

# Forest Resources & Practices Act (FRPA) Effectiveness Monitoring Working Group Meeting Minutes December 10, 2010

**EXECUTIVE SUMMARY:** Participants represented state and federal agencies, the University of Alaska, and private organizations involved with research and monitoring related to forest practices in Alaska. The group reviewed potential funding sources for 2010, summarized 2009 compliance monitoring results and effectiveness monitoring projects, and discussed effectiveness monitoring priorities for the coming year. The top two priorities for the coming year have received funding from federal sources for the coming year.

## UPDATE ON FRPA EFFECTIVENESS MONITORING PROJECTS

**Southeast Road Condition Monitoring Survey.** Joel Nudelman, Division of Forestry (DOF), reported that this six-year project has completed the field survey work funded by the Southeast Sustainable Salmon Fund (SSSF). The survey looked at all BMPs on forest roads, with concentration on fish habitat areas and road systems.

The GIS layer for the road systems was completed in 2010, and we now have a summary of total road miles for the first time. The database is working well. Nudelman will send out the updated road layer in the next few days. This year, crews surveyed culverts at Long Island, White River, Hoonah, and Big Salt. Six low-rated culverts on anadromous water bodies required upstream habitat surveys. Crews have completed four of the habitat surveys, and two are left in Big Salt. ADF&G biologists identify the upstream habitat by walking upstream to a barrier.

Some log stringer bridges are wearing out. Many are older than their original 15-year lifespan. Landowners got Forest Land Enhancement Program funding to replace a couple of bridges at Hobart Bay, and for cleaning up culverts in landslide areas. Landowners also found NRCS cost-sharing funding to replace a non-functioning culvert at Long Island. The agencies need to reevaluate the other pipe and Long Island and the stream's connectivity to habitat to determine whether culvert replacement is needed.

The survey also found thinning slash in ditchlines that was making its way into culverts. Staff notified operators and they responded very quickly to clean it up.

A few culverts are just worn out, rusted until they no longer function. In the future the agencies might want to consider a BMP on culvert condition.

In total, 109 total fish culverts were surveyed on 16 operations, of which 59 were rated 4 (no problems), 27 = 3 (one issue), 21 = 2 (multiple issues with fish passage), and 8 = 1 (non-functioning). A rating of 1 or 2 could be some kind of blockage, or blockage at some flows. Based on the updated GIS analysis, the project surveyed 829 miles of road out of 1891 total miles in the operations in the survey. Total mileage of non-federal forest roads in Southeast is 3,230, including roads that have been put to bed.

In 2011, the Division of Forestry will finish data analysis and put the data in publishable form, and finish last two upstream habitat surveys.

There is now a data layer for every non-federal operation in Southeast that shows the number of road miles and the number of miles surveyed. The database uses roads digitized from satellite imagery plus the Sealaska database. It includes both inactive and closed roads.

Nudelman also announced that DOF and ADF&G just received salmon fund money for a two-year Kenai road condition survey. The Kenai project will start in July 2011. The agencies will meet with stakeholders to look at all road systems. Surveys will begin in fall, 2011. A road survey was done on the Kenai in the late 1990s. There have been some major storms since then that caused wear and tear on the road system. Nudelman noted that the rankings from the prior Effectiveness Monitoring Working Group meeting were used as support in the proposal to the SSSF.

Hanley asked why there are fish culverts on closed roads. Nudelman explained that prior to 1993 there weren't regulatory requirements to remove crossing structures. The surveyors also found two culverts that were overlooked during road closeout. Until 2001, DOF was short of field presence to check closeouts.

Doug Martin asked about the availability of other information on the roads. Nudelman said that other features are recorded on another shape file. He will send the file to Doug.

Moselle said that sharing data with the USFS will also be helpful. He asked that Nudelman also please copy Sheila Jacobsen. Nudelman said that the data had been sent last year to Julianne Thompson, but he hasn't updated with them yet this year. He will also be sending the data to the US Fish and Wildlife Service, The Nature Conservancy, and others who get regular updates.

**Fish Habitat Status and Trends Monitoring Program.** Doug Martin, Martin Environmental, noted that monitoring has continued since 1994. In 2010, the project didn't receive Alaska Clean Water Actions (ACWA) funding. Sealaska funded continued field surveys in 2010, but funding was not available for data analysis. 2010 was a "pulse" year in which all previously surveyed streams were re-surveyed. In between survey pulses, sampling is done on only a subset of the streams.

**Cook Inlet Keeper/Homer Soil & Water Conservation District water temperature studies.** Cindy Gilder, DEC, said she understood that the project has Coastal Impact Assistance Program funding for most of the upcoming year.

**USFS projects.** John Lane, USFS soil scientist and Regional Watershed and Air program leader, said that Julianne Thompson sent a link to the 2009 monitoring report to the working group. The 2010 report is in progress and the USFS will distribute it when it is available.

