FINAL Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC) Meeting
March 13, 2008
Ariel, WA

ACC Participants Present (17)

Jim Byrne, WDFW
Jeremiah Doyle, PacifiCorp Energy
Bernadette Graham Hudson, LCFRB
Diana Gritten-MacDonald, Cowlitz PUD
Adam Haspiel, USDA Forest Service
LouEllyn Jones, USFWS
George Lee, Yakama Nation
Erik Lesko, PacifiCorp Energy
Jim Malinowski, Fish First (9:00am – 12:00pm)
Kimberly McCune, PacifiCorp Energy
Bryan Nordland, NMFS (via teleconference)
Todd Olson, PacifiCorp Energy
Diana Perez, USDA Forest Service
Ron Roler, WDFW (9:00am – 9:45am)
Rich Turner, NMFS (via teleconference, 9:00am - noon)
Steve Vigg, WDFW (9:30am – 1:10pm)
Shannon Wills, Cowlitz Indian Tribe (10:00am – 1:10pm)

Calendar:

April 9, 2008	TCC Meeting	Longview, WA
April 10, 2008	ACC Meeting	Merwin Hydro

Assignments from March 13th Meeting:	**Status:**
Olson/McCune: Request each aquatic funding project proponent to define their respective budgets in more detail. Provide new information to the ACC for review prior to the next meeting on 4/10/08.	**Complete – 3/19/08**
Lesko: Follow up with Frank Shier (PacifiCorp Energy) regarding Acclimation Pond designs/photographs provided by George Lee (Yakama Nation), which were provided for his review; confirm receipt.	**Confirmed receipt – 3/18/08**
Doyle: Provide 24 hour passage/transit information for coho and steelhead similar to that provided by Nordlund for spring Chinook.	**Complete – 4/10/08**

Assignments from February 14th Meeting:	**Status:**
Malone: Provide coho data for the last two years and a like reporting for Spring Chinook.	**Pending**
Malone: provide the RMIS website information to Malinowski and copy Kimberly McCune (PacifiCorp Energy).	**Complete – 3/17/08**

Nordlund: Provide data that supports the 24 hour passage/transit information relative to the ATE definition issue.	**Complete - 3/7/08**

Assignments from January 10th Meeting:	**Status:**
Lesko: Add paragraph to the Habitat Preparation Plan (HPP) to address the following: should sufficient numbers of Spring Chinook adult return in 2008, some may be used for the HPP with approval from Yakama Nation.	**Complete – 3/18/08**

Opening, Review of Agenda and Meeting Notes

Todd Olson (PacifiCorp Energy) called the meeting to order at 9:10 a.m. Olson requested a round-table introduction, reviewed the agenda for the day and informed the ACC that the Merwin Upstream 30% Design Report comments are due today. No additions to the agenda were requested.

In addition, Olson requested comments and/or changes to the ACC Draft 2/1/08 meeting notes and assignments.

Kimberly McCune (PacifiCorp Energy) provided a hard copy of the email Bryan Nordlund (NMFS) provided to fulfill the assignment indicated below. Nordlund's email has been included as Attachment A.

Assignments from February 14th Meeting:	**Status:**
Nordlund: Provide data that supports the 24 hour passage/transit information relative to the ATE definition issue.	**Complete - 3/7/08**

The meeting notes were approved without changes at 9:15 a.m.

License Issuance Update

Olson informed the ACC attendees that he contacted the Federal Energy Regulatory Commission (FERC) (specifically, Alan Mitchnick) last week regarding an estimated date of when the Utilities might receive the Lewis River licenses. The FERC is currently working on one of the licenses and will soon be sending to their management for approval. Upon approval of the first one of the licenses they expect the others to go fairly quickly. Mitchnick also noted that although their goal was to have them out by end of March, 2008, that was not going to happen, perhaps by mid-May. Therefore, the earliest anticipated date for license issuance is June 1, 2008.

Olson also noted that if in fact we receive license issuance the first week of June, PacifiCorp will ask to suspend certain activities in order to adjust the focus on the 30-day review period the FERC will provide the Utilities.

Discussion of missing productions as it relates to Ocean Recruits – Ron Roler, WDFW

Ron Roler (WDFW) communicated to the ACC attendees that the latest report is from 2005; until all data is entered into **Regional Mark Information System (RMIS)**, the document is considered in draft form.

RMIS is the standard method of accessing data from the Coded-Wire Tag (CWT) database. This system allows the user to build a query, optionally preview the result set row by row then run a familiar RMIS formatted report of their choice using the result set. The report may be displayed in the browser or delivered by email.

RMIS data (Standard Reporting, Analysis Reporting, and Catch & Effort Reporting) can be located at the following link: http://www.rmpc.org/

Roler indicated that the 2006 report may be out by the end of 2008. This report does not look at Lewis River wild fall Chinook.

Lewis River coho type S & N: biggest number is hatchery escapement. Biggest harvest for Type S: Washington Coastal Sport, and for Type N: Commercial Fisheries.

Spring Chinook travel further North – 5% of total interception.

WDFW's goal is to try to capture and tag 100,000 wild fall Chinook juveniles each year.

Currently the ocean productivity is in a down cycle, but may be improving. Jack returns last year (2007) were high. The state is expecting poor numbers coming back in 2008 from Lewis River fish. There is also talk of sport fishing closure on Oregon and Washington coast to protect the fish.

Olson asked Roler if WDFW sees much straying on the Lewis River. Roler responded that the Lewis has good flow, good attraction and cold water so the straying occurs into the Lewis River. Conditions are good for the fish. The dam has created a good stable condition for fish habitat, thus inviting a healthy population. Data is available to anyone on RMIS. Jim Malinowski (Fish First) asked Roler if he will be providing a written document outlining his presentation today. Roler responded that WDFW is putting together a report specifically for Fish First. In addition, the Bonneville Power Administration Coded Wire Tag Recovery Program – Annual Report 2004 can be located on the BPA website at the following link: http://pisces.bpa.gov/release/documents/documentviewer.aspx?doc=00006500-2. In addition, a PDF of this document has been included as Attachment B.

Malinowski expressed that he wants a professionally produced report that the ACC can rely on. Wants annual reports of disposition of fish relating to ocean recruits, where the harvest is occurring, etc.

Lewis River Aquatic Funding Proposals Review

McCune provided a handout titled, *Lewis River Aquatic Fund - ACC Evaluation of 2007/2008 Project Proposals*, which includes the comments PacifiCorp has received to date (Attachment C). Olson communicated to the ACC attendees that he hopes to determine the choices today, followed by notification to the selected proponents by mid April. Olson also informed the ACC attendees that if all projects are selected by the ACC for funding; the total is $280,000 for the 2008 funding cycle.

Olson reviewed all comments provided on the evaluation matrix by project with the ACC attendees.

Mud Creek Enhancement ($75,000) - Cowlitz Indian Tribe

Bernadette Graham Hudson (LCFRB) wants to confirm that the culvert is passing fish; does it meet fish passing guidelines? In addition, Graham Hudson requested that the project proponent provide culvert specifications prior to funding.

Jim Malinowki (Fish First) requested that we confirm with Rhidian Morgan (Plas Newyyd) that the design works and he approves.

Shannon Wills (Cowlitz Indian Tribe) informed the ACC attendees that Morgan put in two (2) 5' culverts; function of tidal influence with allows intermittent fish passage. A tide gate was never in place at this location. Culverts are on Morgan's property.

***Decision*: No formal decision from the ACC until questions are addressed and a detailed budget is provided for review.**

Muddy River Thinning/Brushing/Invasive Plant Project ($117,000) – USDA FS

The ACC attendees expressed concern that the invasive plant eradication efforts might require repeated multi-year treatments to continue to be effective. The ACC is willing to endorse the eradication of exotics during this five-year period, and expressed concerns about the applicant returning to the ACC at some future date for additional funds to repeat this aspect of the project. Diana Perez (USDA FS) expressed that likely the eradication will not be done in five years and that they will seek other funding outside of the ACC for ongoing efforts. Perez also communicated that this initial project is considered the kick-start to a coordinated effort which will contribute to the long-term goals of the USDA FS. Perez does not want the door closed to applicants coming back to the ACC for additional funds in the future.

