



# Public Utility District No. 1 of Douglas County

1161 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553 • [www.douglas pud.org](http://www.douglas pud.org)

April 7, 2010

Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 1st Street N.E.  
Washington, D.C. 20426

Subject: **Wells Hydroelectric Project – FERC Project No. 2149  
Annual Report – Anadromous Fish Agreement and Habitat Conservation Plan**

Dear Secretary Bose:

Pursuant to Article 59 of the Wells Project License, the Public Utility District No. 1 of Douglas County hereby submits the enclosed annual report of activities related to the Anadromous Fish Agreement and Habitat Conservation Plan for the Wells Project. The enclosed annual report covers activities performed from January 1, 2009 through December 31, 2009.

If you have any questions or require further information, please feel free to contact me at (509) 881-2208 or [sbickford@dcpud.org](mailto:sbickford@dcpud.org).

Sincerely,

Shane Bickford  
Natural Resources Supervisor

Enclosure

Cc: Mr. James Hastreiter, FERC, Portland  
Mr. Erich Gaedeke, FERC, Portland  
Mr. Jon Miyashiro, FERC, Portland  
Wells HCP Coordinating, Hatchery and Tributary Committees  
Tom Kahler, Douglas PUD  
Greg Mackey, Douglas PUD  
Scott Kreiter, Douglas PUD



CALENDAR YEAR 2009  
OF ACTIVITIES UNDER THE ANADROMOUS FISH AGREEMENT  
AND HABITAT CONSERVATION PLAN

WELLS HYDROELECTRIC PROJECT  
FERC LICENSE NO. 2149

**Prepared for**

Federal Energy Regulatory Commission  
888 First Street N.E.  
Washington, D.C. 20426

**Prepared by**

Anchor QEA, LLC  
1423 Third Avenue, Suite 300  
Seattle, Washington 98101  
and  
Public Utility District No. 1  
of Douglas County, Washington  
1151 Valley Mall Parkway  
East Wenatchee, Washington 98802-4497

**March 2010**

# ANNUAL REPORT CALENDAR YEAR 2009 OF ACTIVITIES UNDER THE ANADROMOUS FISH AGREEMENT AND HABITAT CONSERVATION PLAN WELLS HYDROELECTRIC PROJECT FERC LICENSE NO. 2149

---

**Prepared for**

Federal Energy Regulatory Commission  
888 First Street N.E.  
Washington, D.C. 20426

**Prepared by**

Anchor QEA, LLC  
1423 Third Avenue, Suite 300  
Seattle, Washington 98101  
and  
Public Utility District No. 1  
of Douglas County, Washington  
1151 Valley Mall Parkway  
East Wenatchee, Washington 98802-4497

**March 2010**

---

## TABLE OF CONTENTS

1	INTRODUCTION .....	1
2	PROGRESS TOWARD MEETING NO NET IMPACT.....	2
2.1	Status of Phase Designations for Current Plan Species.....	2
2.2	2009 HCP Decisions.....	3
2.3	Project Operations and Improvements .....	5
2.3.1	Operations.....	5
2.3.2	Improvements.....	6
2.3.3	Assessment of Project Survival .....	7
2.4	Hatchery Compensation .....	12
2.4.1	Hatchery Production Summary.....	13
2.4.2	Hatchery Planning .....	15
2.4.3	Maintenance and Improvements.....	18
2.5	Tributary Committees and Plan Species Accounts .....	19
2.5.1	Regional Coordination .....	20
2.5.2	Fiscal Management of Plan Species Accounts .....	21
2.5.3	General Salmon Habitat Program.....	22
2.5.4	Small Projects Program .....	24
2.5.5	Tributary Assessment Program.....	25
3	HCP ADMINISTRATION .....	26
3.1	Mid-Columbia HCP Forums.....	26
3.2	HCP Related Reports Published in Calendar Year 2009.....	27

### List of Tables

Table 1	Phase Designations for Wells Dam.....	3
Table 2	Summary of 2009 Decisions by the Wells HCP Committees.....	3
Table 3	Adult Conversion Rates for All Available Release Groups .....	9
Table 4	Production Objectives and Release Numbers for the Inundation and Harvest Enhancement Programs in 2009 .....	13
Table 5	Production Objectives for the HCP Passage Loss Compensation Program Released in 2009.....	14

---

Table 6	General Salmon Habitat Program Projects Reviewed by the Tributary Committees in 2009 .....	23
Table 7	Projects Reviewed by the Tributary Committees under the Small Projects Program in 2009.....	25

## **List of Appendices**

Appendix A	Habitat Conservation Plan Coordinating Committees Meeting Minutes and Conference Call Minutes
Appendix B	Habitat Conservation Plan Hatchery Committees Meeting Minutes and Conference Call Minutes
Appendix C	Habitat Conservation Plan Tributary Committees Meeting Minutes
Appendix D	List of Wells HCP Committee Members
Appendix E	Statements of Agreement for Coordinating Committees
Appendix F	Statements of Agreement for Hatchery Committees
Appendix G	2009 Juvenile Bypass Operating Plan
Appendix H	Broodstock Collection Protocols
Appendix I	2009 Action Plan: Wells HCP
Appendix J	Annual Report of Wells Plan Species Account Financial Activity For the Year Ended December 31, 2009
Appendix K	Monitoring and Evaluation of Wells and Methow Hatchery Programs in 2008
Appendix L	2009 Letter Inviting Non-signatory Parties to a Mid-Columbia Forum

---

## 1 INTRODUCTION

On June 21, 2004, the Federal Energy Regulatory Commission (FERC) approved an Anadromous Fish Agreement and Habitat Conservation Plan (HCP) for the Wells Hydroelectric Project (Wells Dam – FERC License No. 2149) on the Columbia River in Washington State. The Wells Project is owned and operated by Public Utility District No. 1 of Douglas County (Douglas PUD). The HCP provides a comprehensive and long-term adaptive management plan for species covered under the HCP (Plan Species) and their habitats. This document is intended to fulfill Section 6.9 of the HCP and Article 59 of the Wells Project FERC License requiring an annual report of progress toward achieving the No Net Impact (NNI) goal described in Section 3 of the HCP, and a summary of common understandings based upon completed studies.

Designated representatives of the signatories of the Mid-Columbia HCPs (HCPs of the Wells, Rocky Reach, and Rock Island hydroelectric projects) comprise the Coordinating Committees, Hatchery Committees, and Tributary Committees for each HCP, which meet collectively to expedite the process for overseeing and guiding the implementation of their respective HCPs. Minutes from the monthly meetings are compiled in Appendices A (Coordinating Committees), B (Hatchery Committees), and C (Tributary Committees). In addition, a Policy Committee provides a forum for resolution of disputes that are either elevated to or arise in the Coordinating Committees and remain unresolved. The Policy Committees meet as needed to discuss any of these issues and receive updates on the progress of HCP implementation. Appendix D lists members of the Wells HCP Committees. The Coordinating Committee for the Wells HCP oversaw the preparation of this sixth Annual Report for calendar year 2009, which covers the period from January 1 to December 31, 2009. (The first through fifth Annual Reports covered January 1 to December 31, 2004 through 2008.)

---

## **2 PROGRESS TOWARD MEETING NO NET IMPACT**

The Wells Project HCP requires preparation of an Annual Report that describes progress toward achieving the performance standard of NNI for each Plan Species. The NNI standard consists of two components: 1) 91 percent combined adult and juvenile project survival achieved by project improvement measures implemented within the geographic area of the project, and 2) 9 percent compensation for unavoidable project mortality provided through hatchery and tributary programs, with 7 percent compensation provided through hatchery programs and 2 percent through tributary programs (Section 3.1 of the HCP). Section 4.1 of the HCP states that, given the present inability to differentiate between the sources of adult mortality, initial compliance with the combined adult and juvenile survival standard will be based on the measurement of 93 percent juvenile project survival or 95 percent juvenile dam passage survival (described further in Section 4.1.2 of the HCP).

The following sections of this chapter describe activities implemented during 2009 toward maintaining the HCP passage and survival standards and implementing the HCP objectives as they relate to decision making, continued implementation of the juvenile and adult passage plans, and project improvements for hatchery programs and tributary programs.

### **2.1 Status of Phase Designations for Current Plan Species**

A major feature of the Wells HCP is what is termed a “phased implementation plan” to achieve the survival standards. These phases have been described in previous HCP Annual Reports to FERC. Since February 2005, steelhead, subyearling Chinook, yearling Chinook, and sockeye salmon are in Phase III (either Standard Achieved or Additional Juvenile Studies; Table 1). In December 2007, coho salmon were designated as in Phase III (Additional Juvenile Studies). In 2008, land and cash with a total value of \$600,000 were transferred to the Yakama Nation pursuant to Douglas PUD’s coho mitigation agreement. This completes Douglas PUD’s coho mitigation obligation through 2017.

Under Phase III conditions (Standard Achieved), Douglas PUD is required to re-evaluate survival at 10-year intervals following completion of three years of valid Juvenile Project Survival studies. Douglas PUD conducted valid juvenile survival studies in 1998, 1999, and 2000. The Verification Study Plan is designed to re-assess the survival of yearling spring

migrants in 2010. The study plan for the 10-year “verification” of survival was approved by the Coordinating Committees at their July 23, 2009 meeting. The current Phase Designations of all Plan Species covered by the Wells HCP are shown in Table 1. No changes in Phase Designations occurred in 2009.

**Table 1**  
**Phase Designations for Wells Dam**

<b>Plan Species</b>	<b>Phase Designation</b>	<b>Date</b>
Upper Columbia River (UCR) steelhead	Phase III (Standard Achieved)	February 22, 2005
UCR yearling spring Chinook	Phase III (Standard Achieved)	February 22, 2005
UCR subyearling summer/fall Chinook	Phase III (Additional Juvenile Studies)	February 22, 2005
Okanogan River sockeye	Phase III (Additional Juvenile Studies)	February 22, 2005
Methow River Coho	Phase III (Additional Juvenile Studies)	December 12, 2007

## 2.2 2009 HCP Decisions

Throughout 2009, the HCP Coordinating, Hatchery, and Tributary Committees made and noted a number of agreements during committee meetings, some of which were documented in Statement of Agreements (SOAs). These agreements are summarized in Table 2 and are discussed in the remainder of this report.

**Table 2**  
**Summary of 2009 Decisions by the Wells HCP Committees**

<b>Meeting Date</b>	<b>Agreement</b>	<b>HCP Committee</b>	<b>Reference</b>
Jan. 27, 2009	Approved the 2009 Wells Bypass Plan	Coordinating	Appendix A, Jan. 27, 2009
Feb. 12, 2009	Approved a unanimous recommendation to the JFP and Coordinating Committee to select annual payments rather than a lump-sum payment for future contributions to the Wells Plan Species Account	Tributary	Appendix C, Feb. 12, 2009



Meeting Date	Agreement	HCP Committee	Reference
Feb. 12, 18, 24, 2009	Approved the Wells 2009 Action Plan	Coordinating, Hatchery, and Tributary	Appendices A, B, and C (Feb. 12, 18, and 24, 2009)
Feb. 18, 2009	Approved Douglas PUD's production of up to 80,000 brood year (BY) 2010 steelhead at Wells Hatchery and 201,000 BY 2009 spring Chinook at Methow Hatchery for Grant PUD	Hatchery	Appendix B, Feb. 18, 2009
March 18, 2009	Agreed that NMFS Science Center staff could collect 200 summer Chinook for a precocity study from stocks at Dryden, Similkameen, Carlton, and Wells hatchery facilities	Hatchery	Appendix B, March 18, 2009
March 18, 2009	Concurred that WDFW may provide 25,000 Wells summer steelhead smolts to the Colville Tribes for release in Salmon Creek again this year, as in the past 3 years	Hatchery	Appendix B, March 18, 2009
March 24, 2009	Memorialized the Tributary Committee's recommendation and Fisheries Parties' decision to receive future Douglas PUD contributions to the Wells Plan Species Account annually beginning in Jan. 2010, rather than as a single lump-sum contribution	Coordinating	Appendix A and Appendix E, March 24, 2009
April 9, 2009	Approved an external financial review of the management of the Plan Species Accounts	Tributary	Appendix C, April 9, 2009
April 9, 2009	Approved the change in geographic scope of the Riparian Restoration and Regeneration Initiative Project to include properties in the Beaver Creek watershed	Tributary	Appendix C, April 9, 2009
May 14, 2009	Approved Douglas PUD funding of portions of the Okanogan River Restoration Initiative Monitoring Project for a second year, for \$19,260	Tributary	Appendix C, May 14, 2009
June 23, 2009	Approved the Wells Dam 2010 Survival Verification Study Plan, Phase III (Standards Achieved)	Coordinating	Appendix A and Appendix E, June 23, 2009
June 23, 2009	Approved the collection at Wells Hatchery of 200,000 summer Chinook eggs for transfer to the U.S. Fish and Wildlife Service (USFWS) Entiat National Fish Hatchery (NFH)	Hatchery	Appendix B and Appendix F, June 23, 2009
July 15, 2009	Agreed to Floy and body-cavity tag steelhead at Dryden, Priest Rapids Dam, Wells Dam, and Twisp Weir	Hatchery	Appendix B, July 15, 2009

Meeting Date	Agreement	HCP Committee	Reference
July 21, 2009	Approved the design of a 2009 study to investigate the response of lamprey and adult Plan Species to a reduction in water velocity at the fishway entrances at Wells Dam	Coordinating	Appendix A, July 21, 2009
Sept. 16, 2009	Approved Douglas PUD's production of up to 80,000 brood year (BY) 2011 steelhead at Wells Hatchery and 201,000 BY 2010 spring Chinook at Methow Hatchery for Grant PUD	Hatchery	Appendix B, Sep. 16, 2009
Sept. 22, 2009	Approved the commencement of planning for a potential contingency survival-verification study in 2011, and the collection of eggs from excess summer/fall Chinook broodstock at Wells Hatchery for that study	Coordinating	Appendix A, Sep. 22, 2009
Oct. 21, 2009	Approved the collection of eggs from excess summer/fall Chinook broodstock at Wells Hatchery for a potential contingency survival-verification study in 2011	Hatchery	Appendix B, Oct. 21, 2009
Nov. 18, 2009	Approved culling 57,000 Met-Comp spring Chinook eggs that were above program needs at Methow Hatchery	Hatchery	Appendix B, Nov. 18, 2009
Nov. 24, 2009	Approved proceeding with final design and implementation of the necessary modifications to the Rocky Reach Juvenile Fish Bypass System to accommodate the installation of a PIT-tag detection system	Coordinating	Appendix A, Nov. 24, 2009
Dec. 15, 2009	Approved Douglas PUD design for the West Ladder Fish Return Pipe Plan, and agreed to proceed with construction	Coordinating	Appendix A, Dec. 15, 2009

## 2.3 Project Operations and Improvements

This section summarizes project operations toward meeting and maintaining HCP requirements at Wells Dam in 2009. Actions in 2009 were guided by the 2009 Douglas PUD Action Plan, as approved by the Coordinating Committees (Appendix I).

### 2.3.1 Operations

As in past years, operation of the juvenile bypass system in 2009 was guided by the Bypass Operating Plan (Appendix G) and criteria contained within Section 4.3 of the Wells HCP.

Spring bypass spill occurred this year from April 12 through June 13, and summer bypass spill occurred from June 14 through August 26, as implemented per the Pre-season Operating Plan agreed to by the Wells HCP Coordinating Committee at the January 27, 2009 meeting (Appendix A). In January 2010, Douglas PUD provided a bypass operation summary that documented the initiation and termination dates for the Wells bypass operation in 2009. The year 2009 was the sixth year that operation of the bypass system was guided by representatives of the Wells HCP Coordinating Committee.

River flows at Wells Dam during the 2009 juvenile migration of Plan Species (April to August) were at 83 percent of the 15-year average. Operationally, all five bypass bays were available and were utilized as appropriate during the outmigration.

The spring bypass season started on April 12 at 0000 hours and ran continuously through June 13 at 2400 hours. The spring bypass operated for a total of 63 days and utilized a total discharge of 1.09 million acre feet (MAF), or 6.5 percent of total project discharge. During the spring bypass operation, there was forced spill during 22 hours or 1.5 percent of the season. The maximum total spill occurred on April 14 at 2100 hours with a volume of 50.0 thousand cubic feet per second (kcfs) and a total river flow of 199.3 kcfs.

Summer bypass started on June 14 at 0000 hours and ran until August 26 at 2400 hours, for a total of 74 days. There was 1.08 MAF, or 7.2 percent of the total discharge dedicated to summer bypass. During the summer bypass operating period, there were 18 hours or 1.0 percent of the hours with forced spill. The maximum total spill occurred on June 22 at 2100 hours with a volume of 29.4 kcfs and a total river flow of 214.0 kcfs.

### **2.3.2     *Improvements***

Maintenance and improvements at Wells Dam in 2009 fell largely into the category of maintenance or retrofits. Construction of a debris boom began in November 2008 and was completed in April 2009. In February 2009, the west fishway was serviced as part of annual maintenance. In March 2009, the gull wires in the Wells tailrace were repaired by the U.S. Department of Agriculture (USDA).

In December 2009, the Coordinating Committees approved a preliminary design for a fish return pipe for use in the west fish ladder; the pipe will be constructed in the spring of 2010. The intent of the modification is to minimize fish handling. Previously, returning adults collected but not needed for broodstock were trucked from the hatchery for release in the Wells Reservoir. When completed, this modification will allow fish to be returned to the fish ladder with minimal handling to continue their migration.

Finally, the east fishway was serviced starting December 22, 2009; the west fishway will be serviced in January 2010.

### **2.3.3      *Assessment of Project Survival***

As previously noted, Douglas PUD has met the HCP survival standard of 91 percent combined adult and juvenile project survival, and is in Phase III of the phased implementation plan for all Plan Species. In 2009, Douglas PUD continued to successfully implement the juvenile and adult passage plans.

Under Phase III conditions (Standard Achieved), Douglas PUD is required to re-evaluate survival at 10-year intervals. The study plan for the 10-year “verification” of survival was approved by the Coordinating Committees at their July 23, 2009 meeting. The Verification Study Plan is designed to re-assess the survival of yearling spring migrants in 2010.

#### **2.3.3.1      *Adult Passage Monitoring***

The HCP acknowledges that no scientific methodology currently exists that would allow the Wells HCP Coordinating Committee to assess adult project survival for Plan Species (presumed to be 98 percent). This is because available methods are unable to differentiate between mortality caused by the project versus other sources of non-detection (such as mortality from natural causes, injuries resulting from passage at downstream projects, or injuries sustained by harvest activities; or fish not detected for other reasons, such as spawning in locations downstream from Wells Dam). However, the Wells HCP Coordinating Committee is able to evaluate available information to assess whether or not there is a high likelihood that the adult survival rates are being achieved. Table 3 details detections at Priest Rapids Dam of known-origin adult steelhead and Chinook salmon that

were tagged with passive integrated transponders (PIT), the number of those adults redetected at Wells Dam, the estimated conversion rate (Priest Rapids Dam to Wells Dam), and average per-project (i.e., four dams and four reservoirs) conversion rates.

These conversion rates are best viewed as a minimum survival estimate between the two detection sites because they encompass mortalities from all sources and non-detected fish (as described above) between the two detection sites. They do not include any indirect or delayed mortality that might occur upstream of Wells Dam (the redetection site). The per-project conversion rate exceeded 98 percent for steelhead and spring and summer Chinook salmon (that is, mortalities from all sources averaged less than 2 percent through each project). Data for fall Chinook and sockeye are not available. As noted above, this 2 percent figure reflects a combination of mortality attributable to both non-project related causes (e.g., recreational and tribal harvest, tailrace spawning, and disease) and dam passage, as well as non-detections resulting from straying and spawning below Wells Dam. For this reason, it is highly probable that the actual conversion rate for adult Plan Species exceeds the 98 percent per-project assumption set forth in the HCP.

