

Southeast Alaska Watershed Symposium

November 4th, 5th & 6th 2013

Centennial Hall, Juneau, Alaska

Symposium Goals:

This event will provide fisheries and aquatic resource professionals with an opportunity to share information, tools, and methods which promote fish habitat conservation and support aquatic resource management in southeast Alaska.

It is envisioned that the Southeast Alaska Watershed Symposium will be a catalyst for professionals working in southeast Alaska to share relevant work and recent efforts occurring in watersheds across the region as well as provide an opportunity for participants to network and identify strategic partnerships that will advance common fish habitat conservation and aquatic resource management goals.

This symposium is focused on topics of fish distribution, stream/river habitat, watershed assessment and prioritization methods, relevant geospatial tools and information on emerging research in the region. Additionally, the symposium offers an overview of the Clean Water Act Section 404 program and proposed Southeast Alaska Mitigation Fund. It is our hope that this symposium will provide a baseline level of information sharing and become an annual event for future exploration of these and other important thematic topics.

Session Objectives:

1. Provide participants with an overview and demonstration of current fish distribution and fish habitat inventory activities throughout southeast Alaska.
2. Demonstrate watershed scale assessment and prioritization schemas with applications to support fish habitat conservation and aquatic resource management.
3. Showcase geospatial tools and emerging research with applications to support aquatic resource management in southeast Alaska.
4. Provide participants with an overview of the Clean Water Act Section 404 program in Alaska and the role aquatic resource mitigation can play to support mitigation of development impacts to wetlands and fish habitat.

*Co-hosted by the
Southeast Alaska Watershed Coalition (SAWC) &
the Southeast Alaska Fish Habitat Partnership (SEAKFHP)*

<http://alaskawatershedcoalition.org>

<http://www.seakfhp.org>

November 4th- Centennial Hall

Southeast Alaska Watershed Symposium

- 11:00-12:30** **Poster Session Set-up**
Lead: Nina Horne, Juneau Watershed Partnership
Attendees are encouraged to bring poster presentations to the symposium. Posters will be on display for the duration of the event and highlighted on the evening of November 4th.
- 12:30-1:15** Symposium Registration
- 1:15 - 1:30** Welcoming Comments
- 1:30 – 2:00** Table Introductions, Host Partner Overviews, Agenda Overview, Symposium Goals

Session 1: Fish Distribution and Habitat Inventory Activities in Southeast Alaska

Lead: Jeff Nichols, ADFG - Sport Fish Division, Freshwater Assessment Group

Every year in southeast Alaska, there are numerous efforts undertaken to identify fish distribution patterns, aquatic habitat use and condition, and the natural and anthropogenic factors contributing to changes in any or all of the above. A diversity of approaches have been used to address these information needs, allowing flexibility in methods and data requirements to answer specific questions, adherence to agency protocols, and comparisons across time and space. Inherently, a wide diversity of approaches can contribute to uncertainty in choosing the ‘best’ approach.

Session Goal: To provide participants with an overview of the most widely used, and emerging, protocols and data holdings related to identifying fish distribution, aquatic habitat use, and condition in southeast Alaska. Presentations by practitioners will be followed by facilitated panel discussions and open forum, providing further opportunity to explore how differences in spatial and temporal variability and subsequent management or restoration actions drive selection methods.

- 2:00-3:00** **Presentations – Fish Distribution, Abundance, Mapping**
1. **(2:00 – 2:20):** Beyond Stream Classification (AHMU): Improving Fish Distribution Maps on the Tongass National Forest - Emil Tucker, USFS
 2. **(2:20 – 2:40):** Identifying Distribution Patterns of Fish in Freshwater Habitats and Current Activities in Southeast Alaska; What the AWC (and other state holdings) Can and Can’t Tell Us About Fish Distribution – Matt Kern, ADFG-Habitat Division
 3. **(2:40 – 3:00):** ADF&G Surveys to Estimate Relative Abundance, Catch, and Harvest of Salmonids in Freshwater Habitats (*Steelhead snorkel surveys, SWHS, cabin mail out surveys*) – Roger Harding, ADFG-Sport Fish Division

- 3:00-3:20** **Break/Poster Session Set-up**

November 4th- Centennial Hall (Continued)

- 3:20 – 4:20** **Presentations – Habitat Inventory / Assessment and Application**
1. (3:20 – 3:40): Hydrologic Investigations in Support of Reservations of Water and Adjudication – Jarrod Sowa, ADFG-Sport Fish Division
 2. (3:40 – 4:00): Reach-based Surveys to Inventory and Characterize Stream and River Habitats – KK Prussian, USFS
 3. (4:00 – 4:20): Making Sense of Restoration Activities, Effectiveness Monitoring, and the Response of Fish – Hal Geiger, St. Hubert Research Group and Jeff Nichols, ADFG-Sport Fish Division
- 4:20-5:00** Facilitated Panel Discussion/Open Forum
- 5:00-5:15** Final Points and Wrap-up
- 5:15-7:00** **Poster Session and Evening Social**

November 5th- Centennial Hall

Southeast Alaska Watershed Symposium

8-8:30 Welcome

8:30-8:45 Table Introductions, Brief re-cap of Day 1 and Day 2 Agenda overview

Session 2: Habitat Inventory and Assessment (Continued) and Watershed Scale Prioritization Lead: Neil Stichert, USFWS Southeast Alaska Habitat Restoration Program

This session will continue inventory and assessment themes from Day 1 and close the morning with regionally relevant watershed prioritization schemas and decision support tools for fish habitat restoration and preservation needs.

