study, which documented the ecological response in several tributaries to the Wind River to the addition of carcass analogs. This study lays the groundwork for full scale application of nutrients via carcass analogs.

Tony Meyer, Lower Columbia Fisheries Enhancement Group, will discuss how his organization implements a variety of nutrient enhancement techniques in multiple watersheds in southwest Washington. Issues will be discussed such as dealing with landowner complaints, logistics, partnerships, and funding for their nutrient enhancement program.



9-11 A.M.

Monitoring for Salmon Recovery: Approaches, Tools, and Integration

Monitoring is a key element of success in salmon recovery and habitat restoration. This panel will describe the core monitoring programs supported by the Salmon Recovery Funding Board, including overall design approach, how monitoring programs integrate across different scales, and tools available.

Jennifer O'Neal is the watershed ecology manager at Tetra Tech EC with ten years of experience in stream restoration monitoring, salmon habitat restoration design, and riparian ecology. She is coordinating the reach-scale effectiveness monitoring program for the Salmon Recovery Funding Board and the coordinated monitoring program for livestock exclusions for both the Salmon Recovery Funding Board and the Oregon Watershed Enhancement Board. She will discuss the monitoring design, protocols, and recent results from the Salmon Recovery Funding Board's Project Effectiveness Monitoring Program.

Dr. William Ehinger is an aquatic ecologist and senior natural resource scientist with the Department of Ecology. For the past nine years, he has worked on the design and implementation of effectiveness monitoring to support the Washington Department of Natural Resources' Adaptive Management Program, and currently is the project manager for the intensively monitored watersheds program. Dr. Ehinger will discuss the results of the Salmon Recovery Funding Board's intensively monitored watersheds program, with implications for restoration planning and monitoring.

Robert Cusimano has more than 20 years experience in environmental modeling, analysis, and assessment, and is the manager of the Western Operations Section in the Department of Ecology's Environmental Assessment Program. Mr. Cusimano will review the design and implementation of the status and trends monitoring program for rivers and streams, and discuss how this program can integrate local, watershed, and regional monitoring efforts.

Dr. Mara Zimmerman is the unit leader for the Washington Department of Fish and Wildlife's Wild Salmonid Production Evaluation Unit. She will provide an overview of the department's approach to fish-in and fish-out monitoring, with an emphasis on Viable Salmonid Population (VSP) monitoring for salmon recovery and recent efforts to improve data management and data sharing.

Dr. Phil Larsen is a senior environmental scientist with the Pacific States Marine Fisheries Commission and the Environmental Protection Agency's Research Laboratory in Corvallis, Oregon. Dr. Larson's expertise includes statistical design of large monitoring programs, and he has been a key contributor to Environmental Protection Agency's national Environmental Monitoring and Assessment Program. Dr. Larson will discuss methods for integrating aquatic ecosystem status and trend monitoring using the master sample design concept.

Little Skookum A-B
Rooms

Moderator
Ken Dzinbal
Monitoring Forum
on Salmon
Recovery and
Watershed Health

Thursday
April 16, 2009



Got Match? Building a Sustainable Restoration Economy

Squi-Aitl Room

Moderator

*Paul Cereghino
National Oceanic
and Atmospheric
Administration
Restoration Center
and Washington
Department of Fish
and Wildlife*

- **Dennis Canty**, Evergreen Funding Consultants, will speak on conservation marketplaces.
- **Robin Clark**, People for Puget Sound, will speak on volunteer-based restoration and advocacy.
- **Sky Miller**, Wildlands, will speak on mitigation banking.
- **Cara Rose**, National Fish and Wildlife Federation, will speak on federal and state competitive funding.
- **Tim Walls**, Snohomish County Lead Entity, will speak on salmon recovery.

Restoration and long-term stewardship benefits the public but doesn't produce income for an investor. The restoration economy is dependent on public funds, organizational commitment, volunteerism, and a mix of legal mechanisms to complete the enormous task of sustained ecosystem protection, restoration, and long-term stewardship. This session brings together a diversity of potential partners to describe the economic challenge of restoration and look for specific, creative solutions that can be implemented.