**Table 3**  
**Adult Conversion Rates for All Available Release Groups**

<b>Stock Species</b>	<b>Priest Rapids Dam</b>	<b>Wells Dam</b>	<b>Priest Rapids to Wells Total Conversion Rate</b>	<b>Priest Rapids to Wells Average Per Project Conversion Rate<sup>1</sup></b>
All Releases <sup>2</sup> Summer Steelhead 2004-2009	5,480	5,102	93.0%	98.2%
All Releases <sup>3</sup> Spring Chinook 2003-2009	451	420	93.1%	98.2%
All Releases <sup>4</sup> Summer Chinook 2003-2004	15	14	93.3%	98.3%

Source: Columbia River DART website: [http://www.cbr.washington.edu/dart/pit\\_obs\\_adult\\_conrate.html](http://www.cbr.washington.edu/dart/pit_obs_adult_conrate.html)

- 1 Calculated as Priest Rapids Dam to Wells Dam Total Conversion Rate to the fourth root (four dams and four pools). Adults detected at Wells Dam that were not also detected at Priest Rapids Dam were excluded from the analysis.
- 2 Summer steelhead released into the Okanogan and Methow River Systems—PIT-tag release site designations: CHEWUR, METHR, OKANR, OMAKC, SIMILR, TWIS2P, TWISPR, BEAV2C, WINT, LIBBYC, METTRP, and STAPAC. Please note that many fish detected at Priest Rapids in 2009 will not pass Wells Dam until spring of 2010.
- 3 Spring Chinook salmon released into Methow River System—PIT-tag release site designations: CHEWUP, METH, METHR, TWISPP, TWISPR, BEAV2C, WINT, and METTRP.
- 4 Summer Chinook salmon released into Columbia River System above Wells Dam—PIT-tag release site designations: OKANR.

Although not addressed in the HCP, passage of adult bull trout was considered in the operation of Wells Dam in 2009. In 2004, FERC issued an order incorporating the HCP and the U.S. Fish and Wildlife Service (USFWS) *Bull Trout Biological Opinion* into the FERC license for the Wells Dam Project. Article 61 of the Wells Project license requires Douglas PUD to file an annual report with FERC describing the activities required by Douglas PUD's *Bull Trout Monitoring and Management Plan*; Douglas PUD filed this report with FERC on December 24, 2008. There was no separate 2009 update report; the December 24, 2008 report functioned as both the 2008 and 2009 reports.

### 2.3.3.2 Completed Studies 2009

Douglas PUD documented the removal of 19,068 northern pikeminnow from the Wells Reservoir and tailrace during annual removal efforts occurring from March 19 to July 27,

2009. From 1995 to present, the pikeminnow removal programs sponsored by Douglas PUD have resulted in the removal of approximately 193,000 pikeminnow from the Wells Project. Documentation of northern pikeminnow removal efforts in 2009 will be presented to the Wells Coordinating Committee in early 2010.

Douglas PUD studied lamprey passage at Wells Dam in the late summer 2009. Recent data indicated that most adult lamprey entered the adult fishway collection galleries between the hours of 8:00 pm to 12:00 midnight, a time period during which few salmon and steelhead enter the collection gallery. The minimal overlap of passage timing created an opportunity to evaluate reduced gallery-entrance velocities as a possible operational change to improve passage of adult lamprey with nominal impact to salmonids. Douglas PUD stated that any change to gallery entrance velocities would not require a change in in-ladder flows, would not coincide with peak diurnal passage timing of salmonids, could be implemented with a head differential that is at or near original target levels, and would represent a minor window of adjustments. Reducing entrance velocity also reduces fishway attraction flow, which could impact the ability for salmonids and lamprey to locate the ladder entrance. The study results will be carefully considered before any permanent attraction flow reduction is made. At the July 21, 2009 meeting, the HCP Coordinating Committees approved a 30-day study of modified fishway-entrance velocities to evaluate measures to enhance lamprey passage. A draft report of the results from this study may be available in March 2010.

#### *2.3.3.3 Planned Studies 2010*

As per Section 4.2.5.1 of the Wells HCP, Douglas PUD is scheduled for a 10-year “re-evaluation” survival study to re-assess the survival of yearling spring migrants in 2010. In August and September 2008, the Hatchery Committees approved the collection of 44 additional summer/fall Chinook broodstock from the Wells Hatchery program to provide approximately 75,000 smolts for this study. There was no shortfall in Wells summer Chinook broodstock, so this request did not affect the existing program objectives. Yearling summer Chinook from Wells Hatchery were used in the original 1998 study because they are readily available and are not listed under the Endangered Species Act (ESA). Initially, Douglas PUD had planned to conduct the 2010 study as implemented in 1998 to 2000, but instead, at the request of the Coordinating Committees, modified the study plan to include a

lower Okanogan River release group to address survival of fish originating in the Okanogan River. The new survival estimate resulting from the study will be used to adjust (if necessary) hatchery production and/or allocation of fish at various hatcheries in order to continue to meet project mitigation requirements. Under the HCP, the study is a 1-year effort, to be conducted in 2010, using one species with the survival estimate averaged with the previous survival estimates. The Verification Study Plan was approved at the June 23, 2009 Coordinating Committees meeting. Douglas PUD requested and received permission from the Coordinating Committee at the September 22, 2009 meeting, to plan for and obtain study fish for a repeat of the verification study in 2011, as a contingency in the event of a failure of the 2010 study. The Hatchery Committee also approved (by e-mail vote, September 28-30, 2009) the collection of eggs to provide study fish for a 2011 contingency study.

In December 2009, Douglas PUD presented a draft study design to the Committees for a Methow basin steelhead reproductive success study (RSS). The draft study design covers a 12-year period beginning in 2010, focusing on an adult-to-adult assessment of relative reproductive success of hatchery vs. wild fish, and includes the measurement of covariates of fitness. The study is also designed to provide data that may be used to distinguish genetic and environmental influences on productive success. The results of the study are expected to be relevant to management of summer steelhead in the Methow subbasin. The draft RSS plan is Appendix B of the steelhead Hatchery Genetic Management Plan (HGMP), which is currently under review by the Hatchery Committees and scheduled for approval in early 2010.

Douglas PUD is planning a second year of lamprey passage research at Wells Dam in 2010. It is anticipated that testing will be similar to that conducted in 2009. Tests will be conducted at night when impacts on salmonids are minimal and the opportunity to improve lamprey passage is optimal. A study plan will be provided to the HCP CC in early 2010.

Also, as in previous years (see Section 2.3.3.3, 2008 HCP Annual Report), Douglas PUD will continue the pikeminnow removal program in 2010.



## **2.4 Hatchery Compensation**

As required by the HCP, Douglas PUD supported hatchery production in 2009 to compensate for unavoidable project mortality and loss of habitat caused by original inundation by the project. Section 8 of the Wells HCP outlines a Hatchery Compensation Plan with two hatchery objectives for Douglas PUD: 1) to provide hatchery compensation for spring Chinook salmon, summer/fall Chinook salmon, sockeye salmon, summer steelhead, and coho salmon (an obligation to compensate for coho was established in December 2007); and 2) to implement specific elements of the hatchery program consistent with the overall objectives of rebuilding natural populations and achieving NNI.

The Hatchery Committees reviewed the Broodstock Collection Protocols in March 2009 (for Chinook, sockeye, and steelhead). The protocols were finalized in April 2009 and implemented at program hatcheries (Appendix H); in-season revisions were made as needed in coordination with the Hatchery Committees. Coho broodstock collection protocols were provided by the Yakama Nation and are included in the Broodstock Collection Protocols. Broodstock protocols were intended to be a guide for 2009 collection of salmon and steelhead broodstocks in the Methow, Wenatchee, and Columbia River basins. The protocols are consistent with previously defined program objectives such as program operational intent (i.e., conservation and/or harvest augmentation) and mitigation production levels (HCPs, Priest Rapids Dam 2008 Biological Opinion), and they comply with ESA permit provisions. Hatchery compensation for NNI and inundation compensation in 2009 included the release of 836,012 yearling and 427,131 subyearling salmonids from hatcheries associated with the Wells Project (Tables 4 and 5). This total does not include the increased production of natural-origin sockeye smolts attributed to the continued implementation of the Fish-Water Management Tool project administered by the Okanagan Nation Alliance and funded by Douglas PUD and does not include compensation paid to the Yakama Nation for facilities associated with their production of coho in the Methow Basin. These totals also do not include the Methow Basin spring Chinook raised by Douglas PUD for Chelan and Grant PUDs or the yearling steelhead produced at the Wells Hatchery by Douglas PUD for Grant PUD.

### 2.4.1 Hatchery Production Summary

Tables 4 and 5 summarize and compare HCP hatchery production objectives and actual 2009 production levels for both the fixed hatchery compensation for original inundation and harvest enhancement programs and HCP passage loss compensation programs.

#### 2.4.1.1 Inundation Compensation Program

The FERC license to operate the Wells Hydroelectric Project requires Douglas PUD to rear and release fish to compensate for original impacts associated with the development of the Wells Dam and Reservoir. All of the fish for this program are raised at the Wells Fish Hatchery. The number and pounds of fish to be released each year for the Inundation and Harvest Enhancement Program can be found in Section 8.4.6 of the Wells HCP Agreement.

**Table 4**  
**Production Objectives and Release Numbers for the Inundation and Harvest Enhancement Programs in 2009**

<b>Inundation and Harvest Compensation Program</b>	<b>Numeric Target</b>	<b>Number Released</b>
Yearling Summer/Fall Chinook (2007 BY)	320,000	310,063 <sup>1</sup>
Subyearling Summer/Fall Chinook (2007 BY)	484,000	427,131 <sup>2</sup>
Yearling Summer Steelhead (2008 BY)	300,000	326,287 <sup>3</sup>

- 1 C. Snow, (WDFW 2009, pers. comm.) for the total released.
- 2 C. Snow June 2009 shows release on May 11-20 of 427,131 (52.9 fpp). The poundage obligation was affected by this early release of fish, which was approved by the Hatchery Committees on March 21, 2007. Additionally, approximately 11,000 subyearlings escaped from Wells Hatchery during tagging late March and early April.
- 3 C. Snow (WDFW 2009, pers. comm.) indicates total release of 455,145 steelhead smolts at 74,696 lbs, which is 101.1 percent of the numerical target for release. The release includes 326,287 fish for fixed hatchery compensation (harvest), 48,858 for NNI, and 80,000 Group 3 steelhead (under the hatchery sharing agreement with Grant PUD).

### 2.4.1.2 NNI Compensation Program

Section 8.4.3 of the Wells HCP contains specific numbers and pounds of juvenile plan species to be produced to meet Douglas PUD's NNI production levels for unavoidable juvenile losses at the Wells Project. Juvenile passage losses are offset through the production of juvenile plan species at three facilities (Wells Fish Hatchery, Methow Fish Hatchery, and Eastbank Fish Hatchery) and through the implementation of mitigation options identified in the Sockeye Enhancement Decision Tree.

**Table 5**  
**Production Objectives for the HCP Passage Loss Compensation Program Released in 2009**

<b>No Net Impact Compensation Program</b>	<b>Numeric Target</b>	<b>Number Released</b>
Yearling Summer Steelhead (2008 BY)	48,858	48,858 <sup>1</sup>
Yearling Summer/Fall Chinook (2007 BY)	108,570	117,581 <sup>2</sup>
Yearling Spring Chinook (2007 BY)	61,071	33,223 <sup>3</sup>
Yearling Osoyoos Lake Sockeye <sup>4</sup>	7%	55%
Methow Coho <sup>5</sup>	7%	7%

- 1 C. Snow (WDFW, personal communication) indicates a total release of 455,145 steelhead smolts at 75,751 lbs, which is 101.1 percent of the numerical target for release. The release includes 326,287 fish for fixed hatchery compensation (harvest), 48,858 for NNI, and 80,000 Group 3 steelhead under the hatchery sharing agreement with Grant PUD.
- 2 Carlton Pond Summer Chinook are released by Chelan PUD for Douglas PUD as part of the Douglas-Chelan Hatchery Sharing Agreement. The target release for the pond is 400,000 and the actual release in 2009 was 433,256, or 108.3 percent of the goal. NNI "Number Released" (117,581) is 108.3 percent of 108,570 fish.
- 3 There were 299,558 spring Chinook smolts released at an average of 13.9 fpp from the Methow Hatchery (May 2009 Memo from C. Snow). The target release of 550,000 fish was a combination of Wells NNI (61,071) and the sharing agreements with Chelan PUD (288,000) and Grant PUD (201,000). This is 54.4 percent of the numerical target for release for 2009. The shortfall was equally applied to the three programs, giving Wells NNI 33,223 fish, Chelan PUD 156,859 fish, and Grant PUD 109,474 fish in 2009.
- 4 Okanogan Sockeye obligation for NNI is covered by Douglas PUD funding of the Fish/Water Management Tool (FWMT) program managed through the Okanogan Nation Alliance. The HCP Hatchery and Coordinating committees agreed that the continued implementation of this program will satisfy Douglas PUD's 7 percent hatchery compensation requirement for sockeye, based on a retrospective analysis of 25 years of historic data on sockeye production that estimated an average 55 percent increase in annual sockeye smolt production had flows in the Canadian Okanogan been annually managed with the FWMT.
- 5 NNI for Methow coho is achieved through the funding provided to the Yakama Nation Fisheries Enhancement Program as approved by the HCP HC at the December 12, 2007 meeting.

## **2.4.2 Hatchery Planning**

### **2.4.2.1 Monitoring and Evaluation Plan Implementation**

In 2007, Douglas PUD and Washington Department of Fish and Wildlife (WDFW) updated the 2005 Monitoring and Evaluation (M&E) Plan for the operation of Douglas PUD hatchery programs. The M&E Plan is implemented to assist in the determination of whether the specific hatchery objectives defined by the HCP are being met (the M&E Plan is titled: *Conceptual Approach to Monitoring and Evaluation for Hatchery Programs funded by Douglas County Public Utility District*). Implementation of this M&E Plan began in 2006 and continued in 2009 in accordance with two documents: the *Analytical Framework for Monitoring and Evaluating PUD Hatchery Programs*, which was prepared in 2006 (and updated in 2007) and which provides the analysis tools for the M&E Plan; and the document, *Implementation of Comprehensive Monitoring and Evaluation of Hatchery Programs funded by Douglas County PUD* (M&E Implementation Plan), which is prepared annually and describes the M&E activities for the next calendar year, anticipating that adaptive modification of the plan may be necessary in future years. The Hatchery Committees approved the M&E Implementation Plan for next year (2010) in November 2009. The Douglas PUD M&E Report documenting M&E activities in 2008, titled *Monitoring and Evaluation of Wells and Methow Hatchery Programs in 2008*, is still under review. Once finalized and approved by the Hatchery Committee, it will be included in this annual report as Appendix K. A similar report will be expected in 2010 for 2009 monitoring and evaluation of natural production and hatchery operations.

### **2.4.2.2 Hatchery and Genetic Management Plans**

In October 2008, the National Marine Fisheries Service (NMFS) requested that the Wells HCP Hatchery Committee prepare updated HGMPs for Methow and Okanogan basin federal and ESA-listed species hatchery programs. NMFS will use the new HGMPs to determine whether the current Biological Opinions and Incidental Take Permits will require amendment or modification, or will require a new consultation. The draft HGMPs for Wells

Hatchery steelhead and Methow Hatchery spring Chinook were under review by the Committees at the conclusion of 2009 with approval anticipated in early 2010<sup>1</sup>.

In preparing the new HGMPs, NMFS requested that the Hatchery Committees consider the recommendations of the Hatchery Scientific Review Group (HSRG). The HSRG conducted a review of the Columbia River hatcheries in spring 2008. The final HSRG review report was produced in 2009 and included three principles and 17 system-wide recommendations. Recommendations included expressing conservation goals in terms of a population's biological significance and viability, selecting an integrated or segregated broodstock management strategy based on population goals and hatchery program purpose, and managing harvest, hatchery broodstock, and natural spawning escapement to meet HSRG standards for pHOS<sup>2</sup>, pNOB<sup>3</sup>, and PNI<sup>4</sup> appropriate to the affected natural population's designation. Douglas drafted the Wells Hatchery steelhead HGMP and the Methow Hatchery spring Chinook HGMP to achieve consistency with the HSRG's recommendations.

#### **2.4.2.3      *Objective 10 of the Hatchery M&E Plan - NTTOC***

The Hatchery Committees began addressing the interaction of Plan Species with non-target taxa of concern (NTTOC; Objective 10 of the Hatchery M&E Plan) in early 2008. At the close of 2008, the Hatchery Committees agreed to conduct an expert-panel review of risks to NTTOC in late spring 2009 using a risk-based model that WDFW has previously developed and applied in the Yakima River basin (Ham and Pearsons, 2001, Fisheries 26: 15-23). The Hatchery Committees agreed on the species to be analyzed and containment objective categories for these species, as well as potential panel members for the exercise, in November 2008. The final documentation for this decision, titled *Summary and Strategy for Monitoring and Evaluation Plan Objective 10 (NTTOC)*, was made available as Attachment B to the January 21, 2009 Hatchery Committee meeting minutes.

---

<sup>1</sup> The spring Chinook HGMP was approved by the Hatchery Committee on February 17, 2010; approval of the steelhead HGMP is pending

<sup>2</sup> pHOS is the proportion of the natural spawning population made up of hatchery-origin fish.

<sup>3</sup> pNOB is the proportion of hatchery broodstock composed of natural-origin fish.

<sup>4</sup> PNI is the proportion natural influence on an integrated population that results from the combination of pHOS and pNOB.

In August 2009, the Hatchery Committees directed the HETT to conduct the NTTOC assessment. For Hatchery Committees' review, input, and approval, the HETT was asked to develop a list of regional and local ecological experts to serve on a panel to estimate the risk of Plan Species hatchery programs to NTTOC, develop a strategy and logistics for conducting the assessment panel workshops (phone, in person, or a combination of the two), and schedule the workshops. In November 2009, the HETT was working on completing the NTTOC risk template for Hatchery Committees' review in January or February 2010. The HETT is completing the risk analysis for presentation to the Hatchery Committees by approximately March 2010.

#### **2.4.2.4      *Steelhead Reproductive Success Study***

A steelhead reproductive success study (RSS) is required by all three of the Mid-Columbia HCPs; the requirement is in Section 8.5.3 of the Wells HCP. A steelhead RSS is also identified as a Reasonable and Prudent Alternative (RPA) in the Federal Columbia River Power System (FCRPS) Biological Opinion. In December 2009, Douglas PUD presented a draft study design to the Committees for a Methow basin steelhead RSS. The draft study design covers a 12-year period beginning in 2010, focusing on an adult-to-adult assessment of relative reproductive success of hatchery vs. wild fish, and includes the measurement of covariates of fitness. The study is also designed to provide data that may distinguish genetic and environmental influences on productive success. Study results will be relevant to management of summer steelhead in the Methow subbasin. The RSS plan is Appendix B of the steelhead HGMP, which is currently under review by the Hatchery Committees.

#### **2.4.2.5      *M&E Program Control Groups***

In 2007, the HETT was tasked with making recommendations to the Hatchery Committees on reference streams (now called control groups) for the Chelan and Douglas PUDs' hatchery M&E programs. In 2008, the HETT completed the control group analysis for spring Chinook hatchery programs in the Chiwawa, Methow, Chewuch, and Twisp rivers. The HETT considered correlation coefficients for effect sizes, and also productivity and abundance. The next step was for the HETT was to provide a list of recommended control groups for steelhead and sockeye. While work on collection of data for potential steelhead control groups progressed in 2009, the HETT revisited the control groups recommended for spring

Chinook, concluding that the analysis needed to account for the differences in carrying capacity between control and reference groups. At the November 2009 Hatchery Committees meeting, it was reported that the HETT was completing the control group analysis for spring Chinook and will present it to the Committees by approximately March 2010. The analysis will include a document that describes the methods and results for the analysis. The steelhead data were still being analyzed at the end of 2009 and it is expected that this data will also be ready to present in March 2010.