Session Goal: In southeast Alaska, various regional and watershed-scale prioritization efforts and decision support tools have been developed and used to support management decisions and restoration project site selection. These schemas and tools are used to inform conservation or restoration plans, prioritize funding allocations, and optimize benefits to the resource. This session will provide an overview of existing and emerging activities in the region.

8:45-11:40 Habitat Inventory & Assessment/Watershed Scale Prioritization Presentations

1. (8:45 – 9:05): Forest Service Watershed Condition Framework (big picture assessment of watershed condition); Priority Setting – Julianne Thompson, USFS
2. (9:05 – 9:25): Using Aquatic Habitat Survey Information to Guide Restoration and Rehabilitation Efforts: A Case Study (Twelvemile Creek) – Sarah Brandy, USFS
3. (9:25 – 9:45): Design and Implementation of large wood structures to restore hydrological functions to Twelvemile Creek: A Case Study – Sean Claffey, USFS
4. (9:45 – 10:05): Tongass National Forest Watershed Restoration Effectiveness Monitoring Program (WREM) Overview – Sheila Jacobson, Forest Fish Biologist, Tongass National Forest (USFS)

10:05-10:20 Break

5. (10:20 – 10:40): Surveys to Inventory and Assess Fish Passage in Southeast Alaska – Gillian O’Doherty, ADFG-Sport Fish Division
6. (10:40 – 11:00): Fish Passage Inventory and Prioritization in the Haines Borough - Brad Ryan, Takshanuk Watershed Council, Haines
7. (11:00 – 11:20): Inventory and Assessment and Prioritization in Support of Aquatic Habitat Restoration and Protection in the Mat Su Valley - Applications from the Mat Su Salmon Habitat Partnership - Bill Rice, USFWS, Anchorage
8. (11:20 – 11:40): Using a Community Survey to Integrate Social Priorities with Ecological Needs for Restoring Watersheds - Scott Harris, Sitka Conservation Society
9. (11:40-12:00): How do we use collaboration and coordination to increase the collective impact of watershed restoration activities? – Bob Christensen, SEAWHEAD

November 5th- Centennial Hall (Continued)

12:00-1:00 **Lunch: sponsored by the Southeast Alaska Fish Habitat Partnership**

Session 3: Showcase geospatial tools and emerging research and monitoring in Southeast Alaska **Lead: Cindy Hartmann Moore, NOAA Alaska Region – Office of Habitat Conservation**

Session Goal: Progressive geospatial applications, tools, and data repositories are being developed to support fish conservation and aquatic resource management decisions in southeast Alaska. In addition, new research is emerging from agencies, NGO's, and University partners across the region that provides insights on potential changes in aquatic habitat in the future, describes fish/habitat associations, outlines monitoring schemas, and other contributed topics. This session will provide an overview of these applications and tools as well as includes some of the relevant emerging research taking place in southeast Alaska.

1:00-2:40 **Geospatial Tools Presentations**

1. (1:00 – 1:20): SEAKGIS Library Holdings and Wetland/Coastal Modules – Kim Homan, University of Alaska Southeast
2. (1:20 – 1:40): SEAKHYDRO—Unified Representation of Hydrography and Fish Distribution - How it's been Developed and Applications for Users – Becci Anderson, USGS Geospatial Liaison and Kim Homan, University of Alaska Southeast
3. (1:40 – 2:00): NetMap in Southeast Alaska and the Tongass: A Community Based Digital Landscape with Analysis Tools – Lee Benda, Earth Systems Institute
4. (2:00 – 2:20): Salmon Habitat Decision Tools – David Albert, The Nature Conservancy
5. (2:20 – 2:40): SHOREZONE/Nearshore Fish Atlas applications – Steve Lewis, NMFS, Analytical Team

2:40-3:00 **Break**

3:00 – 4:30 **Emerging Research Presentations**

1. (3:00 – 3:20): Food Webs and Fish Habitat Quality in Glacially-influenced Estuaries of Southeast Alaska – Anne Beaudreau, University of Alaska Fairbanks, Juneau Center
2. (3:20 – 3:40): Predicting Distributions of Estuarine Associated Fish and Invertebrates in Southeast Alaska – Katharine Miller, NOAA NMFS Alaska Fisheries Science Center, Auke Bay Laboratories
3. (3:40 – 4:00): Southeast Alaska Stream Temperature Data Network – Sanjay Pyare, University of Alaska Southeast
4. (4:00 – 4:20): Southeast Alaska Stream Discharge Data Compilation – Colin Shanley, The Nature Conservancy
5. (4:20 – 4:40): Analysis of North Temperate Rainforest Projections of Key Climate Variables, Including Hydro-ecology; Scenarios to 2080 – Mike Goldstein, USFS
6. (4:40-5:00): Di Johnson, USFS-PNW