In response to Graham Hudson's inquiry on project reporting, Olson noted that when each aquatic project is completed a report is submitted to PacifiCorp. Modification to project scope requires ACC review, discussion and approval. Graham Hudson said that she would like to see an outline of the more detailed financial study plan prior to funding.

WDFW would like text included in the project proposal that clarifies that the ACC funds are intended only to kick-off the eradication project.

***Decision*: No formal decision from the ACC until questions are addressed and a detailed budget is provided for review.**

Clear Creek Road (2575000) Decommission ($34,000) - USDA FS

The ACC attendees agreed to approve for funding pending a detailed budget is submitted by the USDA FS.

***Decision*: No formal decision from the ACC until detailed budget is provided for review.**

<Break 11:20am>
<Reconvene 11:30am>

East Fork Lewis River Instream Structures Steelhead ($60,000) - USDA FS

General discussion took place that the project is outside the North Fork Lewis basin, that it does not meet the funds objective and that this same project was submitted in the last round of SRFB funding and did not rank high enough to make it past the LCFRB's TAC review; the FERC nexus was also questionable.

However, discussion also took place in that this project is located in a favorable area for steelhead production. In addition, the proposed large woody debris structures, if placed correctly, would accumulate spawning gravels for fish production and create pools providing shelter for juvenile fish. Although this project is outside the North Fork Lewis basin it is believed that beneficial effects exist for listed wild steelhead in the East Fork Lewis River which would eventually spill over into the adjoining basin.

Graham Hudson expressed that this area supports primary populations of summer steelhead and coho and improving stream channel habitat structure is a high priority project type. However, the project proposal fails to make connection between the limiting factors for the reach and the proposed treatments to address those factors. The addition of spawning gravel does not enhance natural watershed processes; LCFRB feels the approach is not appropriate for this site, but they are willing to consider other designs.

Perez suggested a meeting between USDA FS, Fish First and LCFRB to clarify and understand concerns. Forest Service wants the ACC to be a functioning body with the ability to make their own technical review without being dependent on the LCFRB TAC reviews or processes, while at the same time taking into consideration professional knowledge about projects.

Olson referenced language in the Lewis River Settlement Agreement regarding guidance for resource project approval (see SA 7.5.3.1(c)), Attachment D for ACC review and consideration.

Adam Haspiel (USDA FS) informed the ACC attendees that the USDA FS requires a decision by the next ACC meeting on 4/10/08 so work can begin mid July 2008. Haspiel said that the NEPA is already complete and that the agency performs there own monitoring of the project.

Shannon Wills (Cowlitz Indian Tribe) expressed that although the Tribe does not see any compelling reason to complete this project using ACC funding, she will revisit this project with the Tribe and present more detailed information.

Olson suggested that in April or May of each year, that the ACC review the Aquatic Fund guidelines and familiarize themselves with the terms which will assist with their evaluation of each proposed project.

Decision: No formal decision from the ACC until questions are addressed and a detailed budget is provided for review.

<Working Lunch 12:00pm>

Panamaker Creek Road Closure and Culvert Removal ($25,000) – PacifiCorp

The ACC attendees agreed to approve for funding. Perez requested that the project also include measures related to having cleaned machinery to reduce opportunity for introduction of invasive plants. All equipment should be washed and steam cleaned prior to use in the area.

Steve Vigg (WDFW) requested the project proponent consider adding some form of In-Kind funding to the project budget.

Decision: No formal decision from the ACC until project plan is modified and a detailed budget is provided for review.

Olson communicated to the ACC attendees that until such time a detailed budget is received from each project proponent, none of the projects are formally approved.

Merwin Model Presentation – Lisa Larson (NHC)

Defer this presentation to the April 10, 2008 ACC meeting.

Merwin Upstream 30% Design Report Comments

Olson informed the ACC that comments relating to the *Lewis River Fish Passage Merwin Upstream Collection and Transport Facility Preliminary Engineering 30% Design Report (SA 4.3)* are due today. No comments were provided at this meeting.

Shoreline Management Plan (SMP) Update

Olson expressed that PacifiCorp Energy has received several comments asking for change in classification, i.e., SE side of Swift changed to integrated use from Resource Management. PacifiCorp Energy will consider the comments and if appropriate respond in the next draft of the SMP.

Olson also informed the ACC attendees that PacifiCorp Energy will provide a formal 30-day review period for the Public Review Draft of the SMP which will be distributed in

April 2008. The document will identify steps to gain a permit for allowable structures within the FERC project boundaries. In addition, the draft SMP will include text addressing what gives PacifiCorp the legal right or ability to designate what happens on the shoreline.

Study Updates

Erik Lesko (PacifiCorp Energy) and Olson provided the following study updates:

Swift Constructed Channel Concept Design and Swift Upper Release Design – Completed permit applications; copies will be sent to Cowlitz PUD and the Washington Department of Natural Resources next week. The work window is planned for May – September of 2009.

Hatchery Upgrades –
Lewis River Pond 15 –Construction is planned for January 2009.
Speelyai Burrows Pond – Construction planned for January 2009.
Lewis River Ponds 13 & 14 – Completed conceptual design.
Merwin Hatchery – On schedule pending license issuance in June 2008.

Hatchery and Supplementation Plan (H&S) – Waiting for the results of the HGMPs..

Acclimation Pond Plan – Design in conceptual phase. PacifiCorp Energy will follow up with Frank Shier (PacifiCorp Energy) regarding designs provided by George Lee of Yakama Nation for his review.

Habitat Preparation Plan – Developing a draft plan, PacifiCorp Energy will submit draft to ACC this March or April.

Yale Entrainment – Plan approved by USFWS on 1/18/08; submitted to the FERC on 1/23/08; PacifiCorp has 120 days for development of design. Shrier working on the Plan design.

New topics/issues

McCune provided a hard copy of the 2007 Draft ACC/TCC Annual Report, 30-day review version http://www.pacificorp.com/Article/Article78699.html and related cover letter (Attachment E) to each of the ACC attendees and informed them that comments are due on or before April 14, 2008.

In addition, Olson informed the ACC that the TCC has been working on acquiring certain lands from interested sellers in the Lewis River area, however, these conversations are considered confidential. Those TCC participants who participate in land acquisition activities have each signed a confidentiality agreement. Certain questions have presented themselves which require ACC input going forward. Those ACC participants who wish to participate in these conversations will need to also sign a confidentiality agreement. McCune provided a copy of the document to Graham Hudson and via email to Bryan Nordlund, NMFS.

All ACC participants who *have not* signed a confidentiality agreement left the meeting. Olson provided an update relating to interests in certain lands, however, this discussion is considered confidential and proprietary and not for public viewing.

Agenda items for April 10, 2008

- Merwin Model Presentation – Lisa Larson (NHC)
- Lewis River Aquatic Funding Proposals Review
- ATE Discussion
- Shoreline Management Planning Update
- Study/Work Product Updates
- Relicensing Update

Public Comment Opportunity
No public comment was provided.