### **2.4.3      *Maintenance and Improvements***

Several maintenance and improvement activities were implemented supporting hatchery production under the Wells HCP in 2009.

#### **2.4.3.1      *Twisp Weir***

The Twisp Weir was heavily damaged in 2006 during spring high flows. Repair and improvement construction was completed in time to use the weir for collection of spring Chinook broodstock in 2008. In 2009, due to ice buildup just upstream of the Twisp Weir, operations could not begin as planned on March 1; however, the weir was operational by March 15 as soon as the ice could be removed from the weir. In March 2009, WDFW developed Twisp Weir Operation Protocols and submitted them to the Hatchery Committees for review. The protocols were intended to guide the operation of the weir for collection and tagging of steelhead, a new use of the weir, which had previously been used only for the collection of spring Chinook broodstock. No comments were received on the protocols, and WDFW successfully used the weir in 2009 to implement two companion studies on steelhead in the Twisp River, in addition to the routine collection of spring Chinook.

#### **2.4.3.2      *Methow Hatchery Broodstock Trap***

A new broodstock trap at the Methow Hatchery outfall was completed and operational by May 2009.

### **2.4.3.3      *Methow Pollution Abatement Venturi System Upgrade***

Douglas PUD notified the Hatchery Committee at the June 17, 2009 meeting that the above-ground vacuum system at the Methow Hatchery for removing waste from the production raceways was performing poorly and that Douglas PUD was in the process of upgrading the existing system with an underground system. System upgrades were completed in October of 2009.

### **2.4.3.4      *West Ladder Brood Collection Trap***

Douglas PUD notified the Hatchery Committee and presented plans at the October 21, 2009 and December 16, 2009 meetings to upgrade the West Ladder fish trapping and steelhead broodstock holding facility at Wells Hatchery. The plan consists of 1) increasing the size of the area where newly arriving fish are held, 2) a crowder and moveable floor system to facilitate handling fish and reduce stress from the current operational practice where the water level must be dropped to handle fish, 3) a brail to allow water-to-water transfer of fish to trucks, and 4) screens to partition the steelhead broodstock holding area. Douglas PUD addressed questions about the project and will report back with additional information as discussed at the December meeting. The project is planned for completion in 2010.

## **2.5      *Tributary Committees and Plan Species Accounts***

As outlined in the Wells HCP, the signatory parties designated one member each to serve on the Tributary Committee. The Rock Island, Rocky Reach, and Wells Tributary Committees meet on a regularly scheduled basis as a collective group to enhance coordination and minimize meeting dates and schedules. Subject items requiring decisions are voted on in accordance with the terms outlined in the specific HCPs. During 2009, the Tributary Committees met on seven different occasions.

The initial focus of the Tributary Committees was to adopt operating procedures, which provide a mechanism for decision making on various issues related to the Committees, and which were provided in the 2005 HCP Annual Report (Anchor 2005)<sup>5</sup>, and most recently

---

<sup>5</sup> Anchor Environmental, L.L.C. 2005. Annual Report, Calendar Year 2005, of Activities Under the Anadromous Fish Agreement and Habitat Conservation Plan. Wells Hydroelectric Project, FERC license no. 2149. Prepared for FERC by Anchor Environmental L.L.C. and Public Utility District No. 1 of Douglas County.



updated in April of 2009. The Tributary Committees also developed Policies and Procedures for soliciting, reviewing, and approving project proposals (Anchor 2005); this document was last updated in April of 2009. The Policies and Procedures provide formal guidance to project sponsors on submission of proposals for projects to protect and restore habitat of Plan Species within the geographic scope of the HCP. The Committees established two complementary funding programs, the General Salmon Habitat Program and the Small Projects Program.

### **2.5.1 Regional Coordination**

Similar to the Hatchery Committees and to improve coordination, a representative from Grant PUD and the facilitator of the Priest Rapids Coordinating Committees (PRCC) Habitat Subcommittee are invited to the Tributary Committees monthly meetings. In addition, they receive meeting announcements, draft agendas, and meeting minutes. This benefits the Tributary Committees through increased coordination and sharing of expertise. The Grant PUD representative and PRCC Habitat Subcommittee facilitator have no voting authority. The Tributary Committees, through the Coordinating Committees, also invited American Rivers and the Confederated Tribes of the Umatilla Indian Reservation to participate in Committees meetings. Both parties contributed to the development of the HCP, yet elected not to sign the document. Neither of these parties participated in the deliberations of the Tributary Committees in 2009.

The Tributary Committees also coordinate with the Upper Columbia Salmon Recovery Board (UCSRB). Coordination is typically between the chairperson of the Tributary Committees and the Executive Director or Associate Director of the UCSRB. The Tributary Committees also invite representatives from the UCSRB to at least one meeting per year to update the Committees on activities proposed by the Board. For example, in January 2009, the Executive Director, UCSRB Regional Technical Team (RTT) Chair, and the UCSRB Data Steward discussed 2009 UCSRB proposed activities with the Tributary Committees. In addition, some members of the Committees typically attend the UCSRB meetings to foster coordination in developing and selecting projects for funding. Some members of the Committees are also members of the RTT, which increases coordination in selecting projects for funding. Many of the policies and procedures of the Salmon Recovery Funding Board

(SRFB) and Tributary Committees are complementary, and annual funding rounds by these funding entities have been coordinated over the last several years.

### **2.5.2      *Fiscal Management of Plan Species Accounts***

The Tributary Committees set up methods for the long-term management of the Plan Species accounts for each HCP. The Wells Tributary Committee agreed to have Douglas PUD manage the accounting services internally, and to structure the relationship so that it can invoice these administrative costs to the Wells Plan Species accounts. The beginning balance of the Wells Plan Species Account on January 1, 2009 was \$1,111,129.33; interest accrued during 2009 was \$8,922.68; funds disbursed for projects in 2009 totaled \$566,084.64; disbursements for administrative costs included \$2,420.86 to Chelan PUD for administrative support provided to the Wells Plan Species Account, and \$2,340.14 to Douglas PUD for account administration during 2009; resulting in an ending balance of \$549,206.40 on December 31, 2009.

In January 2009, the Wells Tributary Committee recommended to the Fisheries Parties (via the Wells Coordinating Committee) that Douglas PUD should make annual payments to the Wells Plan Species Account beginning in 2010, per Section 7.4.1 of the Wells HCP. The annual contribution would be \$176,780 (in 1998 dollars). In February 2009, the Wells Coordinating Committee accepted the recommendation that Douglas PUD make annual payments to the Wells Plan Species Account beginning in January 2010.

In 2009, the Tributary Committees requested an external financial review of the Plan Species accounts. The objectives of the review are to:

- Review all areas associated with the receiving and handling of funds, including processes, internal controls, and work flow. Also review bank statements and statement reconciliation.
- Review project budgets and corresponding financial reporting, assuring that the record keeping is in balance with the intent of the budget.
- Review procedures and controls associated with the allocation and approval of expenses to ensure a tight process.

In November 2009, the Committees hired the accounting firm Cordell, Neher & Company, PLLC, to conduct the financial review. The firm will submit their results to the Committees in February 2010. The Committees will request an external financial review of the Plan Species accounts every 3 to 5 years.

The Wells Tributary Committee delegated signatory authority to the Tributary Committee chairperson for processing of payments for invoices approved by the Committee, with the Coordinating Committee Chairperson serving as the alternate. The Tributary Committee Chairperson works for a limited liability corporation and the Tributary Committees provide funds for liability insurance.

### **2.5.3      *General Salmon Habitat Program***

The Tributary Committees established the General Salmon Habitat Program as the principle mechanism for funding projects. The goal of the program is to fund projects for the protection and restoration of Plan Species habitat. An important aspect of this program is to assist project sponsors in developing practical and effective applications for relatively large projects. Many habitat projects are increasingly complex in nature and require extensive design, permitting, and public participation to be feasible. Often, a reach-level project involves many authorities and addresses more than one habitat factor. Because of this trend, the General Salmon Habitat Program was designed to fund relatively long-term projects. There is no maximum financial request in the General Salmon Habitat Program; the minimum request is \$50,000, although the Committees may provide lesser amounts during a phased project.

In an effort to coordinate with ongoing funding and implementation programs within the region, the Tributary Committees used the previously established technical framework and review process for this area, and worked with the other funding programs to identify cost-sharing procedures.

#### **2.5.3.1      *2009 General Salmon Habitat Projects***

The Tributary Committees announced their 2009 funding cycle in April, with pre-proposal applications due on June 1, 2009 and full proposals due on July 24, 2009. The Tributary

Committees received and reviewed 16 pre-proposal applications. The Committees selected 15 projects that they believed warranted full proposals, and dismissed one project because it did not have strong technical merit.

In July, the Tributary Committees received 14 full proposals to the General Salmon Habitat Program. Most of these were “cost-shares” with SRFB or other funding entities. By the end of December, two proposals were withdrawn by the project sponsors. Of the remaining 12 proposals, the Committees approved funding for six projects. Table 6 identifies the projects, sponsors, total cost of each project, amount requested from Tributary Funds, and, if funded, which Plan Species Account supported the project.

**Table 6**  
**General Salmon Habitat Program Projects Reviewed by the Tributary Committees in 2009**

<b>Project Name</b>	<b>Sponsor<sup>1</sup></b>	<b>Total Cost</b>	<b>Request from T.C.</b>	<b>Plan Species Account<sup>2</sup></b>
White River Nason View Acquisition	CDLT	\$545,000	\$76,635	RI
Upper Methow II (Tawlks) Riparian Protection	MC	\$411,943	\$61,948	RI
Nason Creek UWP Floodplain Reconnection	CCNRD	\$35,000	\$5,250	RI
Upper Methow III (Hardy) Riparian Protection	MC	\$423,402	\$63,520	Not Funded
Foreman Floodplain Reconnection Side Channel	CCNRD	\$208,592	\$104,296	RR
White River Tall Timber Ranch Conservation Easement	CDLT	\$462,000	\$43,000	Not Funded
McLoughlin Falls Conservation	WDFW	\$700,000	\$200,000	Not Funded
Entiat River Troy Acquisition	CDLT	\$406,770	\$325,909	Not Funded
Entiat NFH Habitat Improvement Project	CCD	\$285,886	\$61,373	RR
Nason Creek LWP Floodplain Reconnection Assessment	CCNRD	\$99,166	\$49,583	Not Funded
Lower Wenatchee Instream Flow Enhancement	WRC	\$4,954,466	\$167,500	RI
Peshastin Creek Reconnection Alternatives Analysis	CCNRD	\$84,606	\$12,690	Not Funded

1 CDLT = Chelan-Douglas Land Trust; MC = Methow Conservancy; CCNRD = Chelan County Natural Resource Department; WDFW = Washington Department of Fish and Wildlife; CCD = Cascadia Conservation District; WRC = Washington Rivers Conservancy.

2 RI = Rock Island Plan Species Account; RR = Rocky Reach Plan Species Account.

Only one of the projects approved for funding by the Tributary Committees was eligible for funding by the Wells Plan Species Account (projects must be upstream of Wells Dam). However, in the interest of reserving funds, the Wells Tributary Committee elected not to fund that project with the Wells Plan Species Account.

#### **2.5.3.2      *Modifications to General Salmon Habitat Program Contracts***

The Wells Tributary Committee received no requests from project sponsors in 2009 asking for contract amendments to General Salmon Habitat Program projects funded by the Committee.

#### **2.5.4      *Small Projects Program***

The Small Projects Program has an application and review process that increases the likelihood of participation by private stakeholders that typically do not have the resources or expertise to go through an extensive application process. The Committees encourage small-scale projects by community groups, in cooperation with landowners, to support salmon recovery on private property. Project sponsors may apply for funding at any time, and in most cases, will receive a funding decision within three months. The maximum contract allowed under the Small Projects Program is \$50,000.

##### **2.5.4.1      *2009 Small Projects***

In 2009, the Tributary Committees received four requests for funding under the Small Projects Program. Two projects were approved for funding. The two projects not funded lacked technical merit. Table 7 identifies the projects, sponsors, total cost of each project, amount requested from Tributary Funds, and, if funded, which Plan Species Account supported the project.

**Table 7**  
**Projects Reviewed by the Tributary Committees under the Small Projects Program in 2009**

<b>Project Name</b>	<b>Sponsor<sup>1</sup></b>	<b>Total Cost</b>	<b>Request from T.C.</b>	<b>Plan Species Account<sup>2</sup></b>
Legacy Park Stream Restoration Project	OCD	\$22,370	\$16,500	Not Funded
LWD/Rootwad Acquisition and Transport II	CCD	\$35,000	\$35,000	RI
2010 Entiat River Riparian Planting	CCD	\$49,951	\$49,951	Not Funded
Sleepy Hollow Reserve Protection Feasibility	CCNRD	\$25,000	\$20,000	RI

1 CCNRD = Chelan County Natural Resource Department; CCD = Cascadia Conservation District; OCD = Okanogan Conservation District.

2 RI = Rock Island Plan Species Account; RR = Rocky Reach Plan Species Account.

Only the Legacy Park Stream Restoration Project was upstream of Wells Dam and thus eligible for funding by the Wells Plan Species Account, but the Tributary Committees declined to fund this project as described above.

#### **2.5.4.2 Modifications to Small Project Contracts**

The Methow Conservancy asked the Wells Tributary Committee to expand the geographic scope of the 2008 Riparian Regeneration and Restoration Initiative Project to properties in the Beaver Creek watershed. The purpose of this project is to build re-usable cages that protect seedlings and saplings of cottonwood, aspen, and willow trees within riparian areas along the Methow and Twisp rivers from wildlife browsing. The sponsor requested no change in funding. The Wells Tributary Committee approved the change in geographic scope of the project.

The Methow Conservancy asked the Wells Tributary Committee to extend the termination date of the 2008 Riparian Regeneration and Restoration Initiative Project from December 31, 2009, to October 31, 2010, to allow them to continue to protect seedlings in 2010. The Wells Tributary Committee agreed this extension.

#### **2.5.5 Tributary Assessment Program**

In 2008, the Okanogan Nation Alliance responded to the Tributary Committees request for a proposal to monitor the Okanogan River Restoration Initiative Project. The Wells Tributary

Committee agreed to fund three monitoring tasks of the Okanagan River Restoration Initiative: 1) Fish Holding and Rearing for \$2,983, 2) Channel Morphometry and Hydraulics for \$7,224, and 3) Substrate Composition for \$5,596. Douglas PUD provided funding for the approved monitoring tasks through the Wells Tributary Assessment Program, as per Section 7.5 of the Wells HCP, rather than through the Wells Plan Species Account.

In May 2009, the Okanagan Nation Alliance submitted a report titled, “Aquatic Monitoring of the Okanagan River Restoration Initiative (ORRI)—the initial year, 2008” for Wells Tributary Committee review. The Committee reviewed the report and noted that the monitoring efforts should continue as planned. Thus, the Wells Tributary Committee chose to fund the following components for another year: 1) Fish Holding and Rearing for \$3,867, 2) Channel Morphometry and Hydraulics for \$9,680, and 3) Substrate Composition for \$5,713. The Committee elected not to fund any other “unfunded” components of the monitoring plan. The Committee directed the sponsor to submit another report and budget at the end of the monitoring year (April 2010).

### **3 HCP ADMINISTRATION**

This chapter lists events of note that occurred in 2009 related to the administration of the HCPs, as well as gives a list of reports published in 2009 that relate to the HCPs.

#### **3.1 Mid-Columbia HCP Forums**

In 2005 and 2006, Mid-Columbia Forums (Forums) were held as a means of communicating and coordinating with the non-signatories and other interested parties on the implementation of the HCPs. Non-signatory parties at the time of the 2006 meeting included the Confederated Tribes of the Umatilla Reservation and American Rivers. As in 2007 and in 2008, these parties were invited by letter in 2009 to attend a Forum, in conformity with the 2005 FERC Order on Rehearing 109 FERC 61208 and in accordance with the offer to non-signatory parties of non-voting membership in HCP Tributary and Hatchery Committee processes (Appendix L). The parties indicated no interest in attending a Forum in 2009, and thus a Forum was not held in 2009.

### 3.2 HCP Related Reports Published in Calendar Year 2009

The following is a list of reports released in 2009 related to the implementation of the Wells HCP:

- Anchor QEA. 2009. Annual Report, Calendar Year 2008, of Activities Under the Anadromous Fish Agreement and Habitat Conservation Plan. Wells Hydroelectric Project. FERC License No. 2149. Prepared for FERC. March 2009.
- Audy, N. and K. Long. 2009. Okanagan fish-and-water management tools project assessments: Okanagan River sockeye spawning habitat assessment 2008. 10p., 2 Appendices. Okanagan Nation Alliance Fisheries Department, Westbank, B. C.
- Blankenship, S.M., Bowman, C., Warheit, K.I., and Murdoch, A. 2009. Methow Basin Steelhead – Evaluating the Effects of the Supplementation Program. Report to Douglas County PUD. Prepared by Washington Department of Fish and Wildlife, Molecular Genetics Laboratory, Olympia, WA. March 2009.
- Hyatt, K. D. and M. M. Stockwell. 2009. Okanagan fish-and-water management tools project assessments: Post-season summary of the record of management strategies and decisions for the 2008-2009 fish-and-water year. Draft report to the Canadian Okanagan Basin Technical Working Group. Nov. 2009. 24p.
- Hyatt, K.D., Bull, C., and Stockwell, M.M. 2009. Okanagan Fish and Water Management Tool project assessments: Record of management strategy and decisions for the 2005-2006 fish-and-water year. Can. Manusc. Rep. Fish. Aquat. Sci. 2897: ix + 68p.
- Hyatt, K. D., D. P. Rankin and M. M. Stockwell. 2009. Okanagan fish-and-water management tools (FWMT) project assessments: Osoyoos Lake juvenile sockeye salmon (*Oncorhynchus nerka*) production associated with 2001-2007 brood year returns of adults to the Okanagan River, B. C. Report to file: JSIDS-SRe03-2009. 15p. Salmon in Regional Ecosystems Program, Fisheries and Oceans Canada, Nanaimo, B. C. V9T 6N7.
- Hyatt, K., M. Stockwell, H. Wright, L. Wiens, and P. Askey. 2009. Okanagan fish-and-water management tools project assessments: Brood year 2008 salmon (*Oncorhynchus nerka*) abundance and biological traits. Report to file: JSIDS-SRe04-2009. 27p. Salmon in Regional Ecosystems Program, Fisheries and Oceans Canada, Nanaimo, B. C. V9T 6N7.
- Jerald, T. 2009. Draft 2008 Public Utility District No. 1 of Douglas County: Northern



Pikeminnow Removal and Research Program. Prepared for: Public Utility District No. 1 of Douglas County by Columbia Research. (Approved by the HCP Coordinating Committees, January 26, 2010).

