

2015 Alaska Fish Passage Meeting
October 13-14th, 2015 8:00am – 5pm
(Working group meeting slated for Oct. 15th 8:00 am – noon)
Central Council Tlingit and Haida Vocational Training and Resource Center (VTRC)
3239 Hospital Drive, Juneau, Alaska
(Contact #'s Debbie 907-723-0258 /Neil 907-209-6954)

Background:

As road infrastructure in Alaska improves and expands, maintaining and restoring fish passage at road/stream crossings will remain a top priority for both transportation planners and aquatic habitat managers. Inventories of fish passage barriers on Federal (USFS, FWA), State (ADOT&PF), private (ANCSA Corporation) and municipal road systems in Southeast Alaska have been largely completed over the past 15 years. Advances and refinements in fish passage assessment, prioritization, design, and construction have also occurred across the region as awareness of fish passage issues has increased. While progress has clearly been made, nearly ten years have passed since the last comprehensive review of fish passage management in Alaska.

The Southeast Alaska Fish Habitat Partnership (SEAKFHP) will host the 2015 Alaska Fish Passage Meeting to examine the state of the science and practice of maintaining and restoring fish habitat connectivity through road crossings in the region. With over 5,000 inventoried culvert barriers on fish streams across local, state, and federal ownerships, maintaining current fish passage regulatory policies, design and implementation approaches, and performance monitoring schemas are critical to maintaining habitat connectivity. Interagency coordination and information sharing events reflecting the state of the science are keys for future success. This event will be a continuation of past efforts to comprehensively address these topics in an interagency context at the Southeast Interagency Fish Passage Workshop in January 2001 (Ketchikan) and the Fish Passage on the Tongass meetings in May 2005 (Juneau).

Meeting Purpose:

This meeting will convene leading Federal, State, and local engineers, transportation planners, hydrologists, biologists, and regulatory specialists to examine the plans, policies, and practice of fish passage management in the region. This event is not designed as a training opportunity. Rather, we will focus on identifying technical inconsistencies and prioritizing needs. Participants are expected to have a topical working knowledge. **Due to the interdisciplinary aspects of fish passage issues, meeting attendees are asked to try attending all sessions of this event.**

Outcomes: Desired meeting outcomes include coordination on the following topics

- 1) Overview of current fish movement and behavior studies and their applications to road/stream crossings;
- 2) Culvert barrier inventory, assessment, and prioritization in Alaska;
 - Identifying differences in agency fish passage assessment matrices
 - Interagency data sharing for regional fish passage information
 - Reviewing prioritization schemas for the region;
- 3) Reviewing design and construction approaches;
- 4) Overview of State and Federal fish passage regulatory context and policy;
- 5) Discuss potential regional partnerships and projects to achieve specific outcomes from the above.

2015 FISH PASSAGE MEETING AGENDA

Tuesday-- October 13, 2015

8:00 am Coffee

8:30 – 9:00 am Welcoming Comments and Introductions—Neil Stichert, USFWS and Deborah Hart, SEAKFHP

9:00 – 10:30 am Fish Movements and Behavior

This session is intended to provide an overview of past and current fish movement and behavior studies and their applications to road/stream crossings. The ecological context and understanding of fish movements, dispersal, and migration needs by species, life stage, and season are important. Interdisciplinary recognition of the aquatic life history requirements of Alaska's fish and other aquatic species is a consistent need in planning for transportation improvements. This session is dominantly an information sharing session.

Moderator—John Hudson, USFWS

- Overview of Fish Movement Studies in Alaska—John Hudson, USFWS
- How Culverts Impact Fish Movement—Gillian O'Doherty, ADFG
- Seasonal Movement of Dolly Varden and Cutthroat Trout with Respect to Stream Discharge—Buck Bryant, Douglas Island Aquatic Ecology
- Juvenile Coho Salmon Habitat Use and Migration Behavior in the Big Lake Drainage—Suresh Sethi, USFWS

BREAK 10:30-10:45 am

10:45 am – 4:30 pm Fish Passage Assessment and Prioritization. Comprehensive fish passage assessments on Alaska's road networks have been conducted by State and Federal agencies and NGOs over the past 15 years and are nearing completion. As the pattern of road/stream crossings on the landscape emerged and interest in restoration, compliance, and mitigation actions at assessed fish passage barriers increased, the need for prioritization schemas to guide fish passage improvements has also increased. This session is dominantly an information sharing session with discussion breaks after specific topics.

Moderator—Gillian O'Doherty, ADFG

Fish Passage Assessment

- USFS Tongass National Forest Road Conditions Survey - Methods, Data Stewardship, and Status of TNF Assessment—Sheila Jacobson, USFS
- ADFG Fish Passage Inventory and Assessment Program- Methods, Data Stewardship, and Status of Statewide Assessment—Gillian O'Doherty, ADFG
- DNR Assessments on Forest Roads—Joel Nudelman, ADNR

LUNCH – 12:00 – 1:00pm – Luncheon—Participants are invited to bring lunch or in-house lunch order will be confirmed with attendee RSVP.

Proposed Group Discussion Topic (20-30 minutes):

- The Assessment Matrix after 15 Years-How is it performing and what have we learned? (Consider various assumptions in matrix, propose changes).