Next Scheduled Meetings

April 10, 2008	May 8, 2008
Merwin Hydro Facility	Cowlitz PUD
Ariel, WA	Longview, WA
9:00am – 3:00pm	9:00am – 3:00pm

Meeting Adjourned at 1:10pm

Handouts

- Final Agenda
- Draft ACC Meeting Notes 2/14/08
- Attachment A – Bryan Nordlund, NMFS email dated March 7, 2008 that supports the 24 hour passage/transit information relative to the ATE definition issue
- Attachment B – Bonneville Power Administration Coded Wire Tag Recovery Program – Annual Report 2004
- Attachment C - Lewis River Aquatic Fund - ACC Evaluation of 2007/2008 Project Proposals, dated March 10, 2008
- Attachment D – Lewis River Settlement Agreement regarding guidance for resource project approval (see SA 7.5.3.1 (c))
- Attachment E - Cover letter dated March 12, 2007 regarding a 30-day review of the 2007 Draft ACC/TCC Annual Report

McCune, Kimberly

From: Bryan Nordlund [Bryan.Nordlund@noaa.gov]

Sent: Friday, March 07, 2008 9:49 AM

To: McCune, Kimberly

Cc: ahaspiel@fs.fed.us; pebbles@yakama.com; bghudson@lcfrb.gen.wa.us; Bill Bakke; Brett Swift; Clifford Casseseka; Curt Leigh; spchinook@comcast.net; Darlene Johnson; Diana MacDonald; Doyle, Jeremiah; dperez@fs.fed.us; HML LRN (Kinne, Eric); George Lee; HML LRN (Huber, Elaine); dixonjfd@dfw.wa.gov; Jeff Breckel; byrnejbb@dfw.wa.gov; Jim Eychaner; Jim Malinowski; Joel Rupley; John Clapp; John Weinheimer; kmiller@tu.org; Lesko, Erik; LouEllyn Jones; Mariah Stoll-Smith Reese; Melody Tereski; Michelle Day; Nathan Reynolds; Olson, Todd; frazipaf@dfw.wa.gov; pearce@co.skamania.wa.us; Rich.Turner@noaa.gov; Ruth Tracy; Ryan Lopossa; Shannon Wills; Shelley_Spalding@fws.gov; Shrier, Frank; smanlow@lcfrb.gen.wa.us; Steve Vigg; Susan Rosebrough; taalvik@cowlitz.org; Ken Kozmo Bates; Dana Postlewait; Shallenberger, Will; Jim Stow

Subject: Re: ACC 3/13/08 Meeting Agenda, Draft ACC 2/14/08 Meeting Notes

Attachments: ATE rationale - Mid C passage Times.xls; bryan_nordlund.vcf

Hello everyone
Per my assignment from the Feb 14 ACC meeting, the attached spreadsheet shows my rationale for the proposed maximum 24 hour median delay time as part of the definition of ATE for the new trap/passage system currently in design for Merwin Dam.

I chose spring Chinook for my analysis because they seemed to be the species with the highest delay times as determined by the previous radio telemetry study at Merwin Dam, and were a common species between the Mid-Columbia and the Lewis system.

In a nutshell, as derived from DART website data (administered by UW), in 2007 spring Chinook passage over the the four dams between Priest Rapids and Wells forebay (Wanapum, Rock Island, Rocky Reach and Wells Dams) averaged 99.2% passage per dam, with a median delay of 10.75 hours, assuming the most efficient in-river cruising speed for spring chinook, per Milo Bell 1992. These numbers, of course, will vary from year to year, and 2007 was a more or less typical flow year.

We can discuss this at the next ACC meeting if you wish, or call or e-mail me with questions.

Thanks,
BN
360-534-9338

McCune, Kimberly wrote:

> Attn: ACC Participants
>
> Please find attached the ACC 3/13/08 Meeting Agenda and the Draft ACC 2/14/08 Meeting Notes for your review.
>
> Thank you.
> *Kimberly L. McCune - PacifiCorp Energy*
> *Hydro Resources Project Coordinator*

NMFS proposal for ATE:

The Settlement (Table 4.1.4) defines the ATE as the percentage of fish that are actively migrating to a location above the trap and that are collected by the trap in a safe, timely and efficient manner.

I suggest, for the purpose of evaluating the new fishway, ATE be defined as:

- Safe passage means fish are re-captured without injury, including handling effects involved with electro-anesthetic, etc..

- Timely passage means a measured median delay of less than 24 hours, with no more than 5% of the active migrants taking longer than 1 week to pass.

- Efficient means that at least 98% of the active migrants are trapped and passed safely upstream. Active migrants would not include fish that drop out of the Lewis system, are sport-caught or return to the hatchery.

NMFS rationale for the proposed ATE:

Bullet 1 - Safe passage would be determined through examination for injury, upon recapture of radio-tagged fish in the handling facility.

Bullet 2 - Timely passage would be determined by a median delay of less than 24 hours, as determined by the radio telemetry study from first detection in Merwin tailrace to recapture in the handling facility for transport, excluding the upper 5% of the passage times in the data set. Note that the analysis below suggest that median delay at 4 mid-Columbia River dams is 10.75 hours.

Bullet 3 - As reported in "Annual Report Calendar Year 2007 of Activities under the Anadromous Fish Agreement and Habitat Conservation Plan", to be submitted to FERC by Douglas PUD in March 2007, data derived from the DART web site administered by the University of Washington indicates that 99.2% of the spring chinook passed each dam (Wanapum, Rock Island, Rocky Reach and Wells Dams) successfully from Priest Rapids to Wells.

DART PIT tag data for Spring Chinook that traveled from Priest Rapids (and through Wanapum, Rock Island and Rocky Reach Dams) to Wells Dam in 2007

Tag Information								Detection Dam	Date of Passage	Time of Passage	Time stamp	Passage Time (days)	Rank	
CGS05091.MT1	14	3D9.1BF1A1C0C1	11W	112	METTRP	873	04/02/05	Priest	06/21/07	20:02	39254.83			
CGS05091.MT1	14	3D9.1BF1A1C0C1	11W	112	METTRP	873	04/02/05	Wells	6/28/2007	9:52	39261.41	6.58	1	
CGS06111.LAF	421	3D9.1BF1A18223	11H	147	TWISPR	909	04/21/06	Priest	6/3/2007	11:59	39236.50			
CGS06111.LAF	421	3D9.1BF1A18223	11H	147	TWISPR	909	04/21/06	Wells	6/12/2007	8:29	39245.35	8.85	5	
DMM03280.M1A	3350	3D9.1BF19F8340	11H	96	CHEWUP	933	04/14/04	Priest	5/3/2007	9:36	39205.40			
DMM03280.M1A	3350	3D9.1BF19F8340	11H	96	CHEWUP	933	04/14/04	Wells	5/26/2007	11:33	39228.48	23.08	7	
DMM03281.M4A	2222	3D9.1BF1DB0E39	11H	106	TWISPP	917	04/13/04	Priest	5/5/2007	16:47	39207.70			
DMM03281.M4A	2222	3D9.1BF1DB0E39	11H	106	TWISPP	917	04/13/04	Wells	6/7/2007	17:43	39240.74	33.04	8	Excluded - highest 5% passage time
DMM04008.WI2	1192	3D9.1BF1C18D64	11H	102	WINT	924	04/13/04	Priest	5/6/2007	13:33	39208.56			
DMM04008.WI2	1192	3D9.1BF1C18D64	11H	102	WINT	924	04/13/04	Wells	5/19/2007	16:53	39221.70	13.14	6	
MRC04283.WI5	700	3D9.1BF1E82058	11H	100	WINT	924	04/15/05	Priest	5/16/2007	16:16	39218.68			
MRC04283.WI5	700	3D9.1BF1E82058	11H	100	WINT	924	04/15/05	Wells	5/24/2007	18:01	39226.75	8.07	3	
MRC05298.WI1	1494	3D9.1BF1AF777D	11H	118	WINT	924	04/20/06	Priest	5/24/2007	17:50	39226.74			
MRC05298.WI1	1494	3D9.1BF1AF777D	11H	118	WINT	924	04/20/06	Wells	5/31/2007	12:22	39233.52	6.77	2	
MRC05298.WI1	1494	3D9.1BF1E877EF	11H	162	WINT	924	04/20/06	Priest	5/23/2007	15:53	39225.66			
MRC05298.WI1	1494	3D9.1BF1E877EF	11H	162	WINT	924	04/20/06	Wells	6/1/2007	7:36	39234.32	8.65	4	median

Calculation of median dam passage time, assuming optimal crusing speed in river

median total number of days from Priest Rapids to Wells	8.65			median time from table above
river miles from Priest Rapids to Wells	118			Wells is river mile 515.1; Priest Rapids is river mile 397.1
assumed travel time in hours per day	12			assumption that travel is limited to daytime hours
assumed average migration speed	2.25	ft/s or	18.4 miles per day	Optimal cruising speed, per Bell 1992
days spent in river	6.41			calculated travel time in river from the above data
days passing 4 dams	2.24			4 dam passage time = median total travel time minus in river travel time
days passing 1dam	0.45			1 dam passage time = 4 dam passage time divided by 4
hours passing 1 dam	10.75			conversion to hours

BONNEVILLE POWER ADMINISTRATION

Coded Wire Tag Recovery Program

Annual Report 2004 | February 2005 | DOE/BP-00006500-2

This Document should be cited as follows:

Johnson, Ken, "Coded Wire Tag Recovery Program", 2004 Annual Report, Project No. 198201301, 20 electronic pages, (BPA Report DOE/BP-00006500-2)

Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208

This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views in this report are the author's and do not necessarily represent the views of BPA.