- LGL Limited Environmental Research Associates and Public Utility District No. 1 of Douglas County. 2008. Wells Bull Trout Monitoring and Management Plan 2005-2008 Final Report. Wells Hydroelectric Project, FERC No. 2149. December 24, 2008.
- Long, K., and C. Rivard-Sirois. 2009. Aquatic monitoring the Okanagan River Restoration Initiative (ORRI) - the initial year, 2008. Prepared by Okanagan Nation Alliance Fisheries Department, Westbank, B.C.
- Murdoch, A. and C. Snow. 2009. Implementation of Comprehensive Monitoring and Evaluation of Hatchery Programs Funded by Douglas County PUD. Submitted to Douglas County PUD. October 2009.
- Public Utility District No. 1 of Douglas County. 2009. Annual Report of Operations, Fish Facilities: 2008. Wells Hydroelectric Project, FERC No. 2149. April 2009.
- Snow, C., C. Frady, A. Fowler, and A. Murdoch. 2010. Monitoring and Evaluation of Wells and Methow Hatchery Programs in 2008. Prepared for Douglas County Public Utility District and Wells Habitat Conservation Plan Hatchery Committee. Prepared by WDFW. In review by the HCP Coordinating Committees, December 28, 2009.

APPENDIX A  
HABITAT CONSERVATION PLAN  
COORDINATING COMMITTEES MEETING  
MINUTES AND CONFERENCE CALL  
MINUTES

---

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** February 24, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick, Steve Hemstrom

**Re:** Final Minutes of January 27, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Radisson Gateway Hotel in SeaTac, Washington on Tuesday, January 27, 2009, from 9:30 am to 1:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Ali Wick will distribute the final December 16 Meeting Minutes to the Coordinating Committees (Item I).
- Keith Truscott will send the 2009 Chelan PUD HCP Action Plan for review and comment (Item II-B).
- Steve Hemstrom will provide an electronic copy of the 2009 Chelan PUD Rocky Reach juvenile sockeye survival study plan to Ali Wick for group distribution (Item II-C).
- Steve Hemstrom will provide an electronic copy of the 2009 Rock Island Study Plan to Ali Wick for group distribution (Item II-F).
- The Coordinating Committees will provide comments or edits to the 2009 Wells Action Plan by February 4 (Item III-A).

### DECISION SUMMARY

There were no decision items at this meeting.

#### I. Approval of Meeting Minutes and Agenda (Mike Schiewe)

The December 16 Meeting Minutes were approved with minor revisions. Ali Wick will distribute the final minutes to the Coordinating Committees.

---

## **II. Chelan PUD (Keith Truscott)**

### *A. Rock Island Pikeminnow Ladder Trapping Follow-up*

Keith Truscott updated the group that, for this year, Chelan PUD will use the same Pikeminnow ladder trapping methodology and protocol as in previous years. In response to a question raised at the last Coordinating Committees meeting, Bryan Nordlund said that he had checked with National Marine Fisheries Service (NMFS) staff regarding the rationale for identifying take limits for non-listed Plan Species in the Biological Opinion for the HCPs. They had noted that a relatively large number of adult sockeye had been incidentally trapped during pikeminnow trapping in 2008. Nordlund reported that in his conversation with NMFS staff, 'take' for sockeye was considered in the BiOp because the PUDs, at the time, had wanted some discussion in case sockeye were eventually Endangered Species Act (ESA)-listed. With this information, the Committees said today that they were comfortable with the numbers of sockeye captured during pikeminnow trapping, as they have been released with minimal handling and in good condition, and the Committees do not see this as a problem at this point. They noted that the high numbers were likely a consequence of an exceptionally large return of adult sockeye in 2008. The Committees said they would re-visit this issue if they believe that this is becoming a problem.

### *B. 2009 Chelan PUD HCP Action Plan*

Keith Truscott will send the 2009 Chelan PUD HCP Action Plan for review and comment. This document will be up for approval at the next meeting.

### *C. 2009 Rocky Reach Juvenile Sockeye Survival Study Plan*

Steve Hemstrom distributed and discussed the 2009 study plan for estimating passage timing and project survival for juvenile sockeye at Rocky Reach Dam. The study plan focuses on implementing an alternative fish release strategy, testing for a potential survival advantage that may be inherent to run-of-river (ROR) sockeye that migrate downstream at night and pass the dam under darkness, potentially reducing the overall effect of predation on project survival. The Coordinating Committees asked Hemstrom to include some information on how flow may contribute to fish travel and reservoir residency times. The Committees had questions about how the information gained could be applied in future study years. Steve Hemstrom said that a primary reason to reduce uncertainties related to day/night conditions between study sockeye and ROR sockeye is so that future studies could be designed to match up the study fish release strategy with ROR fish passage timing characteristics. The Committees will review the study plan and provide comments to Chelan PUD. The plan will

---

be up for approval at the next meeting. Steve Hemstrom will provide an electronic copy to Ali Wick for group distribution.

*D. Additional Efforts Toward Improving Rocky Reach Survival*

Keith Truscott said that he had met with senior management at Chelan PUD to ensure a commitment to maximize the implementation efforts for current survival tools in place such as increasing U.S. Department of Agriculture (USDA) and long-lining efforts during Pikeminnow control and he had received support from them. In addition, Truscott also noted that Chelan PUD will also begin preliminary modeling efforts to evaluate additional tools such as intake guidance screens at powerhouse units 3 and 4, and they will also begin a parallel conceptual engineering effort with CFD modeling to analyze potential behavioral guidance devices.

*E. Pikeminnow Control Program*

Keith Truscott said that Chelan PUD would be meeting with Grant PUD to possibly extend the pikeminnow control program to include Wanapum Reservoir because large numbers of pikeminnow have been observed moving upstream at Rock Island Dam in recent years.

*F. Rock Island Study Plan Release Modification*

Steve Hemstrom reminded the group that Rock Island 10 percent spill study would be performed this year on sockeye, steelhead, and yearling Chinook, similar to last year. The changes in releases at Rocky Reach per the 2009 Rocky Reach sockeye study (Item II-C) will change the number of fish per release at Rock Island. Twelve control releases consisting of twice the number of fish are now planned at Rocky Reach (normally 24 releases with half the numbers), to meet statistical requirement and logistical constraints. Hemstrom will provide an electronic copy of the study plan to Ali Wick for group distribution once it is available.

### **III. Douglas PUD (Rick Klinge)**

*A. 2009 Wells HCP Action Plan*

Rick Klinge said that Douglas PUD had sent out an Action Plan for 2009; the Coordinating Committees agreed to provide comments by February 4. The plan will be up for approval at the next meeting.

---

**B. Draft Bypass Operating Memo**

Rick Klinge said that the Draft of the Bypass Operating Memo had been distributed to the group for review. Bryan Nordlund asked whether there was reason to re-visit the fixed start date for the bypass. Klinge said that Douglas PUD has abundant historical data that the fixed start date encompasses 95 percent of spring and summer migration. Klinge further noted that the start date was discussed in the HCP and subsequently agreed to by the Wells Committee. Klinge indicated he will provide the historic hydro acoustic data that helped set this date; he noted that this should help the current Coordinating Committees membership better understand the rationale for this start date. Klinge will also ask Shane Bickford to discuss this at a future meeting. Following this discussion, the Committees approved the bypass plan for 2009.

**IV. NMFS****C. Discussion of Subyearling Chinook Survival Studies**

Bryan Nordlund said that he has recently become aware of some new information about tagging technology. He said that his update today was to provide this information to the Coordinating Committees for consideration when discussing a potential future subyearling survival study in the Upper Columbia. This information indicates that the use of the new flat-plate Passive Integrated Transponder tag (PIT-tag) detectors at downstream dams might greatly reduce the numbers of fish that would be needed to perform a valid study (i.e., higher sampling efficiency). In addition, the Juvenile Salmon Acoustic Tracking System (JSAT) acoustic tags that the U.S. Army Corps of Engineers (Corps) uses are much smaller (0.6 g) and might be used to implant an acoustic tag in subyearling fish (although the JSAT tags do not match the current fish tracking hardware at the dams). Nordlund suggested that the PUDs investigate whether this technology might be useful for subyearling survival studies. It was suggested that later on this year it would be useful to invite researchers using these tools to make presentations for the Committees, so they would be knowledgeable regarding the use of these tools; Tom Kahler and Bryan Nordlund agreed to follow up on this.

**V. Update: Tributary and Hatchery Committees (Mike Schiewe)**

Mike Schiewe updated the group that the Tributary Committees have made their final funding decisions for the 2008 funding cycle. He reviewed the list of funded projects, saying that there were seven proposals, five of which were funded.

---

Schiewe gave an update on the issues under discussion by the Hatchery Committees at the last meeting:

- The Hatchery Committees have come to an agreement to conduct a modeling exercise for Non-Target Taxa of Concern in late spring/summer 2009, to help address Regional Objective 10 of the Monitoring and Evaluation (M&E) Plans.
- The Hatchery Genetic Management Plan (HGMP) Workgroup, as part of the Hatchery Committees, is making progress toward completing new HGMPs required by NMFS; deadlines agreed to by NMFS are the end of March for Wenatchee steelhead and end of May for Chiwawa spring Chinook.
- The Hatchery Committees are discussing and planning a steelhead reproductive success study. They are developing a set of study proposal evaluation protocols that will be used for this and future studies.
- The Hatchery Committees are evaluating the Wells Action Plan.
- Grant PUD has requested rearing capacity at Methow Hatchery.
- NMFS has developed a clinical test to evaluate the proportion of juvenile male Chinook salmon in a hatchery population that will return as jacks or mini-jacks; the Hatchery Committees are considering applying this technique to fish from Chelan PUD's pilot water re-use study.
- The Hatchery Committees are finishing preparations for a sockeye escapement study.
- Chelan PUD is working with the U.S. Forest Service (USFS) on a potential land swap, so that the new Chiwawa steelhead acclimation ponds will be on PUD-owned property.
- The Hatchery Committees received confirmation that Blackbird Island Pond facility was complete and ready for steelhead this spring. Jim Craig reported at today's meeting that the U.S. Fish and Wildlife Service (USFWS) would be installing a PIT-tag detector at the outlet of the pond to check for emigrant steelhead.
- Jerry Marco reported that operations at Bonaparte Pond are going well this year. Groundwater has been used to keep the pond ice-free.
- The Hatchery Committees will soon be reviewing 2009 broodstock collection protocols for this year. Coho broodstock collection protocols will be reviewed prior to June.
- The Yakama Nation is planning a series of regional meetings on their coho program.

- The Yakama Nation expects to submit a proposal to Bonneville Power Administration (BPA) at the end of March for multiple acclimation sites in the Methow and Wenatchee Rivers.
- The Yakama Nation's kelt reconditioning is on hold following review of the Independent Scientific Review Panel (ISRP).

## **VI. HCP Committees Administration (Mike Schiewe)**

### *A. Meeting Schedule*

The upcoming meetings are set as follows:

- February 24 from 9:30 am to 3:00 pm in SeaTac
- March 24 from 9:30 am to 3:00 pm in SeaTac
- April 28 from 9:30 am to 3:00 pm in SeaTac

## **List of Attachments**

Attachment A – List of Attendees



**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor Environmental, L.L.C.
Ali Wick	Anchor Environmental, L.L.C.
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco * (by conference call)	Colville Confederated Tribes
Rick Klinge *	Douglas PUD
Tom Kahler *	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** March 24, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick, Steve Hemstrom

**Re:** Final Minutes of February 24, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Radisson Gateway Hotel in SeaTac, Washington on Tuesday, February 24, 2009, from 9:30 am to 12:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Steve Hemstrom will email new text to be added to the 2009 Rocky Reach Sockeye Survival Study Plan; this text will clarify that the purpose of the study is not to measure survival *per se*, but to gain information on the behavior of juvenile sockeye salmon as they pass Rocky Reach Dam. This text will be subject to Coordinating Committees' approval by email; following this, Keith Truscott will provide the final plan (Item II-B).
- Keith Truscott will update the Coordinating Committees at the next meeting on new resource committees that will be established under the new Rocky Reach Federal Energy Regulatory Commission (FERC) license, and how these committees are expected to relate to the Coordinating Committees (Item II-D).
- Tom Kahler will send out the final 2009 Douglas PUD HCP Action Plan, for the record (Item III-A).
- The Coordinating Committees agreed that they will revisit the discussion of technology for subyearling survival studies in June, in order to provide focus for a full discussion at the September or October meeting (Item IV-A).
- Keith Truscott will ask Chelan PUD to investigate whether there might be an engineering solution that can be applied in order to meet fishway criteria at Rock Island Dam during times when tailwater levels are high (Item IV-B).

- 
- Tom Kahler reported that the Tributary Committees had recommended that Douglas PUD provide new contributions to the Wells Plan Species Account on an annual basis, rather than as a 10-year lump sum, but that the HCP specified that the Joint Fisheries Parties (JFP) needed to approve this action. Douglas PUD will provide a short explanation of this situation to the Coordinating Committees and a JFP agreement will be memorialized at the next Coordinating Committees meeting (Item V).

## **DECISION SUMMARY**

- The Coordinating Committees approved the 2009 Chelan PUD HCP Action Plan (Item II-A). The Coordinating Committees approved the “Study Plan to Compare Effects of Daytime and Nighttime Fish Releases On Estimates of Project Survival For Juvenile Sockeye at Rocky Reach Dam” (Item II-B).
- The Coordinating Committees approved the 2009 Rock Island Study Plan (Item II-C).
- The Coordinating Committees approved the 2009 Wells HCP Action Plan (Item III-A).

### **I. Approval of Meeting Minutes and Agenda (Mike Schiewe)**

The January 27 Meeting Minutes were approved with minor revisions. Ali Wick will distribute the final minutes to the Coordinating Committees.

### **II. Chelan PUD (Keith Truscott)**

#### *A. 2009 Chelan PUD HCP Action Plan*

Keith Truscott said that the 2009 Chelan PUD HCP Action Plan has been reviewed and is now ready for approval. The Coordinating Committees had no further comments and approved the plan as is.

#### *B. 2009 Rocky Reach Juvenile Sockeye Survival Study Plan*

Steve Hemstrom distributed a handout on questions raised by Bryan Nordlund on the 2009 Rocky Reach Sockeye Survival Study Plan, including responses from Chelan PUD. Ali Wick emailed this document to the Coordinating Committees so that Jerry Marco and Bob Rose (participating by phone) could access this during the meeting. Hemstrom discussed each of these comments and how they were resolved.

---

The Committees approved the study plan with the revisions that will be made based on today's discussion. Steve Hemstrom will add new text to the introduction that explains that the purpose of the study is to improve knowledge of juvenile sockeye salmon behavior, and will send it out for approval by email. Following approval of this text, Keith Truscott will provide the final study plan to the Committees. [Update: The new title is: "Study Plan to Compare Effects of Daytime and Nighttime Fish Releases On Estimates of Project Survival For Juvenile Sockeye at Rocky Reach Dam"].

#### *C. Rock Island Study Plan*

Keith Truscott said that the 2009 Rock Island Study Plan has been out for review between meetings and he would like to discuss it and potentially approve it today. He said that the main difference between last year's study and this year's study is that there will be 12 tailrace releases of juvenile sockeye salmon at Rocky Reach Dam this year instead of 24 releases, as there were last year. The Coordinating Committees approved this study plan today.

#### *D. Rocky Reach FERC License*

Keith Truscott notified the Coordinating Committees that Chelan PUD has received its Rocky Reach FERC license. Bill Tweit asked how the relicensing committees would be structured and asked for information on how the Coordinating Committees would interface with these groups. Truscott said that he will provide an update to the Coordinating Committees on this at the next meeting. Truscott will also distribute the FERC license for the Coordinating Committees' information.

#### *E. Rocky Reach Surface Collector Video*

Steve Hemstrom presented several Dual-frequency Identification Sonar (DIDSON) hydro-acoustic videos of fish behavior in the entrance to the Rocky Reach surface collector; videos documented predation by presumptive Northern pikeminnow on smolts. It is not possible to identify the species of smolt in this type of footage due to video quality.

### **III. Douglas PUD (Rick Klinge)**

#### *A. 2009 Wells HCP Action Plan*

Tom Kahler notified the Coordinating Committees that the 2009 Wells HCP Action Plan has been reviewed and is ready for approval. The Committees provided some comments and approved the plan. Kahler will send out the final plan for the record.

---

*B. Fish Salvage during Annual Maintenance of the West Ladder at Wells Dam*

Tom Kahler updated the group that Douglas PUD had sent out a memo on the results of fish salvage during annual maintenance of the west ladder at Wells Dam. There were no questions on this report.

*C. Douglas PUD Committees' Representation*

Mike Schiewe updated the group that Tom Kahler will be the new Coordinating and Hatchery Committees representative and Rick Klinge will be the alternate. Also, Bob Clubb at Douglas PUD will soon be retiring.

**IV. NMFS (Bryan Nordlund)***A. Discussion of Subyearling Chinook Survival Studies*

Last meeting, Bryan Nordlund suggested that the PUDs investigate whether the new flat-plate Passive Integrated Transponder tag (PIT-tag) detection technology might be useful for subyearling survival studies. Today, Nordlund updated the group that he had continued to evaluate whether it may be possible to conduct subyearling survival studies with current technology. Some of the issues he brought up included residualism of subyearling migrants, and potential locations of new PIT-tag detector arrays. The Coordinating Committees agreed that they will revisit this discussion in June, with the intention of having information gathered by September to have a detailed discussion on whether current technology is sufficient to conduct these studies.

*B. Fishway Winter Outages*

Bryan Nordlund brought up the topic of fishway operating criteria. He noted that Dave Benner of the Fish Passage Center has released a 'report card' for fishway operation at Rock Island Dam (in a memorandum entitled "Pertinent Data for Fish Facility Inspections in 2007 at Rock Island Dam"). Nordlund asked Chelan PUD to investigate whether there might be an engineering solution that can be applied in order to improve the probability of meeting criteria. This has been a reoccurring problem at Rock Island Dam, particularly when tailwater levels are high. Keith Truscott agreed to take this question back to Chelan PUD's Operations and Maintenance staff and will report back to the Coordinating Committees.

**V. Update: Tributary and Hatchery Committees (Mike Schiewe)**

Mike Schiewe updated the group on the issues under discussion by the Tributary Committees at their last meeting:

- 
- The Tributary Committees have decided that their preference is for Douglas PUD to provide yearly installments to the Wells Plan Species Accounts beginning in January of 2010, rather than to provide another lump-sum payment (as per Section 7.4 of the Wells HCP). Tom Kahler reminded the Coordinating Committees today that the decision on funding options is not a necessarily for the Wells Tributary Committee, but rather, the HCP requires only that there be JFP agreement on this issue. When this was explained to the Wells Coordinating Committee at their January meeting, the representatives of the JFP indicated that they would inquire about this within their respective entities, but ultimately they desired the input from their counterparts on the Wells Tributary Committee. Therefore, Douglas PUD will provide a short explanation of this situation to the Committees and JFP agreement will be memorialized at the next Coordinating Committees meeting.
  - The Tributary Committees are reviewing their policies and procedures.
  - The Tributary Committees are implementing an external audit.
  - The Tributary Committees discussed the idea of combining agenda items that are common to both the Priest Rapids Coordinating Committee (PRCC) Habitat Subcommittee and the Tributary Committees.
  - The Tributary Committees reviewed the Salmon Recovery Funding Board application form.
  - The Tributary Committees received an update on activities proposed by the Upper Columbia Salmon Recovery Board in 2009.

Schiewe gave an update on the issues under discussion by the Hatchery Committees at the last meeting:

- The Hatchery Committees are working on Wenatchee steelhead and Chiwawa spring Chinook Hatchery Genetic Management Plans (HGMPs) and are preparing for submittals to National Marine Fisheries Service (NMFS) this spring.
- The Hatchery Committees are developing a protocol for development and review of study plans by the Hatchery Committees.
- Chelan PUD introduced the Integrated Hatchery Improvement Plan (IHIP), a Chelan PUD comprehensive planning effort that will guide hatchery improvements over the coming years.
- The Hatchery Committees agreed to test the pilot water reuse study fish for precocity.