**Mat-Su FRPA Effectiveness Monitoring.** Jeff Davis, Aquatic Restoration and Research Institute, finished a couple of years' work looking at pre-harvest conditions in forest streams in the Mat-Su area. He didn't get additional funding for this year, but now has considerable

background data if logging reactivates. He has done some fish passage studies, trying to get a better idea on passage assessment and how to prioritize culverts for work.

In low flow streams barriers affect distribution. Resident fish distribution is affected by crossings, the location of crossings in the watershed, and the type of crossing. These are dirt roads, and are mostly borough and some private roads.

Davis measures abundance with trapping above and below crossings using catch/trap by size and species. Streams are mostly coho and chinook streams. This method doesn't work for sockeye, pinks, or chums, but those aren't the species occurring in the streams surveyed. The AD&G target fish for assessment is a 55mm coho.

**Cutthroat Trout Passage.** Doug Martin reported that the timber industry in Washington State is funding a pretty comprehensive study of cutthroat trout passage. The Alaska, Washington, and California departments of transportation funded a facility at a Washington fish hatchery that is a culvert test bed facility – researchers can change the culvert size, type, gradient, baffles, and flows to test fish passage. The timber industry has been pushing for better information on resident cutthroat trout. The majority of disputes on culvert replacement are on cutthroat streams. The National Council for Air and Stream Improvement, Inc. (NCASI) put together a study on resident cutthroat more than a year old. Passage rates on a 40' culvert were high for flow rates up to about 6 ft/sec. They will develop curves of passage success.

## **DISCUSSION OF GROUP PRIORITIES FOR FY11**

Rogers noted that the Road Condition Survey and Trends & Conditions projects are high priorities that have received funding for FY12 from sources outside ACWA. Although funded, it's important to maintain the priority – this group's ranking was valuable support in obtaining funding from other sources.

Gilder said that it would be valuable to address the long-term view of ongoing projects like the Trends & Conditions study. At what point do we put it to bed and prioritize other work? Rogers responded that it is important to complete the pulse sample and final report. We will need to re-evaluate the future of the program after the report that incorporates 2010-11 sampling. Martin explained that the project is funded by the State and Private Forestry grant for one more year of sampling plus a comprehensive data summary and a cumulative effects analysis by watershed. He wants to tie the analysis into the road condition and landslide data as well.

Davis said that he would like to get biotic measures on some culverts with pit-tagging or trapping on a subset of culverts to better assess which culverts affect distribution of fish. The monitoring and culvert work is still stuck on semi-quantitative data at the crossings. Durst supported that approach. With limited funds, it's important to understand what culverts are really necessary to fix to maintain fish habitat. Timothy noted that ADF&G did trapping above and below culverts, but not in a manner that can be used for statistics. Davis suggested that this could be discussed as part of planning for the Kenai road condition survey. Timothy said that the purpose of the ADF&G trapping was just to determine whether fish are passing the culvert, not to assess abundance. These sites are not vehicle-accessible, so there are logistical limits. We don't want

to greatly increase the amount of time or expense it would take to do the road condition survey. She reported that the USFS is going to do mark-recapture work to look at fish numbers. Davis said his suggestion is for a different project, not adding to the work of the road condition survey. Kenai accessibility may be different. Roy Josephson, DOF, noted that some of the roads to be surveyed are closed roads. Additional sampling would require helicopter support, but that's expensive. The significance of blockage depends on the culvert's position in the watershed. In the Kenai you could try to assess stream order prior to doing surveys. Davis said that lower stream order blockage doesn't necessarily equate to blockage for juvenile fish. Timothy commented that in Southeast the systems are not static; you have to adapt to field conditions. Rogers observed that the road condition survey is extensive, and crews have to be able to move quickly. However, this information may provide a basis for future work. ADF&G uses existing staff to do road condition survey work with the additional funding available – they do this task in addition to their other work.

Josephson noted that the road condition survey did take measurements on the pipes and will run them through a FishPass program for ratings. Culverts that rate red, or possibly gray, might need upstream assessments, and more fish passage sampling might be included at that time if funded could be obtained.

Gilder reported that Cook Inlet Keeper will wrap up Cook Inlet stream temperature monitoring. When they are done there, what other areas should be done? Is the Interior a priority? What about Southeast? It would be good to discuss this in the future, with water temperature experts in the room.

Martin noted the lawsuit in Oregon relating to NPDES (National Pollution Discharge Elimination System) permitting on forest roads. It's important to have good data on forest roads and actual discharges relative to the water quality standards. Rogers commented that the legal status of that court case is currently uncertain – it is still going through courts. It's good to think about what will be needed if the decision holds and NPDES permits are needed for forest roads.