Bonneville Power Administration

Coded Wire Tag Recovery Program

BPA Project Number: 1982-013-01

Fiscal Year: 2004 - Annual Report
(January 1 – December 31, 2004)

Ken Johnson

Pacific States Marine Fisheries Commission
Vancouver, Washington

Table of Contents

Coded Wire Tag Recovery Program

BPA Project Number: 1982-013-01

Prime contractor: **Pacific States Marine Fisheries Commission (PSMFC)**
Subcontractors: **Oregon Department of Fish and Wildlife**
Washington Department of Fish and Wildlife

Use of coded-wire tags (CWTs) to identify Pacific salmon stocks is now widespread along the Pacific coast. This method of identifying individual fish to a particular stock or origin area requires sampling both fishery and escapement populations for comprehensive contribution information.

The CWT Recovery program comprises five separate but closely inter-linked projects.

Project 1: WDFW's program to sample the Columbia River system for CWT marked fish in commercial and recreational fisheries.

Project 2: ODFW's program to sample the Columbia River system for CWT marked fish in commercial and recreational fisheries.

Project 3: ODFW's ocean sampling program for commercial and recreational fisheries.

Project 4: ODFW's tag extraction program at the Clackamas Lab.

Project 5: PSMFC's Regional Mark Processing Center that provides regional access to all CWT data recovered by ODFW and WDFW in their sampling programs.

This annual report covers the activities of each of the five component projects as separate sub-reports.

Project 1: CWT Recovery – Columbia River Sampling Program

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PSMFC Coded-Wire Tag Recovery Program - Columbia River Segment
(BPA Grant No. DE-FG79-84-BP16458)

This report summarizes Columbia River and tributary CWT sampling activity from January through December 2004 obtained by Pacific States Marine Fisheries Commission (PSMFC)/ Washington Department of Fish and Wildlife (WDFW) staff based in Vancouver. The sampling effort was funded by a combination of state funding and BPA funds administered through PSMFC.

Purpose:

Use of coded-wire tags to identify Pacific salmon stocks is now widespread along the Pacific coast. This method of identifying individual fish to a particular stock or origin area requires sampling both fishery and escapement populations for comprehensive contribution and stock status information. A variety of federal and state funding sources support current sampling programs.

Personnel:

- The full-time Washington PSMFC CWT Recovery staff consisted of 5 biologists, 5 crew leaders (three are part year) and 19 seasonal scientific technicians (ranging from 1.5 to 8 months). The aforementioned positions were funded by BPA and additional positions were funded by other funding sources.

Results:
Task 1,A

- The Washington CWT Recovery staff sampled commercial fisheries for spring, summer, and fall chinook and coho on 2004. Commercial fisheries occurred in the non-treaty area from the mouth of the Columbia to Bonneville Dam and the treaty area from Bonneville Dam to Mc Nary Dam. Minor tribal fisheries were also sampled in the area around Priest Rapids Dam.
  - Non-treaty spring chinook fishery: 2,941 fish marks sampled, 575 snouts recovered, and 22 % mark sample rate (Washington only).
  - Treaty spring chinook fishery: 1,173 fish mark sampled, 254 snouts recovered, and 20 % mark sample rate (6.8 % of total harvest) (Washington only).
  - Treaty summer chinook fishery: 864 fish mark sampled, 313 snouts recovered, and 17 % mark sample rate (10 % of total harvest) (Washington only).
  - Non-treaty fall chinook fishery: 9,765 fish marks sampled, 363 snouts recovered, and 24 % mark sample rate (Washington only).
  - Treaty fall chinook fishery: 32,783 fish mark sampled, 1,160 snouts recovered, and 30 % mark sample rate (26.5 % of total harvest) (Washington only).

- Non-treaty coho fishery: 21,797 fish marks sampled, 1,160 snouts recovered, and 33 % mark sample rate (Washington only).
- Treaty coho fishery: 1,501 fish mark sampled, 413 snouts recovered, and 25 % mark sample rate (14 % of total harvest) (Washington only).
- Treaty steelhead fishery: 2,828 fish mark sampled, 109 snouts recovered, and 37 % mark sample rate (19 % of total harvest) (Washington only).
- Wanapum tribal fisheries: 132 fish mark sampled and 9 snouts recovered.
- Staff also sampled incidental harvest of sturgeon, chum, and pink salmon during the normal salmon sampling.

Task 1,C

1. The Washington CWT Recovery staff sampled sport fisheries for spring, summer, and fall chinook and coho on 2004. Sport fisheries occurred in the main-stem Columbia from the mouth of the Columbia to Priest Rapids Dam and the Washington tributaries from the mouth upstream to The Dalles Dam. Samplers interviewed 28,773 anglers on the main-stem Columbia from the mouth to Bonneville Dam (excludes Buoy 10), 10,780 anglers on the Washington tributaries from The Dalles Dam downstream, 5,230 anglers on the Hanford Reach of the Columbia, and 1,836 anglers on the Lower Yakima River.
   - Main-stem spring chinook fishery: 2,160 fish marks sampled, 227 snouts recovered, and 9 % mark sample rate (Washington only).
   - Tributary spring chinook fishery: 1,188 fish mark sampled, 140 snouts recovered, and <5 % mark sample rate.
   - Main-stem summer chinook fishery: 74 fish mark sampled, 27 snouts recovered, and 10 % mark sample rate (Washington only).
   - Main-stem fall chinook fishery: 1,659 fish marks sampled, 59 snouts recovered, and 6 % mark sample rate (Washington only).
   - Tributary fall chinook fishery: 65 fish mark sampled, 4 snouts recovered, and <5 % mark sample rate.
   - Main-stem coho fishery: 80 fish marks sampled, 2 snouts recovered, and 10 % mark sample rate (Washington only).
   - Tributary coho fishery: 64 fish mark sampled, 2 snouts recovered, and <5 % mark sample rate.
   - Main-stem steelhead fishery: 652 fish mark sampled, 27 snouts recovered, and 11 % mark sample rate (Washington only).
   - Tributary steelhead fishery: 771 fish mark sampled, 21 snouts recovered, and <5 % mark sample rate.
   - Hanford Reach fishery: 2,370 fish mark sampled, 43 snouts recovered, and 27 % mark sample rate.
   - Staff also sampled incidental harvest of sturgeon, chum, and pink salmon during the normal salmon sampling.

Task 1,D

- Chinook and coho salmon return to ten Washington hatchery facilities downstream of Priest Rapids Dam. PSMFC staff sampled returns to all facilities (and in the fish ladders at Bonneville Dam) from May through October. Hatchery sampling resulted in a total 27,339 fish examined with 731 snouts recovered. Chinook were near 100 %

mark sampled through the combined effort of PSMFC CWT Recovery staff and WDFW hatchery staff. No coho were mark sampled by PSMFC staff at WDFW hatcheries due to budget cuts. In addition, fall chinook observations at Bonneville Dam resulted in 40,394 chinook observed with 1,774 adipose fin-clip marks observed.

- For Washington tributaries, spawning ground sampling was conducted for spring and fall chinook and coho from August through December. Spawning ground sampling resulted in a total of 37,542 fish examined with 1,149 snouts recovered (less than 20 % mark sample rate).

Task 2, a,b,c

- CWT data collected in 2004 were summarized. This data were stratified by area and age and applied to catch and escapement populations to reconstruct returns for 2004. Historic run information was used to forecast future run sizes for all species. All spring and fall chinook forecasts were completed by the assigned deadlines. A seasonal technician was hired to help achieve on time completion; however, this pulled one technician from the field.