- 
- The Hatchery Committees are moving forward on an adult sockeye enumeration study.
  - Chelan PUD has met with Bonneville Power Administration (BPA) staff (Jeff Gislason and others) regarding the processes to be used for funding and review of studies implemented under the recently signed Three Treaty Tribes Memoranda of Agreement (MOAs).
  - Columbia River Inter-Tribal Fish Commission (CRITFC) and Chelan PUD have had preliminary discussions regarding installation of a PIT-tag detection array for adults in the fishway (or at additional sites) at Zosel Dam in the Okanogan basin.
  - Grant PUD will be using the Lake Wenatchee net pens to acclimate White River spring Chinook this spring; the Hatchery Committees supported this use, and acknowledged the potential risk for damage to the pens during movement of the pens to another location within the lake.
  - Chelan PUD has signed an interim agreement with Washington Department of Fish and Wildlife (WDFW) to collect steelhead tissue samples at Tumwater Dam.
  - The Hatchery Committees are working to identify agreed-upon goals and objectives for a Wenatchee Steelhead Reproductive Success Study. Today, Bill Tweit suggested that there might be a need for a symposium to get input from regional researchers. Mike Schiewe and Bill Tweit will discuss this offline.
  - Due to ice buildup just upstream from the Twisp Weir, Douglas PUD will not be able to begin operation of the Twisp Weir on March 1 as planned. The Hatchery Committees agreed to this.
  - Douglas PUD is considering options for implementing a steelhead reproductive success study in the Methow basin. Douglas PUD staff will be working with Andrew Murdoch on refining a study design proposed in 2007 by WDFW that used the Well Spawning Channel Study.
  - The Hatchery Committees agreed that Douglas PUD can rear 80,000 summer steelhead at Wells Hatchery and 201,000 spring Chinook at Methow Hatchery on behalf of Grant PUD.
  - Douglas PUD is still working through the details of access to the east ladder during the turbine re-wind construction project at Wells Dam.

## **VI. HCP Committees Administration (Mike Schiewe)**

### *A. Meeting Schedule*

The upcoming meetings are set as follows:

- March 24 from 9:30 am to 3:00 pm in SeaTac
- April 28 from 9:30 am to 3:00 pm in SeaTac
- May 26 – Wenatchee meeting: potential agenda will be to watch sockeye tagging

## **List of Attachments**

Attachment A – List of Attendees



**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco * (by conference call)	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose * (by conference call)	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** April 28, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick, Steve Hemstrom

**Re:** Final Minutes of March 24, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Radisson Gateway Hotel in SeaTac, Washington on Tuesday, March 24, 2009, from 9:30 am to 12:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Tom Kahler will send the final Statement of Agreement (SOA) for annual contributions to the Wells Plan Species Account to Ali Wick for distribution (Item III-D).
- Keith Truscott will prepare two SOAs for Chelan PUD reports and study plans approved today, one for the 2008 studies and one for the 2009 plans (Item V-A).

### DECISION SUMMARY

- The Coordinating Committees approved the SOA memorializing the decision by the Fisheries Parties to accept the recommendation of the Wells Tributary Committee regarding future Douglas PUD contributions to the Wells Plan Species Account (Item III-D).

### I. Approval of Meeting Minutes and Agenda (Mike Schiewe)

The February 24 Meeting Minutes were approved, with minor revisions. Ali Wick will distribute the final minutes to the Coordinating Committees.

### II. Update: Tributary and Hatchery Committees (Mike Schiewe)

Mike Schiewe updated the group on the issues under discussion by the Tributary Committees at their last meeting:

- 
- The Tributary Committees reviewed a Small Projects Program application from the Okanogan Conservation District titled Legacy Park Stream Restoration Project, and decided not to fund the project due to some concerns about stream bank stability and the potential for surface erosion.
  - In April, the Tributary Committees will finalize their Tributary Fund Policies and Procedures for Funding Projects and the Tributary Committees Operating Procedures.
  - Dennis Beich had initiated a Tributary Committees discussion about connecting tributary projects to hatchery projects and whether it makes sense to do so. At today's Coordinating Committees meeting, Mike Schiewe said that he had a discussion with Tracy Hillman (chair of the Tributary Committees) discussing this. Schiewe said today that the Hatchery Committees are extremely busy at this time managing the revision of Hatchery Genetic Management Plans (HGMPs), but he and Hillman will be talking about this once the HGMPs are finished. Keith Truscott then noted that Joe Miller will soon be replacing him as the Tributary Committees representative.

Schiewe gave an update on the issues under discussion by the Hatchery Committees at the last meeting:

- The Hatchery Committees are nearing completion of the Wenatchee steelhead HGMP, which is scheduled to be submitted to National Marine Fisheries Service (NMFS) on March 31. The current draft includes a statement that priorities of the hatchery program are mitigation or production, escapement, and management for a Proportion of Natural Influence (PNI) objective of 0.67.
- The Hatchery Committees are discussing the level of support Chelan PUD will provide in implementing adult management at Tumwater Dam. It was discussed that Chelan PUD would likely state in their cover letter transmitting the revised HGMP to NMFS that responsibilities for adult management is a topic under continuing discussion.
- The next HGMP to be completed will be for Chiwawa spring Chinook, which is due to NMFS on May 31. Following that, the Methow HGMPs will be due in July.
- The protocol for the development and review of study plans by the Hatchery Committees is on hold, as the HGMPs are currently taking most of the work time available.

- 
- NMFS' Hatchery Committees representative, Kris Petersen, will abstain from voting on Hatchery Committees agreement on the HGMPs because she will be the NMFS regulatory reviewer for the document(s).
  - Chelan PUD is collecting information for a potential study of rearing densities of steelhead and sockeye salmon and will be providing a proposal soon.
  - Chelan PUD would like to conduct a pilot water reuse study at Chiwawa Ponds for rearing and acclimating Wenatchee steelhead. This would not change the schedule or design of the current project for acclimation facilities at Chiwawa ponds. The Committees will be making a decision on this at the next meeting.
  - The 2008 Chelan PUD M&E Report is out for review.
  - The Sockeye Enumeration Study Plan is nearing completion and will be implemented this year.
  - Construction at Blackbird Island Pond has been completed.
  - Douglas PUD and Washington Department of Fish and Wildlife (WDFW) have discussed interim solutions for access to the east ladder at Wells Dam for 2009 including the ability to periodically move the portable building that currently blocks access to the ladder.
  - The Hatchery Committees will soon discuss developing an integrated steelhead reproductive success study plan that would consider not only the HCP required studies, but also the studies required by the Reasonable and Prudent Alternative (RPA) in the Federal Columbia Power System (FCRPS) Biological Opinion and the Grant PUD Settlement Agreement.
  - NMFS has released a notice of decision on expanding the scope of the Environmental Impact Statement (EIS) that analyzes the operation of Columbia River Mitchell Act hatcheries.
  - The 9th District Court of Appeals has made a ruling in NMFS' favor on a legal case against NMFS regarding how NMFS treats hatchery programs in Endangered Species Act (ESA) listings.
  - The Hatchery Committees approved NMFS researchers collecting 200 summer Chinook yearlings from each of several programs for a precocity study. The collected fish would come from stocks at Dryden, Similkameen, Carlton, and Wells hatchery facilities.
  - Broodstock collection protocols are under review and are due to NMFS by April 15.

- 
- WDFW sent out the Twisp Weir Operations Protocol. The ice has been removed from the weir and the weir is now in operation.
  - The Methow Hatchery staff have asked Douglas PUD to design and build a new broodstock collection trap at the hatchery outfall. Douglas PUD is fulfilling this request.
  - The Hatchery Committees agreed with the Colville Tribes' request for 25,000 Wells summer steelhead smolts for release in Salmon Creek again this year, as in the past 3 years.
  - The Hatchery Committees received an update on a proposed study to measure egg-to-fry survival in several spring Chinook populations in the Upper Columbia. The principal investigator will be Phil Roni, a NMFS watershed ecologist at the Northwest Fisheries Science Center. These data will be used in habitat-based population modeling.
  - Dave Burgess from Grant PUD is conducting a predator impact study in Priest Rapids Reservoir and will be requesting 20 reference samples (fish specimens; e.g., fresh hatchery mortalities) from each Upper Columbia hatchery program in 2009.
  - Columbia River Inter-Tribal Fish Commission is considering a Passive Integrated Transponder Tag (PIT-tag) Array at Zosel Dam for sockeye monitoring, and may build this at a future time when funding is available.

### **III. Douglas PUD (Rick Klinge)**

#### *A. Initiation of the Juvenile Bypass per 2009 Action Plan*

Rick Klinge notified the Coordinating Committees that Douglas PUD is planning to initiate the operation of the juvenile bypass system on April 12 at 0000 hours.

#### *B. Repair to Tailrace Gull Wires*

Rick Klinge updated the group that the tailrace gull wires will be repaired next week by U.S. Department of Agriculture (USDA). Typical of past years, hazing with pyrotechnics will be implemented in April and May during spring juvenile migration.

#### *C. Start of Pikeminnow Removal Efforts*

Tom Kahler reported that pikeminnow removal efforts have begun for this year and will end in July. Fishing has been slow because of cold water temperatures, which are often encountered early in the season.

---

*D. SOA for Annual Contributions to Wells Plan Species Account*

Douglas PUD is proposing to make Wells Plan Species Account payments annually instead of lump sum payments. Tom Kahler reminded the group that the Coordinating Committees and the Tributary Committees have both discussed this so far. The Coordinating Committees agreed to the SOA distributed today that memorializes the decision by the Fisheries Parties to accept the recommendation of the Wells Tributary Committee on this matter. Kahler will send out a final SOA for consideration and will send this to Ali Wick for distribution.

**IV. NMFS (Bryan Nordlund)**

*A. Effects of Chief Joseph Spill Tests on Bypass Operations at Wells Dam*

Bryan Nordlund asked whether the ongoing tests at Chief Joseph Dam investigating spill and total dissolved gas would have any effects on bypass operations at Wells Dam. Tom Kahler and Rick Klinge said that they do not expect that there will be an effect.

**V. Chelan PUD (Keith Truscott)**

*A. Chelan PUD Reports and Study Plans*

Keith Truscott listed several reports and study plans for which agreement needs to be memorialized for the record. The Coordinating Committees stated their approval of these documents today. Truscott will prepare two SOAs, one for the 2008 studies and one for the 2009 plans, stating that the Committees approved these documents. The documents include:

- Survival of Yearling Chinook Salmon Smolts through the Rock Island Project in 2008
- Acoustic Tag Investigations of Sockeye Salmon Smolt Survival and Migration Dynamics at Rocky Reach Dam in 2008
- Route Specific Passage of Juvenile Chinook and Sockeye Salmon using Acoustic Tag Methodologies at Rocky Reach and Rock Island Dams in 2008
- Biological Evaluation of the Rocky Reach Juvenile Fish Bypass System Final Report 2008
- Rocky Reach and Rock Island Fish Passage Plan 2009
- Study Plan for the Biological Evaluation of the Rocky Reach Juvenile Fish Bypass System 2009
- 2009 Fish Spill Plan – Rocky Reach and Rock Island Dams
- Approval of Revised Title and Language for 2009 Rocky Reach Sockeye Study Plan

---

*B. Rock Island Attraction Water Pumps*

Keith Truscott said that Chelan PUD is developing a plan for long-term maintenance of the attraction water pumps at Rock Island. To begin, Chelan PUD staff met internally and agreed to compile background information on all work that has been done over the years with the attraction water pumps.

*C. Feedback on Juvenile Subyearling Survival Study Planning*

Keith Truscott said that Chelan PUD and Douglas PUD are putting together workgroups to investigate the potential to conduct subyearling survival studies in the future.

*D. EonFusion Software*

Steve Hemstrom said that Hydroacoustic Technology, Inc. (HTI) has a new software tool called EonFusion that can be used to take a visual and analytical look at fish data versus time in relation to forebay configurations. Data from 2008 Rocky Reach sockeye passage has been uploaded into the software at HTI. Examples of metrics that the software can produce include amount of water passing the units, spillway flow, and bypass flow. The program also shows fish behavior and can produce “fish tracks” for fish travel. The Coordinating Committees will receive a presentation on this at the upcoming May meeting. Hemstrom said that the software did not currently have an ability to do predictive modeling of how changes in behavior would be affected by the parameters, but if there was some level of certainty on parameter behavior correlated with fish behavior, predictive model runs could potentially be done. He said, however, that the software is not necessarily geared for this use, and his understanding is that it runs best with real data.

*E. Startup of Tagging Operations and Juvenile Fish Collection Facility*

Keith Truscott updated the group that Chelan PUD's tagging crews have arrived and are now being trained for this year's work. Yesterday, the sampling screen that shunts fish into the Rocky Reach juvenile fish facility building was accidentally misaligned. While performing operational checks of the sampling screen, the Rocky Reach plant crew deployed the screen and immediately observed that one of the four hydraulic cylinders (for deployment and retraction) was operating too quickly. They immediately stopped the screen deployment, but one cylinder continued to operate, which led to the misalignment. The cause of the failure was determined to be cracked rubber bladders inside accumulator tanks that store 160 gallons of pressurized hydraulic oil.

---

Rocky Reach personnel deduced that air had been introduced into the hydraulic system, and the compressed air caused the one cylinder to continue to operate until pressures were equalized. The bladders have been temporarily isolated from the hydraulic system to allow the sampling screen to be deployed and retracted. Replacement bladders have been ordered and will be installed when delivered (in approximately 2 weeks.)

He also noted that there is currently one non-operational knife-gate located in turbine unit 1 south gate slot (C-1 South). The knife-gates are hydraulically operated valves mounted in collection pipes that transport fish from each of twelve weir boxes of the intake screen system. Each gate slot (six slots total—turbine units 1 and 2 combined) contains two weir boxes. The knife-gates are used to isolate individual weir boxes for repair, maintenance, or contamination of the gate slot water, and are operated either 100 percent open or 100 percent closed.

Because there are two weir boxes per gate slot, even with one knife-gate inoperable, as in the case of C-1 South, the fish still have access to a weir box and associated collection pipe as a bypass route. Due to the fact that fish can still access the bypass route from C-1 South, the District will leave that inoperable knife-gate closed for the duration of the bypass operating season. This decision was made with consideration of the fact that allowing the non-operational knife-gate to remain at 100 percent open would significantly hinder the District's response in isolating any possible contamination of the gate slot water.

#### *F. Rocky Reach License Update*

Keith Truscott said that Chelan PUD is seeking a rehearing with Federal Energy Regulatory Commission (FERC) on the new Rocky Reach license, asking for clarification on the 43-year time period that was granted in the license, as well as a removal of bull trout critical habitat from the license, since such habitat has not been designated at the Project. Truscott said that in the meantime, Chelan PUD will be progressing with the work that extends from the license because the license does not go on hold while this appeal is in process.

Truscott said that the license work most relevant to the Coordinating Committees will be the Rocky Reach Fish Forum that will meet and develop future actions for fisheries management. There will be an email and meeting set up in the next month that will begin to shape this forum. Truscott said that one question might be how the Coordinating Committees might interact with the Fish Forum. He said that coordination between the Fish



Forum and the Coordinating Committees would be necessary for non-Plan Species such as sturgeon and lamprey, since Plan Species are the responsibility of the Coordinating Committees. Bob Rose suggested the idea of coordinating across the three PUDs (Chelan, Douglas, and Grant PUD) on the Fish Forum, since these species typically cross all five reservoir pools in their use of habitat. Truscott said that a coordinated effort might make sense for certain subjects, and Chelan PUD will be laying this out in the coming months.

## **VI. HCP Committees Administration (Mike Schiewe)**

### *A. Meeting Schedule*

The upcoming meetings are set as follows:

- April 28 from 9:30 to noon in SeaTac
- May 26 – Potential agenda to include EonFusion demonstration at Rock Island and visit to juvenile sampling facility and sockeye tagging at Rocky Reach; wear steel-toe boots, safety glasses, and hard hats if you have them
- June 23 from 9:30 to noon in SeaTac

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Rick Klinge *	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** May 27, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick, Steve Hemstrom, Josh Murauskas,  
Shane Bickford

**Re:** Final Minutes of April 28, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Radisson Gateway Hotel in SeaTac, Washington on Tuesday, April 28, 2009, from 9:30 am to 12:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Shane Bickford will draft a Statement of Agreement (SOA) for the next meeting for the Wells Hydroelectric Project survival verification study. The SOA will state that a future survival study may be conducted targeting fish originating in the Okanogan River (Item III-B).
- Douglas PUD and Chelan PUD will continue to discuss the logistics of a Passive Integrated Transponder tag (PIT-tag) detector at Rocky Reach to support Douglas PUD's survival verification study (Item III-B).
- Rick Klinge will send the Columbia River Inter-Tribal Fish Commission (CRITFC) sockeye proposal to Ali Wick for distribution (Item III-C).
- Mike Schiewe will confirm the approval of the Chelan PUD SOAs with Bill Tweit and Bob Rose (Item IV-A).
- Chelan PUD will update the Coordinating Committees by email regarding tag failure rate in the steelhead and spring Chinook survival studies at Rock Island Dam; and will schedule a conference call if necessary (Item IV-B).
- Mike Schiewe will follow up with Columbia Basin Fish and Wildlife Authority (CBFWA) for more information about the survival data request. (Item V).

## **DECISION SUMMARY**

- Chelan PUD SOAs for 2008 reports and 2009 studies were approved pending approval by Bill Tweit and Bob Rose (approval was confirmed via email on May 4 and 5).

### **I. Approval of Meeting Minutes and Agenda (Mike Schiewe)**

The March 24 Meeting Minutes were approved, with revision to the due date to May 31 for the spring Chinook Hatchery Genetic Management Plan (HGMP) described in the minutes. Ali Wick will distribute the final minutes to the Coordinating Committees.

### **II. Update: Tributary and Hatchery Committees (Mike Schiewe)**

Mike Schiewe updated the group on the issues under discussion by the Tributary Committees at their last meeting:

- The Tributary Committees approved expansion of the Methow Conservancy's Riparian Restoration and Regeneration Initiative Project to properties in the Beaver Creek watershed.
- The Tributary Committees approved a proposal from Cascadia Conservation District (CCD) to collect large woody debris (LWD)/rootwads for use in projects. The money was allocated, but requires CCD to coordinate with the Tributary Committees each time they access funds to purchase, transport, and stockpile wood.
- The Tributary Committees completed a review of policies and procedures; they accepted minor changes, and these changes are now posted on their website.
- The Committees will hire an outside accountant to review the Committees' management of the Plan Species accounts.
- The Tributary Committees are working to develop a uniform policy for acceptable administrative costs associated with projects. The purpose is to establish an administrative cost threshold for use in assessing the relative cost-effectiveness of projects.

Mike Schiewe gave an update on the issues under discussion by the Hatchery Committees at the last meeting:

- A primary focus of the last Hatchery Committees meeting was a presentation on the Wenatchee Spring Chinook Implementation Plan. The general approach would be to use genetic data to segregate all unmarked spring Chinook arriving at

Tumwater Dam based on tributary-of-origin, and use this information for broodstock collection and decisions to pass fish upstream for natural spawning. The Off-Ladder Adult Fish Trap (OLAFT) at Priest Rapids Dam would be used to collect unmarked, returning adults and conduct pedigree analyses. The Hatchery Committees may need an extension from National Marine Fisheries Service (NMFS) beyond the May 31 deadline because of the anticipated timeframe necessary for Committees review and approval of the Implementation Plan. NMFS indicated this would be acceptable as long as good progress is being made toward completing the HGMP.