Restoration mechanisms often are developed piecemeal and are difficult to coordinate. The result is that project managers may spend a lot of labor piecing together a whole project budget, and mitigation and publically funded efforts may live in parallel universes. Even with a diversity of funding sources, some areas of project work are poorly and inconsistently funded. Salmon recovery efforts frequently lose ground due to lack of habitat protection even as restoration moves forward. This session will look at how to design a restoration economy so that all phases of work are effectively supported, from planning and feasibility through evaluation and long-term stewardship. What tools are available for sustained ecosystem management within our watersheds? How do they work in concert to achieve the challenge of sustained ecosystem recovery?

This discussion will continue at Society for Ecological Restoration Northwest in May, with the goal of capturing a ground-up view of the strengths and weaknesses in the restoration economy and creative, small, but effective steps toward improving the ability to provide public service. Brief presentations from different actors in the restoration economy will be followed by discussion.



9-11 A.M.

Effectiveness of Different In-stream Techniques

In this session, speakers will describe projects that used different in-stream structures to create habitat and then discuss their effectiveness in meeting objectives. The session will include a panel discussion with the audience about the use of large woody materials in rivers and the effect on boating and safety.

John Jorgenson, Yakama Nation, will present restoration techniques used to restore a spring-fed tributary to the Methow River. Hancock Creek, 8 miles north of Winthrop and thought to be a key biological component of the natural production system in the Methow basin, was degraded severely by livestock around the turn of the century. Through a unique restoration strategy, in-stream structures, pool and riffle construction, large woody material additions, and riparian re-vegetation was accomplished without the use of mechanized equipment. Steelhead not seen in the spring creek for decades are now spawning and rearing in restored habitat.

Michael Maudlin, Lummi Nation, will present the recently completed Nasset's Reach large woody materials project on the south fork of the Nooksack River. The project addresses reach-scale restoration of habitats that support the recovery of Endangered Species Act-listed south fork early Chinook, bull trout, steelhead, and other salmonid populations. The project attempts to achieve this by reinforcing existing accumulations of large woody materials to promote more persistent and diverse habitats within a very dynamic reach of the south fork.

Mike McHenry, Elwha Klallam Tribe, will present his experiences from several Olympic Peninsula watersheds that have used wood as part of a restoration strategy. Examples of large wood placement effectiveness on physical and biological processes will be highlighted from Deep Creek and the Little Hoko and Elwha Rivers.

Nancy Faegenburg, King County, will discuss some of the contributing factors to potential conflicts on the river and how King County is addressing this concern. As the number and extent of in-stream large wood projects has increased, so has concern over the potential risk these projects pose to recreational river users.

Lloyd Moody, Governor's Salmon Recovery Office, will share insights about efforts to obtain large wood from state-owned timber lands for salmon recovery projects, as well as a Web site tool that could make finding large wood products easier. He also will explore best management practices for storing large wood and ways to take advantage of storm wood when it becomes available.

Bruce Heiner, Washington Department of Fish and Wildlife, will discuss a project that replaced half of a boulder weir with a 60-foot-long roughened channel on the Tucannon River to improve fish passage at lower flows and for weak-swimming fish.

Sa-Heh-WA=Mish Room

Moderator
Pat Powers
Salmon Recovery Funding Board
Technical Review Panel

Thursday
April 16, 2009



Appraising Habitat Lands for Conservation: Understanding the Appraisal Process

9-11 A.M.

Grand Ballroom A

Moderator

*Marc Duboiski
Salmon Recovery
Funding Board*

In this presentation Victoria Adams, an appraiser for Terra Valuations and Greg Richards, an appraiser for the Department of Natural Resources, will offer their different perspectives. The presentation will begin with an overview of the primary differences between the Uniform Standards of Professional Appraisal Practice (USPAP) and the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA or "Yellow Book"). The two appraisers will transition into a discussion regarding how habitat acquisitions may affect the real estate market, the importance of highest and best use, how to understand an appraisal, how to give clear appraisal instructions to your appraiser, when and how appraisers can use extraordinary assumptions and hypothetical conditions and why you may want to use these assumptions and conditions, problems and opportunities encountered in the appraisal review process, how to save money on appraisal costs, and more.

How Utilization Studies Can Help Us Restore and Protect Salmon Habitat

12:30-2:30 p.m.

Grand Ballrooms
B-C

Moderator

*Kurt Fresh
National Oceanic
and Atmospheric
Administration-
Fisheries*

Dr. Dan Bottom, National Oceanic and Atmospheric Administration-Fisheries, will discuss the Salmon Creek project.

Dr. Jason Toft, University of Washington School of Aquatic and Fisheries Science, will discuss the Olympic Sculpture Park project.