Problems:

- Fall treaty Indian fisheries have changed considerably in recent years with nearly 50% of the chinook catch being sold directly to the general public as compared to previous years when most or all fish were sold to commercial buyers. Additionally, chinook salmon are generally sorted prior to sale with primarily bright stock being sold to the public and primarily tule stock being sold to the buyers. This situation is compromising the CWT recovery program in the Columbia River by reducing the number of CWTs recovered from bright stock fall chinook. Sample rates of up to 40 % at the commercial buying stations are needed to maintain the 20 % mark sample goal for the fishery. This increased sampling creates yet another burden on an already overtaxed, budget reduced sampling crew.

- Our failure to achieve the 20 % mark sample goal in the tribal summer chinook commercial fishery was due to a high rate of over the bank sales. Previous experience has shown these sales virtually impossible to sample. In addition, this fishery was not in our budget. Our seasonal samplers are not employed in July. This was the second summer chinook commercial fishery since the 1960s.

- Our failure to achieve the 20 % mark sample goal in the tributary sport fisheries resulted from the need to maintain the sample rate in areas of higher priority. Reduced staffing levels prevented adequate coverage in all areas.

- CWT Recovery samplers were not available to sample all spawning days at hatcheries.

Project 2: CWT Recovery – Columbia River Sampling Program

OREGON DEPARTMENT OF FISH AND WILDLIFE

This report summarizes Columbia River and tributary CWT sampling activity from January through December 2004 for Oregon Department of Fish and Wildlife (ODFW) staff based in Clackamas, OR and Astoria, OR. The sampling effort was funded by a combination of state funding and BPA funds administered through PSMFC. Other federal funding sources, such as the Pacific Salmon Treaty and Sport Fish Restoration, also contributed to CWT sampling programs.

Purpose:

Use of coded-wire tags to identify Pacific salmon stocks is now widespread along the Pacific coast. This method of identifying individual fish to a particular stock or origin area requires sampling both fishery and escapement populations for comprehensive contribution and stock status information. A variety of federal and state funding sources support current sampling programs.

Personnel:

ODFW staff time funded by this project consisted of three and a half months of Supervising Fish and Wildlife Biologist (SFWB), five months of Natural Resource Specialist-2 (NRS-2), 21 months of Natural Resource Specialist-1 (NRS-1), 21 months of Fish and Wildlife Technician –2 (Tech 2), and 24.5 months of seasonal Experimental Biologist Aide (EBA).

Results:

Task 1.a. Randomly sample salmonids landed in mainstem Columbia River non-Indian and treaty Indian commercial fisheries for the purpose of recovering CWTs.

- Treaty Indian and non-Indian commercial fisheries occurred from mid February through October. Oregon sampling results for the treaty Indian and non-Indian commercial fisheries are presented in the following tables.

Fishery	Species	# Landed	# Sampled	% Sampled	# Snouts
Non-Indian	Spr Chinook	8,882	4,617	52%	923
Non-Indian	Sum Chinook	160	102	64%	40
Non-Indian	Fall Chinook	22,804	10,900	48%	424
Non-Indian	Coho	36,567	14,960	41%	1,036
Non-Indian	Sockeye	439	89	20%	2

Fishery	Species	# Landed	# Sampled	% Sampled	# Snouts
Treaty Indian	Spr Chinook	3,173	1,183	37%	208
Treaty Indian	Sum Chinook	2,252	201	9%	75
Treaty Indian	Fall Chinook	30,557	10,353	34%	515
Treaty Indian	Coho	3,006	399	13%	131
Treaty Indian	Sockeye	242	0	0%	0
Treaty Indian	Steelhead	389	14	4%	0

In the past, the majority of the treaty Indian commercial fishery landings to traditional wholesale fish buyers occurred in Washington with ODFW providing staff to assist WDFW's sampling effort. In 2004, significant landings occurred in Oregon with our sampling efforts targeting these landings.

Task 1.b. Randomly sample salmonids landed in sport fisheries occurring in the mainstem Columbia River, including Buoy 10.

- The main-stem Columbia River sport fishery was open to salmon or steelhead from January through December. Oregon sampling results for the combined Buoy 10 and lower Columbia River recreational fisheries are presented in the following table.

Fishery	Species	# Landed	# Sampled	% Sampled	# Snouts
Recreational	Spr Chinook	12,101	2,201	18%	296
Recreational	Sum Chinook	779	137	18%	32
Recreational	Fall Chinook	18,104	5,885	33%	263
Recreational	Coho	8,210	2,573	31%	186
Recreational	Sockeye	6	1	17%	0
Recreational	Steelhead	2,889	1,389	48%	53

Task 1.c. Randomly sample salmonids returning to escapement areas (e.g. dams, hatcheries, and natural spawning areas)

- From mid-August through the end of September fall chinook were observed as they passed through the fish counting windows at Bonneville Dam. Chinook were separated by skin color (bright or tule), size (adults or jacks), and fin-clip (marked or unmarked).

- Coded wire tag recovery project funds were used to sample Big Creek hatchery fall chinook. Sampling occurred during September and October with 3,813 chinook mark sampled and 154 snouts recovered.

- Fall chinook spawning ground surveys were conducted on eight Oregon tributaries with 4,611 fall chinook examined and 100 snouts recovered.

CWT data collected in 2004 were summarized, analyzed, and provided to PSMFC RMIS. The data were stratified by area and age and applied to catch and escapement populations to develop cohort reconstructions. Cohort reconstructions were used to forecast future run sizes.

Problems:

- Treaty Indian commercial fisheries have changed considerably in recent years with nearly 50% of the chinook catch being sold directly to the general public as compared to previous years when most or all fish were sold to commercial buyers. Additionally, chinook salmon may be sorted prior to sale with a disproportionately high amount of bright stock being sold to the public and a disproportionately low amount of tule stock being sold to the buyers. This situation is compromising the CWT recovery program in the Columbia River by reducing the number of CWT's recovered from bright stock fall chinook. This problem will require additional funding to support an increased sampling effort in future years.

Project 3: CWT Recovery - Oregon Ocean Salmon Fisheries

OREGON DEPARTMENT OF FISH AND WILDLIFE

1. Project Overview and Objectives

The project goal is to implement a sampling plan to sample, collect, and process "marked" salmonids that contain coded wire tags (CWT's) in Oregon's ocean salmon fisheries to assess contribution rates and distribution patterns for Columbia River stocks.

Specific objectives are to:

1) Recover CWT's from chinook and coho salmon landed in Oregon's ocean commercial and recreational fisheries via a stratified and representative sampling plan that samples a minimum of 20% of landed catch for all times (weeks) and catch areas.

2) Determine total Oregon ocean commercial troll and recreational landings and effort to match collected CWT data with PSMFC's regional mark information system (RMIS).

3) Deliver Oregon total ocean salmon catch and CWT data by fishery, species, time, and area to PSMFC's Regional Mark Processing Center and incorporation into RMIS.

4) Summarize and analyze CWT data to determine stock composition of stocks represented in Oregon ocean salmon fisheries. Determine contribution, distribution, and survival rates of wild and hatchery stocks of Columbia River basin chinook and coho caught in ocean fisheries.

5) Provide high quality, error-free, raw and analyzed data for various users (scientists, fishery managers, agencies, industry, and public).

2. Personnel

This project involves a staff of one program manager (PEM-D), one project leader (SFWB), one assistant project leader (NRS-2), two sampling coordinators (NRS-1), one program manager, one systems analyst (ISS-5), one information systems specialist (ISS-5), one fiscal analyst (FA-1), two data assistants (OS-2), and 27 seasonal port samplers. This contract funded 28% of the seasonal port sampling activities, and 27% of overall personnel costs.

3. Accomplishments

Objective 1:

- Representative sampling and monitoring of the commercial troll and recreational ocean fisheries were the main activities during 2004. Through representative sampling, the ocean sampling project recovered a total of 1,966 snouts from coho salmon and 7,381 snouts from chinook salmon that tested positive for the presence of CWTs.

Objective 2:

- Several special orientation sessions were held for new seasonal samplers and observers, to insure proper sampling and collection procedures. Including use of CWT detection wands. Fisheries were closely monitored to insure that they stayed within quotas or guidelines, and catch estimates were made that will be used to expand CWT recoveries out for total stock contribution estimates.