- Mike Schiewe reported that he has contacted NMFS, Bonneville Power Administration (BPA), and Northwest Power Planning and Conservation Council (NPPC) staff regarding interest in developing an integrated plan for steelhead reproductive success studies in the Upper Columbia River. BPA and NPPC both acknowledged the value of coordinating these efforts. BPA also indicated that the development of an integrated plan would have to be a very public process to avoid the potential perception of a conflict of interest. This potential perception stems from parties participating in the plan development later submitting proposals to conduct the planned research. Some Hatchery Committees members voiced concern that the multiple jurisdictions involved in such a study would cause a delay. Schiewe agreed, but indicated that he felt that the benefits of having a single integrated plan were worth the additional time and effort.
- The Hatchery Evaluation Technical Team (HETT) is working to incorporate a consideration of carrying capacity in the process of identifying control populations against which measure supplementation effects.
- Chelan PUD submitted the draft HGMP for Wenatchee steelhead to NMFS on March 31. No feedback from NMFS has been provided yet.
- Chelan PUD is moving forward on a Chiwawa spring Chinook HGMP draft due May 31. This HGMP is tied to the implementation plan being prepared by Washington Department of Fish and Wildlife (WDFW) and the Yakama Nation.
- For the Douglas PUD HGMPs, discussions are underway to reduce the number of HGMPs required by combining populations in a sensible manner. The deadline for the draft Douglas PUD HGMPs is July 31.
- The Chelan PUD update topics included the following:

1. A discussion of the 2008 Summer Chinook Pilot Water Reuse Study: Sam Dilly noted that some gill irritation was observed, possibly due to elevated levels of carbon dioxide and algal growth in the pond.
2. Chelan PUD introduced an SOA for a pilot Chiwawa steelhead water reuse Study. A unique aspect of the steelhead study (as compared to the summer Chinook study) is the use of surface water. Surface water will likely carry higher concentrations of sediment particulates and has a greater potential for introducing fish pathogens. Following a follow-up review by WDFW fish health staff, the Hatchery Committees approved the SOA.
3. The Hatchery Committees approved Chelan PUD's request for short-term holding of adult sockeye broodstock at Eastbank Hatchery per a WDFW memo with this recommendation.
4. The installations of the PIT-tag detection arrays in the White and Little Wenatchee rivers are complete and will be operational by June 1. These detectors were installed for the purpose of collecting sockeye and spring Chinook information. Data from both of these arrays will be archived in the PIT Tag Information System (PTAGIS).
5. Shaun Seaman reported that all is well at Blackbird Island Pond. Several Hatchery Committee members visited the pond after the Hatchery Committees meeting. He commended the Hatchery Committees for their teamwork in helping to get the project accomplished. Fish were placed into the pond on March 27 and will likely be released in early May.
- The Douglas PUD update topics included the following:
  1. There was an unintended release of subyearling summer Chinook from the Wells Hatchery. This escape likely happened at the time of marking, but the exact cause is not known at this time. Chelan PUD provided Douglas PUD with information from the Rocky Reach bypass to help calculate a rough estimate of the number of fish that may have escaped. The estimated number was not available, but it is believed to be a small number.
  2. A large log/ice jam upstream of the Twisp weir was observed in early April, and there has been concern that when it breaks up it could block the water intake of the Twisp Acclimation Pond. The Wells Committee discussed this risk, but was reticent to forego acclimation and drop-plant fish upstream of the weir. The Wells Committee approved moving the fish to the acclimation pond, which occurred on April 15. The fish were subsequently acclimated for

7 days and released on April 22. Ultimately, the log/ice jam did not impact the water supply to the ponds or the fish. Based on this experience, WDFW and Douglas PUD staff agreed to meet to consider possible ways to minimize the risk of water intake blockage at the Twisp holding ponds in future years, and will report back at the June Hatchery Committees meeting.

- Dave Carie provided a memorandum from the U.S. Fish and Wildlife Service (USFWS) detailing plans for removal of ad-clipped and non-Coded-Wire-Tagged (CWT) Leavenworth Hatchery strays at Tumwater Dam. Carie noted that these fish cannot be distributed for human consumption because they will have been treated with MS-222. Tom Scribner will be following up with USFWS personnel to discuss options for surplus fish other than euthanizing them.

### **III. Douglas PUD (Rick Klinge)**

#### *A. Proposed Chief Joseph Flip-Lip Tests for 2009*

Rick Klinge informed the Coordinating Committees that Chief Joseph Dam would be conducting spill testing this spring to assess the recently installed flip-lips for their effectiveness at reducing total dissolved gas. Bryan Nordlund noted that he had been alerted as well, and that it was his understanding that the testing would occur in the next week or so. Klinge summarized that the spill schedule has been developed, and the test starts today. The Corps will target 5 spill rates between 18,000 cubic feet per second (cfs) and 145,000 cfs. It will be a 4-day test, ending Friday May 1. Operators of downstream projects will manage pool levels to accommodate pulses of water that will result from the study. Mike Snyder (U.S. Army Corps of Engineers [Corps]) and Joe Carroll (contractor formerly with Corps) will be managing the tests. There is the potential for gas bubble trauma (GBT) to occur in migrating fish, and biologists will be watching for signs of GBT at downstream sampling locations.

#### *B. 2010 Verification Survival Study*

Shane Bickford and Josh Murauskas sent a draft plan for a 2010 Wells Dam Survival Verification Survival Study to the Coordinating Committees in mid-April. The purpose of today's discussion was to provide an overview of the study plan and receive Committee feedback; Douglas PUD was not seeking approval of the plan at this meeting. In describing the plan, Bickford indicated that the HCP requires survival verification studies every 10 years following achievement of the Phase III (Standard Achieved) designation. Since the original studies were completed in 2000, the next study is due in 2010. Bickford noted that

Douglas PUD had received approval from the Wells Hatchery Committee in 2008 to rear an extra 70,000 yearling summer/fall Chinook for study.

Bickford indicated that Douglas PUD will utilize PIT-tagged fish and the double release model to estimate survival; he described the precision/accuracy considerations in designing the proposed study, including sample sizes. The planned detection locations are McNary, John Day, and Bonneville Dams, with the possible addition of Rocky Reach Dam. Douglas PUD is working with Chelan PUD to install a PIT-tag detection system in the Rocky Reach Juvenile Fish Bypass system. The addition of a Rocky Reach detection location would increase the probability of meeting HCP precision/accuracy standards with 70,000 fish, whereas without detection at Rocky Reach, up to 120,000 fish might be needed.

Bickford noted that a number of issues need to be considered in the design and installation of a PIT-tag detection system at Rocky Reach. A detector in the flow separator at the head of the system is a good location because it provides the slowest and most laminar flow. . A second option could be to use a design similar to that at the Bonneville Dam corner collector somewhere lower in the system; however, that configuration would likely have a much lower likelihood of success. Douglas and Chelan PUD staffs are continuing to discuss these and additional options and will include NMFS engineering staff in these discussions. Because the study is planned for the 2010 migration, installation of a PIT-tag detector at Rocky Reach would need to occur in late fall 2009 or winter 2009/2010. Douglas PUD plans to continue to refine the survival study plan and bring it before the Coordinating Committees for approval at the next meeting. They would also draft an SOA for decision.

Following this discussion, several members of the Committees expressed interest in Douglas PUD's plans for developing survival estimates for juveniles originating in the Columbia River above the confluence of the Methow River, and in particular in the vicinity of the Okanogan River. Bickford described differences in environmental conditions that Okanogan versus Methow fish would face, and concluded that differences in water quality (higher temperatures and turbidity) and fish travel times suggest the need to conduct a separate study targeting Okanogan fish. He also noted that such a study had been planned between 1998 and 2000, but at that time the Committees viewed the Okanogan work as lower priority and, as such, the previous studies focused on Methow vicinity releases only. Jerry Marco proposed releasing study fish at the confluence of the Okanogan and Columbia rivers as a



way to minimize the logistical and physical challenges as described by Bickford; others agreed that this option should be considered.

*C. CRITFC Request for Adult Sockeye At Wells*

Rick Klinge reported that CRITFC staff has requested access to the adult fish ladder at Wells Dam to sample adult sockeye again this year; however, this year's request was different from past years' requests. The difference is that CRITFC wants to implant sonic tags into 100 adults in addition to collecting data on length and gender, and obtaining scale samples from an additional 400 sockeye. In total, this would include handling up to 500 sockeye in June/July. Klinge noted that the June/July period is a busy time at Wells Dam because this is a peak time for the collection of Chinook broodstock for hatchery programs. In previous years, accommodating CRITFC data collection slowed broodstock collection and occasionally interfered with other work. Klinge also emphasized that access this year will be very different than previous years due to the turbine rewind that is in progress. Mike Schiewe suggested that approval should be sought from both the Coordinating and Hatchery Committees because it may have a ripple effect on other HCP activities. He noted this appeared to be primarily a Hatchery Committees issue, and particularly a WDFW issue. The Coordinating Committees identified no concerns for fish passage, but encouraged review by the Hatchery Committees. The topic will be on the agenda for the May Hatchery Committees meeting.

#### **IV. Chelan PUD (Keith Truscott)**

*A. SOA for the 2008 Reports (previously sent) and SOA for This Year's Studies (previously sent)*

Keith Truscott introduced two SOAs: one for approval of 2007 study reports, and a second for 2009 study plans. Both had been subject to lengthy review and discussion at previous meetings. The Coordinating Committees conditionally approved both SOAs; Mike Schiewe agreed to confirm approval by WDFW and YN who were not on the call at this point. (Note: Bill Tweit and Bob Rose approved the SOAs by e-mail on May 4 and 5, respectively, thus completing consensus approval).

*B. Update on Implementation of 2009 Survival Studies at Rocky Reach and Rock Island*

Juvenile Chinook salmon and steelhead survival studies at Rock Island Dam were initiated the week of April 20 as planned. The juvenile sockeye studies are expected to start in 2 to 3 weeks when adequate numbers juvenile can be collected at Rocky Reach bypass.

Despite what appeared to be a good start to this year's field tests, Chelan PUD and HTI are finding that an unusually large number of tags are failing prior to fish release. This situation has only become evident in the last couple of days (beginning April 28). The tags are routinely energized and checked prior to implanting in fish. Approximately 25 percent of the tags have stopped working either before implantation or after implantation but before fish are released. This failure rate could compromise the validity of the study. The tags are straight acoustic 795E tags that have previously had few problems. The tags in question come from different manufacturing lots, including some not included in Chelan PUD's battery test. Grant PUD had similar problems in 2008, but with a slightly different design of tag (combination). In an effort to further understand the extent of this problem, Chelan PUD is tagging an additional 25 fish and holding them at Eastbank Hatchery to monitor longer term tag performance.

Chelan will be monitoring this situation very closely over the next 2 weeks and will routinely update the Coordinating Committees, initiating conference calls as necessary.

## **V. Columbia Basin Fish and Wildlife Authority Request for Information**

Mike Schiewe reported that he was contacted by the CBFWA regarding a request for survival estimates at each of the HCP dams. CBFWA has previously collected such information at federal dams and now wants to include PUD information. It was discussed that more information is needed on what the information will be used for and whether it duplicates information already provided by the PUDs for incorporation into the COMPASS model program. Schiewe agreed to follow up with CBFWA to find out if this is a repeat request and how the group wants data reported. If additional information is provided to CBFWA, it will be important to make sure it is consistent with previous information provided for such requests.

## **VI. HCP Committees Administration (Mike Schiewe)**

### *A. Meeting Schedule*

The upcoming meetings are set as follows:

- May 26 at Rock Island Dam, starting at 10:00 am – Rock Island Smolt Monitoring Program, EonFusion demonstration, and visit to Rocky Reach juvenile sampling facility and sockeye tagging; *wear steel-toe boots, safety glasses, and hard hats if*

*you have them.* The order of the agenda will depend upon whether tag operations at Rocky Reach are occurring in the morning or afternoon on that day.

- June 23 in SeaTac
- July 28 in SeaTac

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Paul Schlenger	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Rick Klinge *	Douglas PUD
Tom Kahler *	Douglas PUD
Josh Murauskas	Douglas PUD
Shane Bickford	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Coordinating Committees      **Date:** May 27, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating Committees

**Cc:** Ali Wick and Steve Hemstrom

**Re:** Final Minutes of May 5, 2009 HCP Rock Island and Rocky Reach Coordinating Committees Conference Call

---

The Rock Island and Rocky Reach Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met via conference call on Tuesday, May 5, 2009, from 2:00 pm to 3:00 pm regarding the status of on going passage research at Rock Island and Rocky Reach dams. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Rock Island and Rocky Reach Coordinating Committees will meet by conference call on May 12, 2009, from 2:00 pm to 3:00pm for an update on tag reliability testing and the ongoing studies.

### DECISION SUMMARY

- No decisions were made at this meeting

#### I. Update on Rock Island and Rocky Reach tag reliability Issues (Keith Truscott)

Mike Schiewe stated that the purpose of today's call was an update by Chelan PUD staff on the status of on going fish passage research at Rock Island and Rocky Reach Dams, and in particular, on efforts to resolve problems with acoustic tag reliability. Keith Truscott provided the following information.

- As reported at the Coordinating Committees meeting last week (April 28, 2009), Chelan PUD has discovered that about 25 percent of the acoustic tags being used in the yearling Chinook and steelhead studies have been failing during the first 3 days after being activated. The tags either fail to "turn on" or cease operating during a 1-day observation period before being inserted into fish, or during a 2-day holding period after being inserted into fish, but before release.

- 
- As a result, Chelan PUD researchers have increased the activation time to 3 days and the holding time to 2 days, for a total of 5 days.
  - HTI will be providing an additional 900 newly manufactured tags to replace the oldest shelf-life tags manufactured for this study and also obtained an additional 250 “new” manufactured tags from other projects.
  - Using these new tags (both sources) will allow future releases composed of 50 percent new tags and 50 percent old tags.
  - Today’s fish release (using the 5-day pre-release protocol and a 60/40 mix of new and old tags) appeared successful in that 50 of the 51 fish tagged still had actively transmitting tags.
  - Preliminary testing of failed tags by HTI engineers indicates that capacitors in the tags are failing and not the batteries.
  - Additional testing of tags in fish held at East Bank Hatchery is underway. Out of 29 fish, 2 have failed in the first 2.5 days.

The Coordinating Committees agreed that these actions taken by Chelan PUD were appropriate and that the studies should continue for the time being. The Committees agreed to revisit this issue during a conference call on May 12, 2009, to review results and make a determination on whether to continue the study. It was discussed that if approximately 95 percent or more of the tags remained functioning up until the time of release (using the new 5-day activation and holding period), then the Committees would likely recommend continuing the study. If, however, tag failure was approximately 10 percent or more during this period, then the Committees would likely recommend that the study be terminated, and Rock Island spill returned to 20 percent of daily flow until the start of the sockeye salmon passage study.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Lance Keller	Chelan PUD
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Shane Bickford	Douglas PUD
Barry Keese	Chelan PUD
Bryan Nordlund *	NMFS
Josh Murauskas	Douglas PUD
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Coordinating Committees  
**Date:** May 27, 2009

**From:** Michael Schiewe, Chair, HCP Coordinating Committees

**Cc:** Ali Wick and Steve Hemstrom

**Re:** Final Minutes of May 12, 2009 HCP Rock Island and Rocky Reach Coordinating Committees Conference Call

---

The Rock Island and Rocky Reach Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met via conference call on Tuesday, May 12, 2009, from 2:00 pm to 3:00 pm for an update on tag reliability testing and the ongoing survival studies at Rocky Reach and Rock Island Dams. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- None.

### DECISION SUMMARY

- The Coordinating Committees agreed that Chelan PUD can terminate the Rock Island juvenile project survival study for steelhead and Chinook this year due to high acoustic tag failure rate occurring prior and up to the time of the release of tagged test fish and the ensuing uncertainty of tag performance (Item I).

#### **I. Update on Rock Island and Rocky Reach tag reliability Issues (Keith Truscott)**

Mike Schiewe stated that the purpose of today's call was an update by Chelan PUD staff on tag reliability testing and the ongoing studies at Rock Island Dam. As discussed on the conference call last week (May 5, 2009), Chelan PUD has found a high rate of tag failure in the early releases of yearling Chinook salmon and steelhead used in the Rock Island Dam survival testing under conditions of 10 percent spill. On last week's call, the Coordinating Committees agreed that if approximately 95 percent or more of the tags remained functioning up until the time of release (using the new 5-day activation and holding period),



then the Committees would likely recommend continuing the study. If, however, tag failure continued at the rate observed in the first week of the study then the Committees would likely recommend that the study be terminated, and Rock Island spill returned to 20 percent of daily flow until the start of the Rocky Reach and Rock Island sockeye salmon survival passage study.

Steve Hemstrom distributed a summary of the issues yesterday (*Attachment B*). Chelan PUD has discussed what they have learned in the past week and decided that the tag-life issues are not resolvable, even with the proposed 5-day activation testing period agreed to last week. Thus, due to tag failure rate and uncertainty in tag performance after fish are released for the study, Chelan PUD is requesting Coordinating Committees' approval to terminate the Rock Island steelhead and Chinook studies for this year. A different model of tag used for the sockeye study do not appear to have been affected, and Chelan PUD plans to continue with the sockeye study at Rocky Reach and Rock Island, which is expected to start between May 15 and May 18. Chelan PUD will change spill levels from 10 to 20 percent beginning midnight on May 12, and maintain 20 percent spill until the sockeye study begins at Rock Island. Upon start of the sockeye study, Rock Island will switch back to the 10 percent spill level as agreed to for the study.

Jerry Marco added that the Coordinating Committees will want to discuss tag vendors in the future and any potential contingencies that may be needed for next year. Keith Truscott agreed and said that Chelan PUD will be modifying its contract with HTI to reflect that Chelan PUD will be more involved in tag production and the QA/QC process. He said that HTI will be testing their production line for the 2010 studies in a few weeks once parts come in to assemble the tags. Truscott said that he believes that HTI has done an adequate diagnosis of the key issues in this year's tags. He also said that one contingency could be to set aside a set of micro-tags for use in case the acoustic tag failure rate is unsatisfactory again. Truscott thanked the Committees for their time and focus in working together to come to an agreement for this year's studies.

## **List of Attachments**

Attachment A – List of Attendees

Attachment B - Summary of events leading to suspension of the 2009 Rock Island HCP  
Chinook and Steelhead Survival Study

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Bryan Nordlund *	NMFS
Jim Craig	USFWS
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

Summary of events leading to suspension of the 2009 Rock Island HCP  
Chinook and Steelhead Survival Study:

- Study began April 25 with first Chinook first release into Rocky Reach tailrace.
- Tag performance became suspect in the first four days of the study when approximately 25% of the tags either did not activate or died before fish were tagged.
- HTI identified tag problem linked to capacitor in tag. Chelan PUD and HTI devised strategy to attempt to “identify bad tags” prior to fish release by activating tags three days prior to fish tagging, allowing 5 days of tag evaluation prior to fish release into the river.
- April 28 Chelan tagged 29 Chinook and held them at East Bank Hatchery to determine if implantation in swimming fish could be a contributing mechanism of tag failure through time. Six of 29 tags have failed over a 10 day period.
- With 8 individual treatment and control groups released for the study, 13% (95/728) of tags have failed at some point after activation; three percent failed after 3.5 days of proper operation.
- On May 12 at midnight, Chelan is proposing to discontinue study for Chinook and Steelhead at Rock Island due to tag failure rate and uncertainty in tag performance after fish are released for the study.
- Chelan will continue with the sockeye study at Rocky Reach and Rock Island, anticipated to start between May 15 and May 18. The tag-life test using 25 HTI 795M acoustic tags for sockeye (a different tag than those used for Chinook and Steelhead) have performed with no tag failures after being activated 11 days ago.
- Chelan will change spill levels from 10% to 20% beginning midnight, May 12, until the sockeye study begins at Rock Island. Upon start of this study, Rock Island will switch back to the 10% spill level as planned in the study.