Chris Ellings, Nisqually Indian Tribe, will discuss the Red Salmon Slough project.

The distribution, migration patterns, and habitat-type-specific priorities of juvenile salmonids leaving their natal rivers and streams throughout Washington is a major data gap. This gap limits the ability to focus site-specific salmon protection and restoration actions in the estuarine environment. Several fish scientists, however, have completed fish utilization assessments that have: 1) Been completed before a restoration action, 2) Helped define the project goals, objectives, or design of a restoration project, and 3) Quantified fish response after a restoration action. The second half of this session will be a panel discussion focusing on the synthesis of the recent work and how it can help build better projects.

Additional panel members are **Barbara Rosenkotter**, San Juan Lead Entity, and **Peter Namtvedt-Best**, City of Bainbridge Island.



9-11 A.M. and
12:30-2:30 P.M.

Making Small-Scale, Community Based Restoration Work

In 2003, the National Fish and Wildlife Foundation and Salmon Recovery Funding Board launched the Community Salmon Fund to support local efforts in Washington to enhance and restore salmon habitat. The program provides small grants for salmon restoration projects, including in-stream work, riparian planting, and culvert replacement, that have strong community involvement from landowners, volunteers, students, and other community groups and that broaden local support for salmon recovery. The community fund takes an approach to grant making that integrates local knowledge and initiative into achieving the goals of local recovery strategies.

Little Skookum A-B
Rooms

Moderator
Cara Rose
*National Fish and
Wildlife Foundation*

This panel will provide a brief overview of the program, including its history, program requirements, and accomplishments. Panelists will include past and current grantees who will focus on aspects of their projects that were particularly successful from a small-scale community-based restoration perspective, including creative and innovative solutions to restoration needs, outreach, volunteer recruitment, and fund leveraging strategies. To conclude the session, the panel will encourage a discussion of what needs are not being met through the program so that the National Fish and Wildlife Foundation can continue to develop the program in a manner that will encourage grant applicants to participate in the program and that will result in even broader implementation of these small, community based projects.

Russel Barsh, Kwiaht, Center for the Historical Ecology of the Salish Sea, a nonprofit conservation biology laboratory in the San Juan Islands, will discuss the network of community teams established in the San Juans and its program of nearshore and freshwater web research, long-term monitoring, and resource protection. Mr. Barsh will discuss how citizen science can be a broad-based, mobilizing process that can produce reliable data, stronger constituencies, and voluntary action to protect critical habitats—and attract more youth to science and engineering.

Neil Werner, Hood Canal Salmon Enhancement Group, will discuss the group's broad range of habitat restoration, which has leveraged more than \$22 million dollars in the past ten years for this endeavor. Mr. Werner will discuss the group's experience in working with small landowners and their issues, and will highlight specific projects that have been completed. Included in the discussion will be funding and leverage strategies used for successful projects.

Thursday
April 16, 2009



Using Science to Guide Restoration Activities: National Oceanic and Atmospheric Administration (NOAA)'s Northwest Fisheries Science Center

Sa-Heh-Wa-Mish
Room

Moderator
Steve Leider
Governor's
Salmon Recovery
Office

In this session, research scientists from the Northwest Fisheries Science Center will present findings of their recent research in short, 20-minute segments with time for questions and answers. Topics include: Determining how much restoration is enough, evaluating salmon habitat management strategies at the watershed scale, setting river restoration priorities, and understanding science-based tools for evaluating stream restoration proposals.

Estimating Salmon and Steelhead Response to Restoration: How Much Restoration is Enough?

Dr. Philip Roni, NOAA Northwest Fisheries Science Center

As a fisheries research scientist and program leader, Dr. Roni has conducted research on salmon life history, effects of hydropower operations on salmonids, fish sampling techniques, effects of forestry activities on aquatic biota, identification of essential habitats for sensitive aquatic species, and, most recently, watershed restoration. Before arriving at NOAA in 1995, he worked as a marine and fisheries biologist with the Washington Department of Fish and Wildlife and as a research biologist at an environmental consulting company. His current research focuses on watershed restoration and evaluating various habitat rehabilitation techniques such as in-stream structures, nutrient additions, floodplain restoration, and recovery of urban streams. In addition, he is involved in writing regional, national, and international documents on planning, monitoring, and evaluating watershed restoration for fisheries resources.