- In the 2004 recreational coho season from Leadbetter Pt., WA to Cape Falcon, OR, we examined 5,603 coho and 495 chinook for the presence of CWTs out of total landings of 22,511 coho and 2,189 chinook. This represents sampling rates of 25% of the coho and 23% of the chinook landed. From these samples we found 449 coho and 56 chinook which tested positive for CWT presence when examined with a CWT detection wand, and snouts were recovered from those fish for tag recovery.

- In the 2004 recreational ocean salmon season from Cape Falcon, OR to Humbug Mountain, OR, we examined 15,111 coho out of 48,039 coho landed (31.5%) and 16,345 chinook out of 47,381 chinook landed (34.5%) for the presence of CWTs, and found 1,361 coho and 1,058 chinook that tested positive for CWT presence when examined with a CWT detection wand. Snouts were collected from these fish for tag recovery.

- In the commercial selective coho fishery from the US/Canada border to Cape Falcon, OR, we examined 30.1% of the coho landed in Oregon for coded wire tags (2,793 examined out of 9,289 landed), found 87 adipose fin clipped coho which tested positive for CWT presence when examined with a CWT detection wand, and snouts were taken for tag recovery. Statewide chinook landings into Oregon during 2004 totaled 260,124 of which we examined 79,984 (30.8%), found 6,105 that were marked with the adipose fin clip and tested positive for the presence of a CWT when examined with a CWT detection wand, and snouts were recovered from those marked fish.

Objective 3:

- Completed 2003 preliminary CWT mark summary expansions for PSMFC regional database. Finalized 2002 CWT mark summary expansions for PSMFC regional database. Oregon's 2004 total ocean salmon catch and CWT data was provided for incorporation into PSMFC's Regional Mark Processing System in mid-January, 2005.

Objective 4:

- Provided summarized data from the 2003 fishery to the Pacific Fishery Management Council, and to the Salmon Industry Group public meeting.
- Provided 2004 in season catch and effort updates to the public and other agencies via website and mailings. The website was generally updated each week throughout the season.

Objective 5:

- Completed mail information responses to salmon fishers who landed CWT fish in 2003.
- Provided in-season updates to managers, fishers, and the public during quota fisheries.
- Provided data to PFMC to update the tables in the council document.

4. Major Problems

None.

Project 4: Clackamas CWT Processing Center

OREGON DEPARTMENT OF FISH AND WILDLIFE

Project Title:	Coded Wire Tag Recovery Program
Contracting Party:	Pacific States Marine Fisheries Commission
BPA Project No.:	8201300
Period Covered:	January 1, 2004 – December 31, 2004

Report of Progress:

1. Accomplishments: The Oregon CWT recovery lab processed 37,618 heads from fish sampled in the Columbia Basin. A breakdown of the total heads recovered and processed during the year is as follows:

	Hatchery Returns	River Sport	Spawning Ground	Commercial Gillnet	Ocean Sport & Troll	Totals
JAN	0	0	0	0	2,121	2,121
FEB	3,453	2	0	0	1,358	4,813
MAR	116	352	5	0	0	473
APR	0	0	0	1,493	0	1,493
MAY	0	0	0	0	0	0
JUN	4,866	61	138	0	0	5,065
JUL	946	0	0	0	0	946
AUG	1,587	844	0	3,331	0	5,762
SEP	73	808	0	589	554	2,024
OCT	2,567	143	1,391	232	1,139	5,472
NOV	1,892	608	0	186	1,925	4,611
DEC	0	0	0	0	4,838	4,838
TOT	**15,500**	**2,818**	**1,534**	**5,831**	**11,935**	**37,618**

2. Objectives – Next Quarter: Process CWT's from all fisheries and hatcheries in the Columbia Basin.

3. Problems: The 37,618 CWT's displayed in the table above represent CWT-recovery accomplishments during the calendar year of 2004. The processed snout samples were taken from fisheries, spawning ground surveys and hatchery rack returns during multiple return years, i.e., 2001 through 2004.

   Due to staffing limitations, budget reductions and unusually large escapement during the past few years, we have been forced to prioritize CWT processing. In-season management needs are addressed first, followed by CWT recovery data needed for fishery evaluation and other research projects. We are currently processing CWT samples originating from 2003 and 2004 fisheries and escapements.

Project 5: Regional Mark Processing Center Operations

Pacific States Marine Fisheries Commission

The Regional Mark Processing Center (RMPC) provides essential regional services to State, Federal, and tribal fisheries agencies involved in marking anadromous salmonids. These services include regional coordination of tagging and fin marking programs, maintenance of a regional database for CWT releases and recoveries, and production of printed and/or machine readable data reports.

The regional CWT database is accessed through PSMFC's Regional Mark Information System (RMIS). Users are provided on-line access to the CWT data at no charge.

1. Accomplishments:

Task 5.a PSMFC will maintain and upgrade its regional CWT database and web based RMIS system for CWT data retrieval.

In addition to the normal flow of on-going modifications to data management applications, there were several major improvements made to expedite the Mark Center's data management operations.

1) Data Validation Issues: The CWT data load programs were upgraded to do more rigorous cross-table checks of tag releases in format version 4.0 when validating newly submitted tag recovery datasets.

2) Upgraded Log-in Procedures for Data Providers: A new log-in methodology was implemented to make it easier for data providers using FTP to upload new CWT datasets to the Mark Center.

3) Implementation of 'Users Lists':
A popular 'User List' feature was implemented on RMIS. It now allows users to save their own specific order of data elements selected in a data retrieval using the CSV format. That list or ordering of data elements can then be saved via copy and paste to the user's local computer.

4) New RMIS based Discussion Forum: The move to the Dell-Linux-Oracle computer system was not without glitches, one of those being that the RMIS interactive user forum application 'broke'. After extensive testing of various 'forums' available on the web, the Mark Center installed Discus-Pro/version 6 software for the RMIS users forum. The software is more highly developed than the previous forum software and is easier to use, easier to manage, and will have more flexibility than the older forum.

5) Data Integrity Issues: Significant time was spent working with the various data reporting agencies to resolve various inconsistencies found in the CWT data sets. While

the number of errors was very small (less than 500 records), it took considerable effort to resolve the reasons for the errors and to then correct them.

6) New Administrative Report Added: A new "Region and Basin Report" was added to the RMPC Administrative page to aid Mark Center staff in identifying and updating those location records with missing region and basin codes.

7) Backup and Recovery Procedures: Work also continued on developing and testing backup and recovery procedures for the CWT information stored in the Mark Center's various Oracle databases. The time invested on this task will be invaluable if unexpected events were to cause loss or corruption of the data stored in Oracle.

8) Request to Add 'CRAS' to RMIS: Early in Aug 2004, the Mark Center received notice from NWIFC that they wanted PSMFC to take over ownership and maintenance of the CWT Retrieval and Analysis System (CRAS). After exploratory discussions, this task was accepted by the Mark Center.

Preliminary work was begun during the 4th quarter on porting NWIFC's CWT Retrieval and Analysis System (CRAS) to the Mark Center' Regional Mark Information System (RMIS). The initial work consisted of discussions with NWIFC staff in Olympia Washington on understanding just how CRAS functioned. A copy of the CRAS software and relational database tables was installed on the Mark Center's computer to facilitate the review and also provide a test environment once the new coding is underway. The coding phase will start in February, 2005, with Jim Longwill as project leader.

9) Work continued full time on expediting the processing of new data sets (CWT releases, recoveries, catch/sample, etc) as they were supplied by the various reporting agencies.

10) Throughout the year, specialized requests were received and processed for all CWT recoveries for specific sets of tag codes. These "brood reports" summarized tag recoveries across all fisheries, agencies, and recovery years. In addition, numerous data users were assisted in retrieving "raw" recovery records. These data subsets were then processed by the respective data users in a variety of ways to build their own in-house PC databases and generate customized reports, etc. Additional individuals from various agencies were instructed in the procedures for on-line access to the CWT data via FTP or the internet.

Task 7.b The Mark Center staff will assist in regional coordination of Columbia Basin fish marking programs, including CWT data exchange standards.