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** June 23, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick and Steve Hemstrom

**Re:** Final Minutes of May 26, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at Rock Island Dam, Washington, on Tuesday, May 26, 2009, from 10:00 am to 11:15 am. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Mike Schiewe will send the Coordinating Committees a summary table of dam passage survival estimates that has been requested by Dave Ward of the Columbia Basin Fish and Wildlife Authority (CBFWA) (Item V).

### DECISION SUMMARY

- There were no decision items approved at this meeting.

### I. Welcome

The Coordinating Committees approved the April 28 meeting minutes and the Rocky Reach/Rock Island Committees' May 5 and May 12 conference call minutes. Ali Wick will distribute the final Minutes to the Committees.

### II. Tributary and Hatchery Committees Update

Mike Schiewe updated the group on the issues discussed by the Tributary Committees at their last meeting:

- Administrative cost guidelines were discussed and decided upon.

- 
- The solicitation process has started for large projects for 2009. Pre-proposals are due on June 1. The project site visits will be June 22 and July 5, and final project selection will occur at the end of November.

Mike Schiewe gave an update on the issues under discussion by the Hatchery Committees at their last meeting:

- Chelan PUD discussed with the Hatchery Committees a proposed test to rear up to 200,000 summer/fall Chinook (2008 brood) at the Ringold Springs Hatchery during the summer of 2009. The motivation for this trial is to help alleviate some of the water supply problems that will soon be facing Eastbank Hatchery and aquifer.
- Columbia River Inter-Tribal Fish Commission (CRITFC) staff will soon begin their annual sockeye data collection at Tumwater Dam.
- The Hatchery Committees discussed CRITFC's annual request for sampling adult sockeye at Wells Dam. The main issue under discussion is whether this activity will interfere with any Chinook broodstock trapping changes that might occur during the re-wind project at Wells Dam this year.
- Chelan PUD and Washington Department of Fish and Wildlife (WDFW) agreed to work to develop a strategy for managing non-migrating steelhead juveniles from Blackbird Island Pond that will reduce/minimize risk to other species.
- Chelan PUD gave an update on the Chiwawa and Chelan Falls rearing facility projects and the accompanying permitting issues.
- The 2008 Chelan PUD Monitoring and Evaluation (M&E) Report due date was changed from May 1 to June 1, 2009. The intent is to finalize the document at either the June or July 2009 meeting. The 2010 M&E Implementation Plan, which was due June 1, will now be due July 1, 2009.
- Chelan PUD shared some preliminary information on Passive Integrated Transponder tag (PIT-tag) detections of juvenile summer Chinook passing McNary Dam; there has been a ratio of about 3.5 to 1 of pilot water reuse study fish compared to raceway-reared fish arriving at McNary Dam.
- The design for the Chiwawa steelhead pilot water re-use study is proceeding as expected, and the current plan is to implement the study in fall 2009.
- The new broodstock trap at the Methow Hatchery outfall has now been completed and is operational.

- 
- Douglas PUD will be modifying the location of the water meter on Well #6 at Methow Hatchery so that it accurately records water usage.
  - Douglas PUD requested Hatchery Committees' concurrence to not coded-wire-tag yearling spring migrant Chinook fish used in the survival verification study, as study fish will already be marked externally and PIT-tagged. The Hatchery Committees will be coordinating to ensure that not code-wire-tagging these fish will not create a U.S. v. Oregon or M&E Implementation Plan conflict.
  - The Yakama Nation (YN) has prepared a proposal for Lake Cle Elum sockeye reintroduction for the U.S. v. Oregon Production Advisory Committee and coordinated with the Hatchery Committees to ensure that there would be no unintended effects to the Skaha sockeye HCP mitigation program.
  - The Joint Fisheries Parties (JFP) will meet and discuss future adult management and disposition of surplus Leavenworth Hatchery adults captured at Tumwater Dam if MS-222 anesthetic will continue to be used there. For this year, Chelan PUD will be investigating options for handling fish at Tumwater Dam to support varied uses of surplus fish.
  - The Hatchery Committees are discussing a U.S. Fish and Wildlife Service (USFWS) Statement of Agreement (SOA) for broodstock collection for a new summer Chinook program at Entiat Hatchery.
  - The USFWS has investigated methods and a plan for collecting steelhead brood at Winthrop Hatchery; hook-and-line sampling was the most effective method.
  - National Marine Fisheries Service (NMFS) has completed a preliminary review of the Wenatchee steelhead Hatchery Genetic Management Plan (HGMP) and will provide comments to Chelan PUD by June 8.
  - The YN, WDFW, and NMFS will meet on June 1 to consider a revised Management Implementation Plan (MIP) for Wenatchee Basin spring Chinook; on June 2 the Hatchery Committees will meet by conference call to receive guidance from NMFS on whether the draft MIP contains sufficient information for Chelan PUD, in collaboration with the Hatchery Committees, to complete a draft HGMP. This HGMP is due to NMFS on June 17.
  - For the Methow and Okanogan spring Chinook and steelhead hatchery HGMPs, Anchor QEA, CCT, WDFW, and USFWS will participate in the early drafting workgroup.
  - The Colville Tribes have received the Step 2 approval for Chief Joseph Hatchery.

### **III. Douglas PUD**

#### *A. Future Survival Verification Study*

Shane Bickford said that Douglas PUD is continuing to plan a survival verification study for Wells Dam in 2010. Initially, Douglas PUD had planned to conduct the study as implemented in 1998 to 2000, but is now investigating the possibility of also addressing survival of fish originating in the Okanogan River. The new survival estimate will be used to adjust (if necessary) hatchery production and/or allocation of fish at various hatcheries in order to continue to meet project mitigation requirements. Bickford clarified that, under the HCP, the study is a 1-year effort, using one species, with the survival estimate result averaged into the previous survival estimates.

### **IV. Chelan PUD**

#### *A. Update on Sockeye Study at Rocky Reach*

Keith Truscott said that Chelan PUD is halfway through the releases for the sockeye study at Rocky Reach and that the study is proceeding well.

### **V. Columbia Basin Fish and Wildlife Authority Request for Information**

Mike Schiewe notified the Coordinating Committees that he has been contacted by Dave Ward at CBFWA regarding survival estimates at each of the HCP projects. The CBFWA will be sending him a blank table that they would like filled in with the most recent data. Schiewe indicated that he will send the Committees a draft table for review before forwarding to CBFWA.

### **VI. HCP Administration**

#### *A. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: June 23, July 28, and August 25; all meetings will be in SeaTac.

### **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Lance Keller	Chelan PUD
Barry Keesee	Chelan PUD
Steve Hemstrom	Chelan PUD
Tom Kahler *	Douglas PUD
Shane Bickford *	Douglas PUD
Josh Murauskas	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate



## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** July 21, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Josh Murauskas, and Steve Hemstrom

**Re:** Final Minutes of June 23, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Radisson Gateway Hotel in SeaTac, Washington, on Tuesday, June 23, 2009, from 9:30 am to 12:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Josh Murauskas will provide the draft lamprey study plan, information on timing of Chinook/steelhead passage at Wells Dam, and a Statement of Agreement (SOA) for the study plan prior to the July meeting (Item III-B).
- Steve Hemstrom will provide information confirming that Chelan PUD will maintain Rock Island spill through 95 percent of the spring Chinook run, and the Coordinating Committees will send any comments or objections to the proposed spill stoppage for hydraulic capacity testing by the end of the day on Thursday, June 24 (Item IV-C).

### DECISION SUMMARY

- The Wells Coordinating Committee approved the Wells 2010 Survival Verification Study Plan and SOA as distributed prior to the meeting (Item III-A).

### I. Welcome

The Coordinating Committees approved the May 26 meeting minutes. Ali Wick will distribute the final minutes to the Committees.

---

## II. Tributary and Hatchery Committees Update

Mike Schiewe updated the group that the Tributary Committees did not meet in June. However, members will attend project tours in late June and the pre-proposal workshop will occur on July 7 and 8. There will be a final review of the pre-proposals following this meeting. Thus far, the Tributary Committees have received 18 General Salmon Habitat Program proposals.

Ali Wick and Mike Schiewe updated the group on the following Hatchery Committees discussion topics:

- Washington Department of Fish and Wildlife (WDFW) has provided preliminary results of an evaluation of 2009 steelhead spawn timing and distribution in the Twisp River and recommendations for next year's evaluation, which includes body cavity tagging. Hatchery Committees concerns are under discussion.
- The Hatchery Committees agreed that WDFW can proceed with a 5,000 hatchery by hatchery (HxH) egg take of Wenatchee spring Chinook for a study of spring Chinook egg-to-fry survival sponsored by the National Marine Fisheries Service (NMFS) Science Center. The WDFW Commission will consider a draft hatchery reform policy at the July Commission meeting.
- Passive Integrated Transponder tag (PIT-tag) arrays for the Chelan PUD sockeye enumeration study will be installed once flows decrease.
- Chelan PUD provided preliminary results from their water reuse study, showing that PIT-tagged water reuse study fish were detected earlier and in larger numbers at downstream PIT-tag arrays than their raceway-reared cohorts.
- Non-migrant steelhead in the Blackbird Island pond will be available for a recreational fishery.
- The Hatchery Committees agreed to Chelan PUD rearing 200,000 spring Chinook at Ringold Springs Hatchery in 2009.
- The Hatchery Committees received an update that 1,000 adult sockeye will be needed for outplanting into Lake Cle Elum for the Cle Elum Sockeye Reintroduction program; 200 pairs (400 total broodstock) will be needed for egg take with Okanogan Nation Alliance (ONA) assistance in the Okanogan River. Chelan PUD is investigating whether there will be an impact on the ONA sockeye program.

- 
- Douglas PUD will be requesting more information about a videographer's proposal to film in the Wells fish ladder.
  - Douglas PUD is in the process of replacing the existing pollution abatement system at Methow Hatchery with an underground system.
  - The Hatchery Committees are reviewing an SOA on Wells/Entiat summer Chinook collection for 2009.
  - The Hatchery Committees are discussing the Yakama Nation (YN) pursuing summer/fall Chinook overwintering acclimation at Carlton and Dryden Ponds as part of a partnership with Grant PUD.
  - The Hatchery Committees received a handout from NMFS clarifying the Endangered Species Act (ESA) consultation process, which may be useful when preparing Hatchery Genetic Management Plans (HGMPs).
  - The Hatchery Committees are working through NMFS' comments to the Wenatchee steelhead HGMP. The Hatchery Committees will soon be receiving NMFS' and Hatchery Committees' comments to the submitted spring Chinook HGMP. Neither HGMP has been approved by the Hatchery Committees.
  - The Douglas PUD Methow and Okanogan spring Chinook and steelhead program HGMPs are underway.
  - The Hatchery Committees will soon be conducting a preliminary Non-Target Taxa of Concern (NTTOC) analysis.
  - The Hatchery Committees are continuing to discuss a steelhead reproductive success study.
  - The Hatchery Committees are developing a Study Plans Protocol to facilitate review of proposals submitted to them for funding consideration.
  - The Hatchery Evaluation Technical Team (HETT) is currently working on how to standardize estimates of spawner recruits for the control group analysis.

### **III. Douglas PUD**

#### *A. DECISION ITEM: Survival Verification Study*

Tom Kahler began by introducing the Survival Verification Study proposed for Wells Dam in 2010, saying that Douglas PUD has sent out the study plan and an SOA for review. John Skalski (University of Washington) joined today's meeting to answer any questions about the study. Josh Murauskas gave an overview of the study as proposed. The study plan has been modified to include releases in the lower Okanogan River. John Skalski answered some

---

Coordinating Committees questions, including the rationale for implementing internal weighting for the various release groups. The Wells Coordinating Committee approved to the study plan and SOA as distributed prior to the meeting (Attachment B).

*B. 2009 Lamprey Behavior Study Plan at Wells Dam*

Josh Murauskas introduced Douglas PUD's plans for lamprey study at Wells Dam in late summer 2009, including the background, hypotheses, and study design. He said that recent data have indicated that most adult lamprey are entering the adult fishway collection galleries between the hours of 8:00 pm to 12:00 midnight. This is a time period during which few salmon and steelhead enter the collection gallery. The minimal overlap of passage timing creates an opportunity to evaluate reduced gallery entrance velocities as a possible operational change to improve passage of adult lamprey with nominal impact to salmon. Murauskas emphasized that any change to gallery entrance velocities would not require a change in in-ladder flows, would not coincide with peak diurnal passage timing of salmon, could be implemented with a head differential that is at or near original target levels, and would represent a minor window of adjustments. He indicated that a key feature of the proposed study was the use of Dual Frequency Identification Sonar (DIDSON) technology to monitor lamprey behavior at the gallery entrances under different velocities.

Following this discussion, the Coordinating Committees requested more detail on the timing of Chinook and steelhead passage at the fishway. Bryan Nordlund said that one of his key concerns is whether fishway entrance velocity would still be high enough to attract salmon at the same rate as current operations if there were eventual modifications to ladder operations for lamprey passage. Shane Bickford said that Douglas PUD would evaluate results of this study for lamprey passage, and then, if appropriate, would consider ladder modifications. If modifications were considered, then a supplemental salmonid study would be conducted to investigate any potential effects on salmonids. Bill Tweit asked about how quickly the collection gallery velocities could be returned to specification flows. Murauskas said that flow modifications are automated and are returned to specifications within minutes; he reminded the group that the remainder of the fishway (i.e., the 73-pool staircase ladder above the collection gallery) would remain within specifications during the study, as ladder flows above the collection gallery would not be altered during any portion of the study. Douglas PUD indicated that it would like to gain approval for the study by the July Coordinating Committees meeting. The HCP Committees indicated their general support for

the study plan as proposed, but want additional time to review the salmon passage data. Murauskas will provide the draft lamprey study plan, the information on Chinook/steelhead passage, and an SOA for the study plan prior to the July meeting.

#### **IV. Chelan PUD**

##### *A. Update on Sockeye Study at Rocky Reach*

Keith Truscott said that the sockeye study at Rocky Reach Dam was completed as planned. Chelan PUD expects that preliminary results from the study will be available in August or September 2009. More information will be coming soon on the 2010 study plan.

##### *B. Rock Island Spill*

Steve Hemstrom updated the group that Grant PUD has proposed that Chelan PUD shut down Rock Island spill for five sampling periods between 12:00 midnight and 1:00 am, between July 2 and August 27, as part of their predator index study. The group indicated their agreement with this proposal.

##### *C. Powerhouse Unit Test*

Steve Hemstrom said that the Chelan PUD Power Management Group is proposing some spill modification at Rock Island on June 30 to test the capacity of the new powerhouse unit. These tests would require increasing flow to 220,000 cubic feet per second (cfs) for 2 hours, sometime between 7:00 am and 3:30 pm. Hemstrom confirmed that existing flows are approximately 180,000 or 190,000 cfs. By the end of the day on Thursday, June 24, Hemstrom will provide information confirming that Chelan PUD will maintain spill for 95 percent of the spring Chinook run, and the Coordinating Committees will send any comments or objections out by end of the day on Thursday, June 24.

##### *D. 2009 Pikeminnow Removal Project*

Keith Truscott updated the group that Chelan PUD has commenced the pikeminnow removal project for 2009, and it is proceeding as planned thus far. Ladder trapping is going well.

#### **V. HCP Administration**

##### *A. Meeting Agreements*

The following agreements were made at the meeting and did not require formal SOAs:

- The Coordinating Committees agreed that Chelan PUD may shut down the Rock Island spill for five sampling periods between 12:00 midnight and 1:00 am, between July 2 and August 27, as part of Grant PUD's predator index study.

*B. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: July 28, August 25, and September 22; all meetings will be in SeaTac.

**List of Attachments**

Attachment A – List of Attendees

Attachment B.1 - Wells HCP Coordinating Committee Statement of Agreement Regarding  
2010 Wells Dam Survival Verification Study, Phase III (Standard Achieved)

Attachment B.2 – Wells Project Survival Verification Study, Phase III (Standard Achieved) –  
2010 Study Plan

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Shane Bickford *	Douglas PUD
Josh Murauskas	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
John Skalski	University of Washington
Bill Tweit *	WDFW

\* Denotes Coordinating Committees member or alternate

**Wells HCP Coordinating Committee  
Statement of Agreement  
Regarding 2010 Wells Dam Survival Verification Study  
Phase III (Standard Achieved)  
June 12, 2009  
Approved June 23, 2009**

**Statement**

The Wells HCP Coordinating Committee approves the Douglas PUD study proposal, dated June 12, 2009, *Wells Project Survival Verification Study; Phase III (Standard Achieved), 2010 Study Plan*. The goal of the study is to verify the achievement of Phase III (Standard Achieved) for yearling Chinook and steelhead migrating through the Wells Project as per Section 4.2.5.1 of the Wells HCP.

**Background**

During Phase I of the Wells HCP Passage Survival Plan (Section 4), Douglas PUD conducted three years of valid juvenile project survival studies with steelhead and yearling Chinook salmon. Results from those studies consistently exceeded the 93% juvenile project survival standard and the precision and accuracy requirements of the HCP. The average juvenile project survival for yearling Chinook and steelhead over the three years of study was 96.2%. The results from the Phase I juvenile project survival studies, coupled with the results from the adult passage studies, provided the necessary information for the HCP Coordinating Committee to determine that the Wells Project could proceed to Phase III (Standard Achieved) for yearling Chinook and steelhead (adopted at the February 2005 Coordinating Committee meeting).

Phase III of the Passage Survival Plan (Wells HCP Section 4.2.5.1) indicates that when the appropriate survival standard has been achieved, periodic monitoring is required to ensure that the survival of Plan Species is maintained and remains in compliance with the survival standards set forth in the plan for the term of the Agreement. Section 4.2.5 states that:

*In this case, the District shall re-evaluate performance under the applicable standards every 10 years. The Coordinating Committee shall pick representative species for all Plan Species. However, only one species will be utilized to represent spring migrants and one species for summer migrants. This reevaluation will occur over one year and be included in the pertinent average for that particular species. If the survival standard is met, then Phase III (Standards Achieved) status will remain in effect.*



# WELLS PROJECT SURVIVAL VERIFICATION STUDY

Phase III (Standard Achieved)  
*2010 Study Plan*

Study Proposal

June 12, 2009

Prepared By:  
Shane Bickford  
Joshua Murauskas

Public Utility District No. 1 of Douglas County  
1151 Valley Mall Parkway  
East Wenatchee, WA 98802



This Page Intentionally Left Blank

## INTRODUCTION

The Wells Habitat Conservation Plan (HCP) requires the Public Utility District No. 1 of Douglas County (Douglas) to periodically conduct juvenile salmon survival studies at the Wells Hydroelectric Project (Wells Project). The results of these studies are then used to guide passage and mitigation programs for Plan Species migrating through the Wells Project. The Passage Survival Plan included in the HCP was structured with a phased implementation plan. Phase I of the HCP (1998 through 2002) required, “juvenile and adult operating plans and criteria to meet the survival standards set forth in sub-Section 4.1, and a monitoring and evaluation program to determine compliance with the standards” (Section 4.2.1). During Phase I, Douglas conducted three years of valid juvenile project survival studies with steelhead and yearling Chinook salmon. Results from these studies consistently exceeded the 93% juvenile project survival standard and the precision and accuracy requirements of the HCP (Bickford et al. 1999; 2000; 2001). The average juvenile project survival for yearling Chinook and steelhead over the three years of study was 96.2%. The results from the Phase I juvenile project survival studies, coupled with the results from the adult passage studies, provided the necessary information for the HCP Coordinating Committee to determine that the Wells Project could proceed to Phase III (Standard Achieved) for yearling Chinook and steelhead (Appendix A).