Science-based Tools for Evaluating Stream Restoration Project Proposals

George Pess, NOAA Northwest Fisheries Science Center

Mr. Pess has worked in the fisheries science and management field since 1989, and has conducted research on historic and current land use impacts on salmon habitat and production, the influence of wood in forested stream channels, the development of a wood recruitment model to determine the relative influence of forestry activities, what role watershed analysis plays in ecosystem management, and how landscape characteristics and land use affect salmon abundance and distribution. His current research projects includes: ecosystem response to the removal of the Elwha River dams, differences in salmonid recolonization associated with population and aquatic habitat dynamics, and biological response to logjam placement in large river systems.



12:30-2:30 P.M.

Decision Support for Evaluating Salmon Habitat Management Strategies at the Watershed Scale: A Case Study on the Lewis River and Guidelines for New Applications.

Dr. Ashley Steel, NOAA Northwest Fisheries Science Center

Dr. Steel is a quantitative ecologist with applied research interests in riverine ecology. She currently investigates the impact of landscape condition on in-stream processes including salmon population performance and in-stream conditions. She also is interested in the assessment of natural spatial and temporal variability in ecosystem processes at multiple scales and the impact of these patterns on biota. Through the Lewis River Case study and sensitivity analyses of models used in recovery planning, she works on the quantification and incorporation of certainty estimates for empirical and modeled data in decision-making. Primary statistical interests include analysis of ratio data, repeated measures data, and wavelet analysis.

Setting River Restoration Priorities: A Review of Approaches and a General Protocol for Identifying and Prioritizing Actions.

Dr. Tim Beechie, NOAA Northwest Fisheries Science Center

Dr. Beechie is the science coordinator for the Watershed Program, and leader of the Ecosystem Processes Team. Since 1990, he has studied the natural development of landscapes and salmon habitat, evaluated the relative influences of different land uses on salmon habitat losses, and led the development of a process-based habitat restoration strategy. He has researched the influence of woody materials on fish habitat, recruitment of woody materials from second-growth forests, and recovery of salmon habitat from landslide impacts and removal of riparian forests. He also is studying the formation and evolution of floodplain habitats, impacts of sediment supply changes on stream habitats, and restoration of incised stream channels in semi-arid environments.

Hatchery Reform in Washington: An Overview of Process, Principles, Methods, and Observations

Hatchery reform has become an increasingly important concept in the operation of hatcheries. The Hatchery Scientific Review Group reviewed Puget Sound, coastal, and Columbia basin hatcheries based on three hatchery management principles: 1) Clear goals for each stock, 2) Scientifically defensible programs, and 3) A transparent and accountable feedback loop to determine if the programs are achieving the goals. In this presentation, Andrew Appleby, from the Washington Department of Fish and Wildlife, will describe the process, tools, importance of population designations, connection between hatchery reform and habitat improvements, and general species-specific observations.

Squi-Aitl Room

Moderator
David Troutt
Salmon Recovery
Funding Board

Thursday
April 16, 2009



12:30-
2:30 P.M.

You've Protected the Land, Now What?: How to Successfully Manage Habitat Lands Over the Long-term

Grand Ballroom A

Moderator

*Bob Bugert
Chelan-Douglas
Land Trust*

In this session, acquisition practitioners will present brief case histories of their watersheds and how they developed stewardship plans. Discussion topics include why these baseline documents and stewardship plans are important in the habitat conservation process; how inadequate documents may increase the risk of legal challenges; how to pay for and staff the development and implementation of both baseline documentation and stewardship plans; the challenges in meeting land trust obligations for holding lands or easements in perpetuity; how to develop strategic partnerships to help manage or restore habitat lands; what can multiple landowners employ to coordinated long-term stewardship; and more.

Bob Bugert, Chelan-Douglas Land Trust, has worked on a number of issues related to land and water conservation and restoration, with particular focus on salmon recovery. Before his work with the land trust, he served for nine years as a policy advisor in the Washington Governor's Salmon Recovery Office. He is a graduate of the Washington Agriculture and Forestry Education Foundation, and has a master and a bachelor degree in fishery and wildlife biology.

Lisa Younger, The Nature Conservancy, is the conservation programs coordinator. She has three main areas of focus: Management of preserves that fall outside the scope of the conservancy's established Washington field programs, coordination of annual monitoring of the Washington chapter's conservation easements and deed restrictions, and tracking statewide invasive species management issues, including work with various task forces and boards.