## **FUNDING OPPORTUNITIES FOR FISCAL YEAR 2012**

**319 Funds.** Gilder reported that the amount of money available for FY11 grants dropped to half of what was anticipated by the time the grants were allocated. DEC doesn't expect increases. The ACWA grant pool will not be getting SSSF funding this year. There will be about \$200,000 to \$300,000 in ACWA grant funding for FY12, which will be focused on stormwater, and impacted or threatened watersheds. Rogers observed that FRPA has been a victim of its own success – if funding is focused on impaired waters, the perception is that forest operations aren't a major source of impairment.

Rogers noted that Section 319 money also helped fund state agency FRPA implementation, and in FY12 no section 319 funds are expected for FRPA implementation.

**6217 Funds.** Gilder reported there's about \$10,000 of leftover 6217 money in the ACWA pot for this year.

**Southeast Sustainable Salmon Fund (SSSF).** Rogers noted that the SSSF is funding the Kenai road condition survey project. Timothy said that the reason SSSF funds couldn't be passed to

ACWA, is because the money has to be used for endangered salmon stocks, certain habitat work, and salmon management, particularly for endangered stocks. The road condition survey's ability to demonstrate a product was probably important to getting funded. The money is Congressional funding, which can only go to projects, not to program support. Gilder said that SSSF funding was only used for applicable projects, but they couldn't say what projects would be funded in advance of review. Timothy noted that the SSSF language tightened this year, and the funding may not be available for road conditions surveys in the future. Gilder added that ACWA had been able to use SSSF funds to continue known multi-year projects. She recognizes the challenge with the program constraints. Nudelman commented that the statement of work required for the SSSF grant proposals has become more detailed and complex than in the past. Timothy said that the Southeast anadromous waters catalog work had to be part of a strategic plan to get approved. That's different than three years ago. Alaska is still getting SSSF money, but the focus is narrower. Nudelman reported that Peter Bangs of ADF&G said that SSSF is well-funded for the next four to five years, but within stringent criteria. Timothy said that it will be challenging to find places for the money due to the emphasis on endangered stocks. Stark observed that the endangered species criteria haven't affected the allocation of funds in the interior – it's really up to the Commissioner's decision because there aren't endangered stocks in the Interior. Timothy said that was true until the last year or so, but the focus has changed now.

**National Fish Habitat Initiative.** Rogers said that the Initiative focuses on salmon partnerships. Timothy said there is a limited pot of money. This program is not well-funded and increasing numbers of partnerships are competing for the funding.

**State and Private Forestry (USFS) grants.** Jeff Graham, DOF, explained that part of the State & Private Forestry (S&PF) funding is allocated through a competitive process. Grants can be awarded for up to \$300,000 per project, and a state can submit up to four grants. Proposals have to fit within the authorities of the S&PF programs – Urban and Community Forestry, Forest Stewardship, Forest Health, and Cooperative Fire. Private landowners with approved Forest Stewardship plans can qualify for other federal grant programs such as the Forest Land Enhancement Program (FLEP) and Environmental Quality Improvement Program (EQIP).

For FY11, an S&PF competitive grant was awarded to Sealaska for one year of sampling and a final report on the fish habitat trends and conditions study. It requires 50% non-federal match. Sealaska provided most of the matching funds, along with some from the state. Funding will be available in late summer 2011, pending final formal approval.

Rogers commented that S&PF grants favor multi-state projects, and there may be multi-state opportunities related to forest practices. Martin noted that state funding for monitoring work is drying up in the Lower 48 also.

Moselle asked whether partnerships with Yukon or British Columbia would count. Rogers said they would probably be viewed favorably but they would probably not count as a multi-state project unless another U.S. state was involved. Stark stated that there are cooperative projects related to transboundary waters in other programs.

Gilder suggested that there might be an opportunity to look at this source for issues that may arise related to NPDES implementation. Rogers and Freeman said that it would depend on the

specific proposal. DOF thought the Trends & Conditions project stretched the limits of the criteria for this grant pool, and some of the reviewers raised issues with the degree of research, state responsibilities, etc., similar to DOF's concerns. However, it did get funded, and DOF will consider additional projects in the future.

Gilder said that EPA is thinking about developing a Healthy Watersheds list to complement the list of impaired waters. That could open opportunities for future funding.

## **UPDATE ON FRPA COMPLIANCE MONITORING**

Joel Nudelman, DOF, reported on compliance monitoring for the first three-quarters of FY11. DOF now has data for eight years. Operators and agencies are pleased to have quantitative data to work with. Scores have improved over the years – rating of 2 or 3 on the 5-point scale is uncommon. The 2009 Region I average score = 4.8 over 480 BMPs rated, with 22 BMPs (4.6%) receiving ratings less than 4. Operators have cleared up road maintenance issues that were a problem in last year's inspection. Inspectors report a good year this year. DOF has appreciated DEC's participation on Afognak inspections.