5:00-5:15 **Wrap-up**

November 6th - Centennial Hall, Juneau AK

Southeast Alaska Watershed Symposium

8:00-8:30

Coffee

8:30-9:00

Table Introductions, Brief re-cap of Day 2 and Day 3 Agenda overview

Session 4: Building an effective Clean Water Act Section 404 Program for Southeast Alaska **Leads: Jessica Kayser, SAWC- In Lieu Fee Program Development and Karen Johnson, The Nature Conservancy, Virginia Aquatic Resources Trust Fund, Mitigation Program Manager**

In 1972, Section 404 of the Clean Water Act established a program to regulate the impacts to the waters of the United States. The program works to ensure that unavoidable impacts to aquatic resources are mitigated. In 2008 the United States Army Corps of Engineers and the Environmental Protection Agency issued revised regulations to the Section 404 program. The improved federal regulation seeks to address the significant losses to aquatic resources over the past several decades- nation wide- and improve compensatory mitigation for authorized impacts to wetlands, streams and other waters of the U.S.

In order to ensure the Alaska Section 404 regulatory program is able to effectively mitigate losses to important aquatic resources and fish habitat in southeast Alaska there is a critical need for aquatic resource scientists, managers, practitioners, policy and decision makers, and developers to come together and support the development of regionally relevant compensatory mitigation policies, tools, guidance and science.

9:00-10:30

Overview of Section 404 Regulatory Program in Alaska

9:00-9:30

An overview of the Section 404 program in Alaska and a discussion regarding tools and resources that could be developed and/or are being developed to ensure valuable aquatic resources are being mitigated under the regulatory program in Southeast Alaska. **Randy Vigil and Matthew Brody, US Army Corps of Engineers, Juneau Field Office**

9:30- 10:00

An overview of the State-wide Inter Agency Review Team being developed for Alaska. Including goals, objectives and plans to develop and/or provide guidance on state and regional guidance that work to ensure valuable aquatic resources are mitigated. **Matthew LaCroix, Environmental Protection Agency, Region 10, Anchorage**

10:00-10:30

An update of Alaska Senate Bill 27 "404 Primacy" and the actions being carried out by ADEC and ADNR to evaluate whether or not the agency should seek approval to assume the Section 404 program from the EPA. **Ben White and Andrew Sayers-Fay, Alaska Department of Environmental Conservation, Juneau AK**

10:30-10:45

Break

November 6th - Centennial Hall, Juneau AK (continued)

- 10:45-11:45** Examples of efforts in Washington and Oregon working to ensure effective mitigation of valuable aquatic resources
- 10:45-11:15** A presentation on how Washington State Department of Ecology supports effective mitigation, including the development of tools and guidance that work to ensure Banks and In Lieu Fee (ILF) programs are meeting mitigation targets. **Kate Thompson, Wetland Banking Lead, Washington State Department of Ecology, WA**
- 11:15—11:45** This presentation will highlight efforts in Oregon being carried out by the Willamette Partnership to support Oregon to implement the 2008 federal rule and develop a Compensatory Mitigation Framework that integrates a watershed approach to mitigation planning. **Nicole Robinson-Maness, Ecosystem Services Project Manager, Willamette Partnership, OR**
- 11:45-12:15** Joint Panel: Question and Answer
- 12:15-1:15** **Lunch: Sponsored by SAWC**
- 1:15-2:14** How current and proposed In Lieu Fee programs strive to mitigate important aquatic resources in Southeast Alaska.
- 1:15-1:45** How SEAL Trust prioritizes mitigation projects and an overview of WESPAK-se Wetland Assessment Methodology. **Gretchen Kaiser, Southeast Alaska Land Trust, Juneau AK**
- 1:45-2:15** An update on SAWC's proposed Southeast Alaska Mitigation Fund In Lieu Fee Program, including an overview of how the program will be operated. **Jessica Kayser, Southeast Alaska Watershed Coalition, Haines AK and Karen Johnson, The Nature Conservancy, Virginia Aquatic Resources Trust Fund, Mitigation Program Manager**
- 2:15-2:30** **Break**
- 2:30-3:30** **Workshop: What aquatic resource restoration/enhancement/creation projects qualify for funding under the proposed Mitigation Fund?**
This workshop will teach participants what constitutes a mitigation project under the 2008 federal rule and how to nominate these potential restoration projects to be considered for mitigation dollars under the Southeast Alaska Mitigation Fund.
- 3:30-4:30** Symposium Assessment and Next Steps