Prioritization of Barriers

- ADFG Fish Passage Working Prioritizations—Gillian O’Doherty, ADFG
- A Review of the USFS Tongass National Forest Fish Passage Prioritization Approach—Integrating the Biological Significance Index and Management Recommendation Process at Various Scales—Julianne Thompson, USFS
- Big Lake Fish Passage Optimization Model—Suresh Sethi, USFWS
- Other Alaska Culvert Prioritization Efforts—Bill Rice, USFWS

BREAK 3:00-3:15 pm

Proposed Group Discussion Topics:

- What types of prioritization are working well and what isn’t?
- Ways to maintain and share live prioritizations, models etc?
- Opportunities for using new tools such as remote sensing and predictive models to support upstream habitat assessment and prioritization of barriers?
- Recap Day One discussions as time allows

2015 FISH PASSAGE MEETING AGENDA

Wednesday, October 14, 2015

8:00 am Coffee

8:30- 8:45 Welcoming Comments and Recap of Day 1---Bob Gubernick, R.G. (USFS) and Bill Rice, P.E., P.H, (USFWS)

8:45 – 12:00 noon Fish Passage Design

Engineering and construction aspects of fish passage improvements at road/stream crossings have developed and evolved over the past 30 years in the Pacific Northwest, Alaska, and nationally. This presentation and discussion session is design to showcase engineering practices, projects, and construction challenges by regional practitioners.

Moderators---Bob Gubernick, R.G. (USFS) and Bill Rice, P.E., P.H, (USFWS)

- Evolution of Fish Passage Design and Guidelines – A Perspective from FWHA—an overview of the synthesis report, HEC 26, and practices in the PNW—Sven Leon, FHWA
- Stream Simulation to Hydraulic Design, Monitoring and Research results — Experience and Perspectives from 10 Years of Practice from the USFS AOP Program—Bob Gubernick, USFS
- Flood flows, Fish, and Debris Passage—Events of the Past 10 years in Southcentral Alaska and Other Examples—Bill Rice, USFWS

BREAK 10:00 – 10:15

- Design Perspectives and Selected Projects from ADOT Northern Region—Jeff Stutzke, ADOT
- Minimally Engineered Fish Culvert Design—Parameters of this approach and performance to date—Tongass National Forest Engineering staff —Jason Powell, USFS
- Design details, bed design and construction; successes and lessons learned -- Bill Rice, USFWS – presentation of visuals with moderated roundtable

Discussion topics from above and those below at the will of the group 11:15-12:00

- Needed improvements to hydrologic models for flow estimation
- Performance monitoring of installed structures over time
- Frequent omissions and details—adequate profile survey extent and detail, bankline construction, bedrock discoveries.
- Design approaches for fish bearing wetlands/palustrine channels
- High gradient design approaches—
- Importance of construction oversight and inspection

LUNCH 12:00 – 1:00 Luncheon--- Participants are invited to bring lunch or in-house lunch order will be confirmed with attendee RSVP.

1:00 – 5:00 Fish Passage Authorities and Policy in Alaska

Alaska has a rich history in the early identification of the need to protect fish habitat and connectivity through the establishment of statutory protections at Statehood. Subsequent policy and interagency agreements at the local, state, and federal levels have evolved through the present time.

Moderators- Julianne Thompson, USFS and Mike Daigneault, ADFG

- Session Introduction—Mike/Julianne
- Review of Clean Water Act and Aquatic Organism Passage—Linda Speerstra, ACOE, with Matthew LaCroix and Chris Meade, EPA
- Review of ADFG Statutory Authority—Megan Marie, ADFG
- ADFG-ADOT MOA for the Design, Permitting, and Construction of Culverts for Fish Passage—what it is and what it isn't— Mike Daigneault, ADFG
- USFS-ADFG MOU and Title 16 Concurrence process for Fish Passage—Don Martin, USFS 15 min 2:05-2:20

2:20-3:00 Questions

BREAK 3:00-3:15

- Emergence of Local Fish Passage Policy and Guidelines In Response to Floods in Southcentral Alaska—Bill Rice, USFWS
- FEMA- Establishing a Federal Flood Risk Management Standard through Executive Order 11988—how will this work in practice?—Mark Eberlein, Environmental Coordinator, FEMA and Susan Wells (invited), USFWS

Discussion Topics:

- What, if any, conditions justify partial or complete passage barriers within the existing authorities?
- Can we identify remediation cost thresholds, upstream habitat thresholds, or cost/benefit thresholds.

Thursday, October 15, 2015 8:30 to noon.

Half Day Discussion Session—Fish Passage on the Tongass—a discussion led by USFS staff as a continuation of the interagency workgroup in 2005-6.

Overall Meeting Planning Team:

Neil Stichert and Bill Rice- USFWS

Sheila Jacobson and Julianne Thompson - USFS Tongass National Forest

Bob Gubernick- USFS Aquatic Organism Passage Team

Mike Daigneault- ADFG Habitat Division

Gillian O'Doherty, ADFG Sportfish Division

Taylor Horn/Melissa Goldstein, ADOT

Coordination Support:

Debbie Hart-SEAKFHP

Intended Attendees:

USFS, Region 10 and Tongass National Forest Fish Wildlife and Watershed and Engineering staff

USFS Aquatic Organism Passage Team Member

Alaska Department of Transportation, Hydraulics, Environmental, and Regional staff

Alaska Department of Fish and Game, Fish Passage Assessment Program

Alaska Department of Fish and Game, Habitat Division

Alaska Department of Natural Resources, Division of Forestry

US EPA

US Army Corps of Engineers

USFWS-Habitat Restoration Program, Conservation Planning Assistance Program

National Marine Fisheries Service, Habitat Conservation Division

Natural Resources Conservation Service

Federal Highway Administration

Alaska Railroad

FEMA

Sealaska

Others as identified

Sponsor:

Coordination, venue, and limited travel support have been secured through the National Fish and Wildlife Foundation, Alaska Fund, award to the Southeast Alaska Fish Habitat Partnership