1) Annual Mark Meeting: The annual Mark Meeting was hosted by IDFG and held in Lewiston, Idaho on May 12-14, 2004. Key issues included discussions and updates on coastwide mass marking and selective fisheries activities. In addition, considerable discussion focused on the dynamics of marking and identifying salmonids returning to

the Snake River system. The role of blank CWT wire as a mark was also explored at some length.

2) CWT Training Seminars: The Mark Center, in conjunction with Northwest Marine Technology, Inc., sponsored three CWT training workshop. They were held over six months in different sites (Portland, OR; Lewiston, ID; and Chelan, WA) to accommodate as many agency programs as possible. The focus was primarily on the issues surrounding tag application equipment and quality control methods.

3) Overview Paper Revised for Specialized CWT Workshop: Under the direction of the Pacific Salmon Commission, a steering committee organized a highly focused workshop entitled "Future of the CWT Program – Challenges and Options". The workshop, held June 7-10 in Lynnwood, Washington, was designed to evaluate the effectiveness of the coastwide CWT program given the growing impact of mass marking and selective fisheries. In addition, the workshop explored the capabilities of alternative technologies to augment the CWT marking program.

The workshop steering committee asked Ken Johnson to revise his 1989 overview paper on the coastwide CWT program as background material for the workshop panelists. The paper, entitled "*Regional Overview of Coded Wire Tagging of Anadromous Salmon and Steelhead in Northwest America*", took over four weeks to revise because of the extensive changes experienced during the past 15 years. Many of those changes resulted from the introduction of mass marking, selective fisheries, and the switch to electronic sampling necessitated by the new use of the adipose clip as a flag for hatchery fish rather than a CWT tagged fish.

4) Supplemental Funding Proposal: The Mark Center staff coordinated a joint funding PSMFC, WDFW, and ODFW proposal to Congress for $861,307 in supplemental FY 2005 funding for the Coded Wire Tag (CWT) Recovery Program in Oregon and Washington's lower Columbia Basin and coastal areas to offset escalating funding shortfalls. Key problems are:

- Static and/or eroded contracts have sharply reduced active funding in recent years.
- Oregon and Washington fishing seasons for salmonids have had major expansions as a result of mass marking programs and associated mark selective fisheries. As such, the expanded seasons require larger sampling efforts and personnel levels to cover the sport and commercial salmon landings, and extract tags from sampled heads.
- Compressed time frames for data analyses in combination with increased complexity in stock assessments and fishery management strategies also require additional staff to summarize and analyze data.

Unfortunately, the requested new funding did not materialize. Thus WDFW, ODFW, and PSMFC will need to make further economies given the level funded BPA CWT Recovery program. Not all required sampling objectives will be accomplished

5) Restructuring of WDFW's CWT Recovery Program: WDFW undertook a major restructuring of its component of the CWT Recovery Program during the third quarter of FY 2004. Particular attention was directed to reducing management level costs and transferring those savings to hire more field samplers for monitoring the various fisheries. These changes were necessary to maintain required CWT sampling levels in the face of level funding and inflation pressures.

Most of the staff working on WDFW's CWT Recovery Program are contracted PSMFC employees. Ken Johnson (program coordinator) and Liz Graves (PSMFC Personnel Manager) attended a number of WDFW planning and implementation meetings in Vancouver, WA to provide PSMFC input on employee changes, and to help ensure that PSMFC's contractual agreements with BPA were not impacted.

6) Joint Meeting of the PSC Selective Fishery Evaluation Committee (SFEC) and Data Standards Working Group (DSWG):

The Mark Center sponsored a joint meeting of SFEC and Data Standards at the PSMFC office in Portland on November 16-18, 2004. The first day of the meeting was devoted to SFEC issues, with special attention given to the challenges surrounding the use of DIT groups (Double Index Tagging) as a result of mark selective fisheries. The next two days were turned over to the Data Standard Working Group. Their agenda included a wide variety of changes needed to upgrade the Data Exchange Specifications Document from Version 4.0 to Version 4.1 to handle new requirements that have resulted from mass marking and mark selective fisheries.

The primary focus of the entire meeting centered on how best to capture the data needed to estimate unmarked mortalities of DIT marked fish in mark selective fisheries. These estimates were given the ungainly label of "EMUDs" (i.e. Estimates of Unmarked DITs). Three parameters are needed to estimate these unmarked mortalities:

a) Marked tags (i.e. Ad clip+CWT) sampled and expanded
b) Estimate of "Lambda, the unmarked to marked ratio
c) Release mortality rate (i.e. selective fishery mortality)

The Data Standards Working Group reached agreement that a new data file (Estimates of Unmarked DITs) would be added to Version 4.1 of the Data Exchange Specifications in order to capture the necessary data for estimating EMUDs as a new component of mortality introduced by mark selective fisheries.

7) SFEC Regional Coordination Working Group Meeting: A subsequent meeting of SFEC was held in Olympia, Washington on December 13-15, 2004 to deal with new selective fishery proposals and mass marking proposals. As a member of the Regional Coordination Working Group, Ken Johnson assisted in the review of 21 new mass marking proposals for 2005. These proposals represented a comprehensive coverage of all salmon mass marking programs on the West Coast that have international ramifications.

2. Problems: Mark Center Funding in Serious Jeopardy

In September 2004, a major budget crisis loomed over the Regional Mark Center as $250,000 in Pacific Salmon Treaty funding for FY 2005 through the U.S. Fish and Wildlife Service had been deleted from the congressional budget on the House side. The $250,000 loss represents 49% of the Mark Center's budget for FY 2005. The Mark Center was already on a very tight budget and simply could not absorb a massive cut of this order without severely restricting operations. At a minimum, this loss of funding would have required termination of two of the Mark Center's three staff members, along with other significant cut backs in operations. Treaty obligations of timely data exchange would not be possible to meet.

After additional discussions between PSMFC and USFWS headquarters leadership, the immediate funding crisis was averted for FY 2005 but not for subsequent years. *The USFWS agreed to fund the $250,000 to the Mark Center for 2005 as stated in the Pacific Salmon Treaty U.S. Section budget. However, USFWS also made it very clear that 2005 would be the last year of support without the Mark Center's budget being re-added to the Congressional Budget. Efforts are continuing to find stable funding for 2006 and out years.*