Nudelman is looking into why there are only 22 score sheets on 42 inspections. There should be one on every inspection unless it's a pre-operation or variation inspection. Haines doesn't always repeat score sheets for small operations if not a lot happens between inspections. If there's nothing to rate, they turn in an inspection report but have zero BMPs rated.

The 2010 average score for Region 2 = 4.9 over 416 BMPs, an increase from prior years. Only two BMPs (<0.5%) rated less than 4. All but one inspection was on state land. There were no deficiencies.

The 2010 average for Region III = 4.6, up from 4.0 in the prior year, with 36 BMPs (7%) rated less than 4. Last year there were problems with personal use wood gatherers using forest roads, and there was no funding for road maintenance outside sale contracts. This year, the Fairbanks Area Office reported heavy personal use activity, but hasn't checked those sites yet. The number of inspections down because the Delta resource forester retired, and his replacement just started. All inspections were on state land. Region III only received one small DPO for a private operation this year.

Nudelman noted that the number of inspections has decreased in Southeast along with the level of harvest activity.

DOF has requested additional state funding for FRPA work and road maintenance for FY12. This proposal is in the Governor's budget at half the level originally requested. On commercial timber sales, the operator does the road maintenance, but not on personal use permits.

## **NEW OR CONTINUING PROJECT PROPOSALS FOR 2011**

- The Road Condition Survey is continuing and moving to the Kenai Peninsula, through SSSF funding.
- The Trends & Conditions of Fish Habitat study is continuing through a State & Private Forestry grant and Sealaska matching funds.

These are the two highest-ranked projects for 2011.

## **12:15 Adjourn**

### **PARTICIPANTS:**

- Jeff Davis (Aquatic Restoration & Research Institute)
- Jim Durst (ADF&G)
- Marty Freeman (DNR Division of Forestry)
- David Gann (DNR Division of Coastal & Oceans Management)
- Cindy Gilder (DEC-Anchorage)
- Jeff Graham (DNR Division of Forestry)
- Kevin Hanley (DEC Division of Water)
- Roy Josephson (DNR Division of Forestry)
- Brian Kleinhenz (Sealaska)
- John Lane (USFS Region 10)
- Doug Martin (Martin Environmental-WA)
- Kyle Moselle (ADF&G Habitat Division)
- Joel Nudelman (DNR Division of Forestry)
- Rick Rogers (DNR Division of Forestry, chair)
- Chris Stark (UAF)
- Jackie Timothy (ADF&G Habitat Division)
- Mark Vinsel (UFA)

### **HANDOUTS**

- Agenda

TABLE \_: RECOMMENDATIONS FOR 2011/FY12

Research topic	Priority	Est. FY09 cost	Lead	Notes
<b>Specific Proposals</b>				
Road Condition Surveys	High - #1	Kenai RCS funded at \$ [redacted] from SSSF	DOF in cooperation with ADF&G	<p>This project is supported by the agencies and landowners. It targets FRPA best management practices and is a major contribution to assessing and ensuring FRPA effectiveness relative to roads and stream crossings.</p> <p>1) For Region I, DOF will finish work funded by SSSF grants; They will complete upstream habitat surveys on problems culverts, release a final report, and make the database available in FY11.</p> <p>2) In Region II, a new two-year survey of Kenai Peninsula forest roads will be initiated. The Kenai survey is <b>funded by the SSSF for FY 12-13</b></p> <p>3) There is a desire to expand the survey in the future to Prince William Sound, Afognak Island, and the eastern and southern portions of the Kenai Peninsula</p>
Continuation of long-term monitoring of fish habitat trends in SE Alaska	High - #2	\$210,655 funded from S&PF competitive grant	Sealaska/ Martin Environmental	<p>This is the longest FRPA monitoring database in Alaska. Maintaining a continuous sampling record is very important to public and private entities. 2010 Sealaska funded sampling but not analysis. Continues to be a priority. <b>Funding for FY12 received through USFS State &amp; Private Forestry program.</b></p>
Continuation of Mat-Su baseline water quality monitoring	On hold pending harvest in study area		ARRI/DEC	<p>Timber harvest and road activity has slowed due to low demand, and is mostly small firewood sales. If new activity occurs in the areas with baseline (e.g., Willer-Kash), post-harvest monitoring is recommended.</p>
Cook Inlet stream temperature monitoring network	See notes	Funded for FY	Cook Inlet Keeper and monitoring network partners	<p>The Effectiveness Monitoring Working Group supports the Cook Inlet monitoring network. The network is funded for FY11, but a funding gap is anticipated for FY12 due to timing of CIAP funding. Forestry activity throughout Cook Inlet remains relatively low.</p>