Eric Erler, Capitol Land Trust, which seeks to maintain the coexistence of people, wildlife, and the natural habitats that sustain us all, by working with groups and individuals at the local level to protect and conserve important lands.

Steve Bondi, Methow Conservancy, which has a mission is to inspire people to care for and conserve the land of the Methow Valley, ensuring it will remain a place where future generations can enjoy the rural character and natural beauty we cherish today.

Speaker Biographies

William Ruckelshaus

Mr. Ruckelshaus is chair of the Leadership Council for the Puget Sound Partnership, a state agency charged with cleaning up and protecting Puget Sound. A long time salmon advocate, Mr. Ruckelshaus has served as chair of the state Salmon Recovery Funding Board, which provides grants to restore and protect salmon, and a member of the U.S. Commission on Ocean Policy, which brings attention to the importance of protecting and restoring saltwater areas important to salmon recovery and cultural, economic, and quality-of-life interests. He co-founded the Shared Strategy process, the framework within which Puget Sound area watersheds prepared groundbreaking plans for recovering salmon. In 2004, he was appointed chairman of The William D. Ruckelshaus Center, a collaborative, problem solving institution of the University of Washington and Washington State University. In 2003, he was appointed to serve on the National Oceanic and Atmospheric Administration's Science Advisory Board. Ruckelshaus was the first administrator of the U.S. Environmental Protection Agency, which was formed in December 1970. He served as director until April 1973.

Phil Anderson

Mr. Anderson is the interim director of the Washington Department of Fish and Wildlife. He began his employment with the agency in 1994, serving as a special assistant to the director for intergovernmental policy. Before becoming interim director, Mr. Anderson was the deputy director for resource policy, overseeing resource conservation, management, and enforcement issues. He also served on the Pacific Fishery Management Council, representing Washington State, and holding the position of vice-chairman and chairman. Before joining the department, he ran a charter fishing vessel for 20 years, fishing for salmon, halibut, groundfish, and albacore. Among other past activities, he was president of the Washington State Charter Boat Association, advisor to the Pacific States Marine Fisheries Commission, and member of the U.S. delegation during negotiation of the Pacific Salmon Treaty.

Norm Dicks

Congressman Norm Dicks, a native of Bremerton, was first elected to the House of Representatives in November 1976. Rep. Dicks serves as the third-ranking member of the House Appropriations Committee



and is a member of three key appropriations subcommittees – Defense, Interior and Environment, and Military Construction/Veterans Affairs. The environment has been a high priority for Rep. Dicks. As chairman of the Interior Appropriations Subcommittee, Rep. Dicks is in a leadership position on federal environmental and natural resource policies as well as Indian Affairs. In the late 1980s and early 1990s he was involved in the regional effort to develop a response to the listing of the Northern Spotted Owl, which resulted in reductions of timber harvesting on federal lands. During the Clinton-Gore Administration, he worked to bring federal assistance to the West Coast states to address the listings of threatened salmon. Perhaps his biggest environmental achievement came in 2000, as Rep. Dicks wrote a landmark bill that created a new federal lands conservation trust, doubling the nation's commitment to preserving threatened parklands and protecting wildlife.

Steve Tharinger

Mr. Tharinger is chair of the Salmon Recovery Funding Board and a Clallam County commissioner. A resident of Clallam County for more than 20 years, he has served on the Dungeness River Management Team, the Clallam County Agriculture/Forest/Mineral Lands Committee, Dungeness River Flood control Advisory Board, and the Clallam County Planning Commission, giving him a solid grasp of local resource issues. He has a bachelor of science degree in political science from Colorado College and is a certified mediator for the Peninsula Dispute Resolution Center. Mr. Tharinger and his wife, Yvonne Yokota, co-founded Dungeness Woodworks a small woodworking business in 1979.

Maggie B. Coon

Ms. Coon is director of external affairs for The Nature Conservancy of Washington. Her career in conservation spans three decades. She has worked for the past 20 years for The Nature Conservancy, gaining broad experience in state, national, and international land conservation, especially in Latin America. Her current position with The Nature Conservancy is strongly focused on building coalitions to accomplish the shared goals of multiple organizations. Ms. Coon has served on a number of state and regional boards, including the Washington Conservation Voters, Farming and the Environment, The Nature Conservancy Action Fund, and as chair of the Washington Biodiversity Council, the Washington Wildlife and Recreation Coalition, and the High Country News Foundation.



Notes