		Lewis River Aquatic Fund - ACC Evaluation of 2007/2008 Project Proposals						
ACC Decision		**Project Title**	**WDFW**	**AR - TU**	**LCFRB**	**USFWS**	**USFS**	**Cowlitz Indian Tribe**
	1	Mud Creek Enhancement - Cowlitz Indian Tribe	We believe this project will provide valuable over wintering habitat for coho in an area of the basin that is dominated by riprap with little shelter or off channel rearing habitat for juvenile salmonids. If fines or other monetary penalties are secured from the Circle C Rock Pit litigation and becomes available, the Tribe should endeavor to get all or a portion of these fines returned to the ACC project funds to offset the cost of developing this project. We question if the identified $1,000 will be sufficient to truck LWD from Swift Reservoir.		Could provide benefits in Allen Creek and potentially benefits to Lewis 1 Tidal A. Could potentially provide winter refuge habitat for fish from adjacent higher-tiered reaches. Supports contributing populations of winter steelhead and coho and has low reach potential for both of these species. Because of existing culvert at the mouth, this project was reviewed as primarily a stream channel habitat structure and off-channel enhancement project. Proposal fails to document condition of culvert and if it meets fish passage criteria. Without knowing condition of existing culvert, it's difficult to discern the benefit this project will have to fish in the Lewis system. Other concerns include presence of non-native carp in Mud Lake and their potential effect on salmonids in Mud Creek. Project does not propose any riparian restoration that would provide long-term benefits for temperature, floodplain roughness and future LWD recruitment.		Mud Creek Enhancement project should be funded without the stipulation that a fine is imposed on the rock quarry. If the sediment problem has been fixed, there is no reason to wait to fund this project until a fine is imposed years from now.	Providing tidal slough habitat and significant refuge/over-wintering habitat for both juvenile and adult salmonids in the lower mainstem Lewis River is beneficial to fish recovery. This project meets the Fund's objectives. **Recommendation: Approve for funding**
	3	Muddy River Thinning/Brushing/Invasive Plant Project - USDA FS	WDFW supports the goals of establishing future shade trees to cool the mainstem riparian corridor by enhancing growth and vigor of confers and dominant hardwoods and we support re-establishment of native vegetation on the flood plain. We have concerns that the invasive plant eradication efforts might require repeated multi-year treatments to continue to be effective. We are willing to endorse the eradication of exotics during this five-year period, but we do not expect the applicant to return to the ACC at some future date for additional funds to repeat this aspect of the project.		This reach has high potential for coho, medium for steelhead and low for Chinook. Still not clear how much area will be treated through this project. While this project has some potential benefits to riparian function in the proposed reaches, there is no way to quantify the amount of benefit to be gained. No metrics provided on number of acres to be treated, number of trees to be planted and number of nurse logs to be placed. Difficult to determine how much work one can expect from the investment.		We agree with PacifiCorp that this project should be funded.	When the ACC first established 'ground rules' for the Aquatic Fund it was decided that projects funded by the ACC must be stand-alone projects, with a definitive end date, which would not need multiple rounds of ACC funding. This particular project proposal is slated to run for three years. However, a major component of the ACC portion of the project is the removal of invasive species and the planting of conifers in areas where they are not naturally occurring. Without continued maintenance of these cleared/planted sites, invasive species will return in a very short amount of time and all the money and time invested in clearing these areas and planting native conifers will likely have been wasted. Three years of Scotch Broom removal is not enough to 'eradicate' this species. Its seed bank is long-lived and there are numerous seed sources close by. The Tribe strongly objects to the funding of this project unless FS can demonstrate that they will not come back for add'l funds. **Recommendation: Do Not approve for funding**.
	4	Clear Creek Road Decommission (2575000) - USDA FS	WDFW supports this proposal. Relatively low numbers of fish are present in Clear Creek as compared to other Muddy River tributaries; therefore WDFW encourages before and after project monitoring to quantify benefits and potentially identify causes for the low fish populations.		This reach has medium potential for Spring Chinook, coho and winter steelhead. Improving watershed conditions and hillslope processes is considered a high priority project type for this reach. LCFRB supports the Utilities' recommendation to fund this project.		We agree with PacifiCorp that this project should be funded.	Closing roads and limiting access to certain areas in the Lewis River Basin is a good idea. The Tribe agrees with the Utility's view that this project will reduce the amount of sediment added to Clear Creek. The project is beneficial to fish and meets the Fund's objectives. **Recommendation: Approve for funding**
	5	East Fork Lewis River Instream Structures Steelhead - USDA FS	WDFW supports this project. This site is located in favorable area for steelhead projection. One limiting factor identifies was little spawning gravel. These structures, if placed correctly, would accumulate gravels and create pools providing shelter for juvenile fish. The project is outside the North Fork Lewis but we believe the beneficial effects on "listed" wild steelhead in the East Fork Lewis would eventually spill over into the adjoining basin.		This area supports primary populations of summer steelhead and coho. Improving stream channel habitat structure is a high priority project type. Proposal fails to make connection between the limiting factors for the reach and the proposed treatments to address those factors. The addition of spawning gravel does not enhance natural watershed processes. LCFRB supports the Utilities' recommendation not to fund this project.		The Forest Service believes this project should be funded. We believe that restoring runs of steelhead on the East Fork will ultimately help restore runs of steelhead on the North Fork.	The Tribe believes that successful habitat restoration projects in the East Fork Lewis may ultimately benefit fish recovery in the North Fork. Having said this, other funding sources are available to complete projects in the EF Lewis. This same project was submitted in the last round of SRFB funding and did not rank high enough to make it past the LCFRB's TAC review and be passed on to the SRFB. The confidence level for the project being a success, as proposed, was not very high. Perhaps the project proponent could rewrite the project (using log weirs versus rock cross vanes) and resubmit it to the SRFB for the next round of funding. The Aquatic Fund monies are finite and need to be treated as such. There is no compelling reason to complete this project using ACC funding. The Tribe is in agreement with the Utility. The project does not meet the Fund's objectives. **Recommendation: Do Not approve for funding**
	6	Panamaker Creek Road Closure and Culvert Removal - PacifiCorp	WDFW supports this proposal to compliment the Cougar-Panamaker Bull Trout Protection Covenant of 1999. We anticipate kokanee will receive the major benefit of this project, but bull trout will also benefit through reduced sediment inputs into Cougar Creek, from Panamaker Creek. We would encourage both fish and water quality (turbidity) monitoring pre- and post project.		This reach has medium potential for coho, a contributing population and low potential for steelhead. This project would also benefit bull trout present in Cougar Creek. LCFRB support the Utilities' recommendation to fund this project.		We agree with PacifiCorp that this project should be funded.	Closing roads and limiting access to certain areas in the Lewis River Basin is a good idea. Project has an excellent cost to benefit appeal. The Tribe believes this project meets the Fund's objectives. **Recommendation: Approve for funding**

Attachment C

7.5.3.1 Guidance for Resource Project Approval and Aquatics Fund Expenditures.

a. Resource Projects must be consistent with applicable Federal, State, and local laws and, to the extent feasible, shall be consistent with policies and comprehensive plans in effect at the time the project is proposed. These may include, but are not limited to, Washington's Wild Salmonid Policy, the Lower Columbia River Bull Trout Recovery Plan, and the Lower Columbia River Anadromous Fish Recovery Plan.

b. The Aquatics Fund shall not be used to fund Resource Projects that any entity is otherwise required by law to perform (not including obligations under this Agreement or the New Licenses for use of the Aquatics Fund), unless by agreement of the ACC.

c. The Licensees shall evaluate Resource Projects using the following objectives:

(1) benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species;

(2) support the reintroduction of anadromous fish throughout the Basin; and

(3) enhance fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River.

For the purposes of this Section 7.5, the North Fork Lewis River refers to the portion of the Lewis River from its confluence with the Columbia River upstream to the headwaters, including tributaries except the East Fork of the Lewis River.

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March 12, 2008

To Lewis River Aquatics and Terrestrial Coordination Committee representatives

Subject: Draft 2007 ACC/TCC Annual Report

Within the Lewis River Settlement Agreement (SA), PacifiCorp Energy and the Public Utility District No. 1 of Cowlitz County (Cowlitz PUD) agreed to prepare annual reports for Aquatic Coordination Committee (ACC) and Terrestrial Coordination Committee (TCC) activities. The SA article 14.2.6 notes that the Committee Coordinators shall prepare and file with the Federal Energy Regulatory Commission (FERC) detailed annual reports on ACC and TCC activities, monitoring and evaluations under the Monitoring and Evaluation Plan, and implementation of the terrestrial and aquatics Protection, Mitigation, and Enhancement measures occurring during the prior year, as well as plans for the coming year as required by the SA.

In addition to making the reports available to each Settlement Party, the SA directs the Utilities to prepare the annual report in consultation with ACC/TCC members. This consultation includes providing members a 30-day review and comment period of a draft annual report. Following the draft review, the Utilities are to incorporate comments into the final report, or provide a written explanation as to why comments were not incorporated within the report.

Enclosed you will find a Draft 2007 ACC/TCC Annual Report provided for your review and comment. The document acknowledges the efforts we have all taken to meet the terms of the SA, as well as those to be conducted in 2008. On behalf of the Utilities I would like to thank those of you who have participated throughout the year on the committees; your dedication and input have been valuable.

If you have comments on the Draft, please provide those to Kim McCune **by April 14, 2008**. The Utilities will then work to finalize the report and submit it to the FERC. Parties to the SA will receive the Final report as will ACC/TCC members. Please submit comments to Kim McCune, Project Coordinator, kimberly.mccune@pacificorp.com or at the mailing address: 825 NE Multnomah Street, Suite 1500, Portland, Oregon 97232.

Sincerely,

Todd Olson
Lewis Implementation Program Mgr.
PacifiCorp Energy

Enclosure

cc: Diana Gritten-MacDonald – Cowlitz PUD
Frank Shier and Kirk Naylor – PacifiCorp Energy