Phase III of the Passage Survival Plan (Section 4.2.5) indicates that when the appropriate survival standard has been achieved, that periodic monitoring is required to ensure that the survival of Plan Species is maintained and remains in compliance with the survival standards set forth in the plan for the term of the Agreement. Therefore, Douglas is required to “reevaluate performance under the applicable standards every 10 years”, including a one-year reevaluation of juvenile project survival for spring-migrant species. The results from the one-year juvenile project survival reevaluation study will be included in the pertinent average for yearling spring migrating Chinook and steelhead. If the survival standard is verified, Douglas will remain in Phase III (Standard Achieved). Otherwise, additional testing will occur, followed by Phase II (Interim or Additional Tools) if the standard cannot be achieved within three years of reevaluation.

Douglas PUD is proposing to conduct a Phase III (Standard Achieved) Survival Verification Study (SVS) in 2010, on the 10<sup>th</sup> anniversary of Douglas’ third and final year of Phase I survival studies. The SVS is designed to meet the precision requirements of the HCP for juvenile Chinook and steelhead originating from both the Methow and Okanogan rivers.

## **METHODS**

### **Study Goals**

The primary goal of the SVS is to confirm that survival through the Wells Project for yearling Chinook and steelhead remains equal to or above the 93% juvenile project survival standard. Toward supporting the primary goal of the study, the SVS is also designed to test the assumptions of the Single (SR) and Paired-Single (PSR) release-recapture models, and estimate capture and reach-specific survival probabilities through the mid-Columbia River. The SVS will also provide additional information related to the physiology, behavior, migration speed and survival of yearling Chinook through the mid-Columbia River

### **Study Fish**

Yearling summer Chinook salmon (brood year 2008) are currently on station at the Wells Fish Hatchery (WFH) for use in the SVS. Chinook parr will be PIT-tagged during February of 2010 and will be held in raceways until transfer to release containers in April and May of 2010 one day prior to release. Planned fish collection, transportation, and physiological monitoring techniques are detailed by Bickford et al. (2001).

### **Estimation Methodology**

Survival estimates generated for the survival reevaluation study will be based upon the SR and PSR models (Cormack 1964; Jolly 1965; Seber 1965; Burnham et al. 1987). These methodologies have been used extensively to accurately estimate project-specific survival for juvenile salmon passing through Columbia River Basin hydroelectric projects (Iwamoto et al. 1994; Muir et al. 1996; Smith et al. 2000). Specifically, these models were used multiple times to successfully generate precise survival estimates of migrating juvenile Chinook and steelhead at Wells Dam (Bickford et al. 1999; 2000; 2001). Appendix B contains the statistical plan for the SVS.

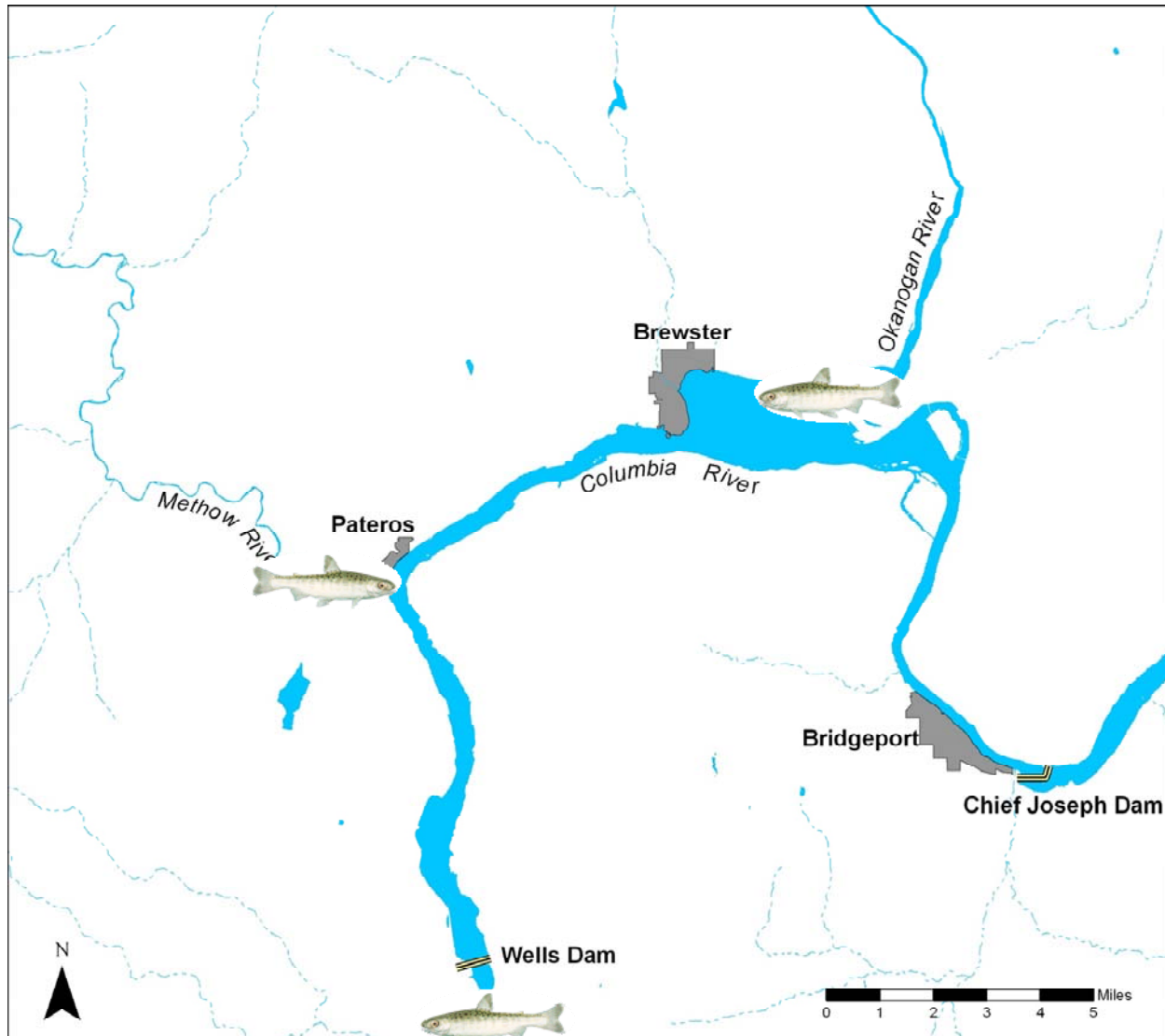
### **Precision Objectives and Sample Size**

The primary objective of the SVS will be to confirm Phase III (Standard Achieved) survival estimates of yearling Chinook and steelhead migrating through the Wells Project at a 95% confidence level with a standard error that will not exceed  $\pm 2.5\%$  (i.e.,  $\epsilon = 0.05$ ). A minimum of 70,000 PIT-tagged juvenile Chinook salmon will be required to achieve the estimated level of precision for the study (Skalski and Townsend, Appendix B). The proposed model design requires the release of 15 replicates of PIT-tagged fish at the Methow confluence (Pateros), Okanogan confluence (Okanogan), and the Wells tailrace at 3:1:3 ratios, respectively.

### **Tagging and Release**

Study fish at the WFH will be tagged with ISO 134 kHz PIT-tags. Each tagged replicate (i.e., treatment and control paired-release groups) will be held within one large-volume rearing container at the Wells Fish Hatchery. The common rearing environment will reduce differences in fish health and physiology between treatment and control groups. The early tag

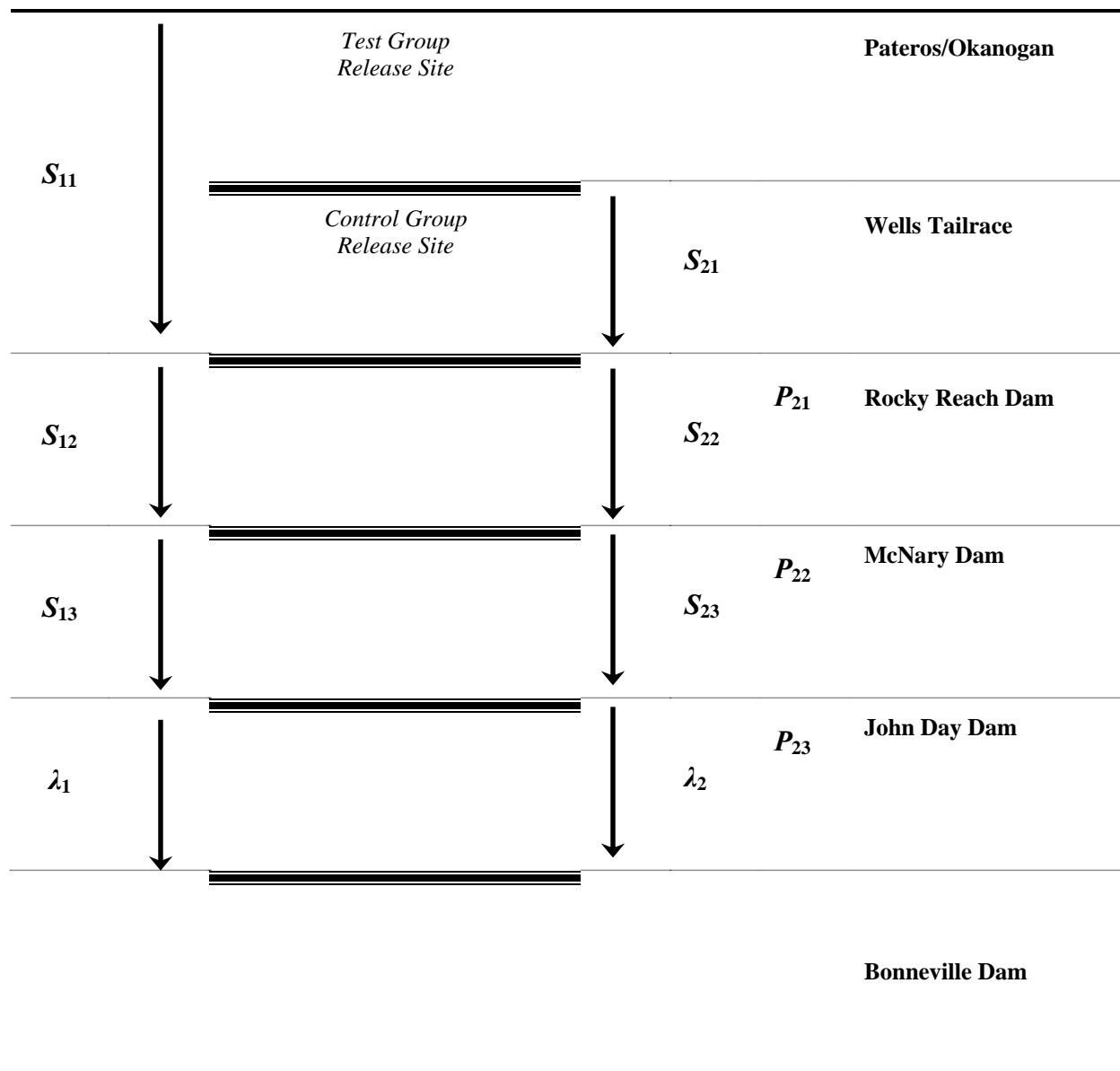
implementation will allow ample recovery time for study fish prior to the spring outmigration. Early tagging will also allow researchers to closely monitor fish for tag shed and diseases that could bias the study results. Test fish will be released at Pateros, Okanogan, and control fish will be released into the Wells Tailrace (Figure 1).



**Figure 1** Proposed release locations for the 2010 Survival Verification Study on the Columbia River. Both test and control (Wells Dam tailrace) release sites are approximately indicated with juvenile salmon markers.

Each of the 15 replicate release groups will contain approximately 4,670 fish, and each paired release of treatment and control fish will be collected from the same rearing vessel, interrogated for PIT-tag codes, and released on a staggered schedule to allow the test groups to join the control group at downstream recapture facilities. The total number of Chinook released for the 2010 SVS will be approximately 70,000 fish. Release sites and PIT-tag detection facilities used

for the SVS are illustrated in Figure 2. Planned fish collection, recovery, and release techniques are detailed by Bickford et al. (2001).



**Figure 2** Schematic of release sites and PIT-tag detection facilities used for the SVS at Wells Dam. Parameters that will be estimated from the release-recapture data are indicated alongside.

## SUMMARY

Douglas PUD is proposing to conduct a Phase III (Standards Achieved) Survival Verification Study in 2010. The study will utilize approximately 70,000 Chinook smolts released over 15 replicates at three release locations. The goal of the study is to reaffirm that project survival for yearling Chinook and steelhead remains greater than or equal to the 93% juvenile project survival standard. Should the survival estimates collected during this study meet the study methodology requirements contained within Section 4.1.4 of the HCP, then the results will be included in the pertinent average survival estimate for yearling Chinook and steelhead, per Section 4.2.5.1 of the HCP, toward adjusting hatchery compensation levels for yearling Chinook and steelhead.

## REFERENCES

- Bickford, S.A., J. Skalski, R. Townsend, B. Nass, R. Frith, D. Park, and S. McCutcheon. 1999. Project survival estimates for yearling chinook salmon migrating through the Wells Hydroelectric Facility, 1998. Public Utility District No. 1 of Douglas County. East Wenatchee, Washington.
- Bickford, S.A., J. Skalski, R. Townsend, D. Park, S. McCutcheon, and R. Frith. 2000. Project survival estimates for yearling summer steelhead migrating through the Wells Hydroelectric Facility, 1999. Public Utility District No. 1 of Douglas County. East Wenatchee, Washington.
- Bickford, S.A., J. Skalski, R. Townsend, S. McCutcheon, R. Richmond, R. Frith and R. Fechhelm. 2001. Project survival estimates for yearling summer steelhead migrating through the Wells Hydroelectric Facility, 2000. Public Utility District No. 1 of Douglas County. East Wenatchee, Washington.
- Burnham, K.P., D.R. Anderson, G.C. White, C. Brownie, and K. H. Pollock. 1987. Design and analysis methods for fish survival experiments based on release-recapture. American Fisheries Society, Monograph 5. 437 pp.
- Cormack, R.M. 1964. Estimates of survival from the sighting of marked animals. *Biometrika* 51:429-438.
- Iwamoto, R. N., W. D. Muir, B. P. Sandford, K. W. McIntyre, D. A. Frost, J. G. Williams, S. G. Smith, and J. R. Skalski. 1994. Survival estimates for the passage of juvenile salmonids through dams and reservoirs. Report to Bonneville Power Administration, Project 93-29, Contract DE-AI79-93BP10891, 140 p.
- Jolly, G.M. 1965. Explicit estimates from capture-recapture data with both death and immigration – stochastic model. *Biometrika* 52:225-247.
- Muir, W. D., S. G. Smith, E. E. Hockersmith, S. Achord, R. F. Absolon, P. A. Ocker, B. M. Eppard, T. E. Ruehle, J. G. Williams, R. N, Iwamoto and J. R. Skalski. 1996. Survival estimates for the passage of yearling chinook salmon and steelhead through Snake river dams and reservoirs, 1995. Report to the Bonneville Power Administration, Contract DE-AI79-93BP10891, and U.S. Army Corps of Engineers, Project E86940119, 150 p.
- Seber, G.A.F. 1965. A note on the multiple recapture census. *Biometrika* 52:249-259.
- Smith, S. G., W. D. Muir, G. A. Axel, R. W. Zabel and J. G. Williams. 2000. Survival estimates for the passage of juvenile salmonids through Snake and Columbia river dams and reservoirs, 1999. Report to: Bonneville Power Administration Contract DE-AI79-93BP10891, Project 93-29, and U.S.



APPENDIX A

HCP PLAN SPECIES PHASE DESIGNATION

WELLS PROJECT

**February 26, 2008**

**Summary of Phase Designations of Plan Species under the  
Wells Hydroelectric Project Habitat Conservation Plan**

The purpose of this document is to summarize and confirm the phase designations of Plan Species under the Wells Hydroelectric Project Habitat Conservation Plan. Further, it serves to document that the Wells HCP Coordinating Committee has reviewed the limitations associated with the best available technology for measuring dam passage survival of subyearling Chinook and sockeye salmon, and has again concluded that these limitations constrain the ability to make empirically based survival estimates.

Upper Columbia Steelhead and Spring Chinook are designated as Phase III (Standard Achieved) based on the results of three years of empirically based survival studies conducted prior to the signing of the HCP. This designation is documented in Section 4.2.1 of the Wells HCP. A summary of the results of these studies can be found in Section 15, Appendix B of the HCP Agreement. Because the HCP requires the consideration of both juvenile and adult project survival in making a final phase designation, the Wells HCP Coordinating Committee reviewed and considered in early 2005 both past radio-telemetry studies and recent information on inter-dam conversion rates to conclude that it was highly likely that the adult survival standard (i.e.,  $\leq 2.0\%$  passage mortality) had been achieved as well. Accordingly, the current designation for yearling spring Chinook and steelhead as Phase III (Standard Achieved) was formally adopted by the Wells HCP Coordinating Committee in February 2005.

At this same meeting, the Wells HCP Coordinating Committee issued final designations of Phase III (Additional Juvenile Studies) for both subyearling summer/fall Chinook and sockeye salmon. As noted in the Wells HCP (Section 3.1), current logistical, biological and/or technological limitations precluded the conduct of empirical survival studies. Hence, phase designations are based upon calculated estimates that take into account the high guidance efficiency of the Wells juvenile fish bypass system, in-season monitoring for run-timing, and species composition for fish passing through the juvenile fish bypass system. Data used for estimating juvenile fish survival is documented in the FEIS for the HCP. As was the case for yearling Chinook and steelhead, the high likelihood that adult summer/fall Chinook and sockeye salmon meet or exceed the adult survival standard was based on previously conducted radio-telemetry studies and analyses of inter-dam conversion rates. Accordingly, the current designation for subyearling summer/fall Chinook salmon and sockeye salmon as Phase III (Additional Juvenile Studies) was formally adopted by the Wells HCP Coordinating Committee in February 2005.

For coho salmon (a Plan Species with newly designated mitigation requirements), the Wells HCP Coordinating Committee agreed on a designation of Phase III (Additional Juvenile Studies) on December 27, 2006. On December 12, 2007, in a Statement of Agreement (SOA), the Wells HCP Hatchery Committee concluded that a criterion pursuant to a long-term coho program had been met, and subsequently the Wells HCP Coordinating Committee agreed that survival of coho was assumed to be 96.2%. As documented in the SOA, the District agreed to provide funding at a compensation level commensurate with a 93% survival rate in lieu of juvenile coho survival studies for a ten-year period.

## APPENDIX B

### SAMPLES SIZE CALCULATIONS PHASE III (STANDARD ACHIEVED) PERFORMANCE VERIFICATION STUDY *2010 Study Plan*

# Statistical Plan for the 2010 Wells Project PIT-Tag Survival Study

Prepared for:  
Joshua Murauskas  
Public Utility District No. 1 of Douglas County  
1151 Valley Mall Parkway  
East Wenatchee, WA 98802

Prepared by:  
John R. Skalski  
Columbia Basin Research  
School of Aquatic and Fishery Sciences  
University of Washington  
1325 Fourth Avenue, Suite 1820  
Seattle, Washington 98101-2509

2 June 2009

## Table of Contents

1.0 Introduction.....	2
2.0 Release-Recapture Design.....	2
3.0 Statistical Analysis .....	4
3.1 Survival Estimation.....	4
3.2 Tests of Assumptions .....	5
3.3 Tests between Releases .....	6
3.4 Tests within a Release.....	7
4.0 Anticipated Precision.....	9
5.0 Literature Cited.....	11

## 1.0 Introduction

The 2010 PIT-tag study at Wells Dam will estimate project passage survival of yearling Chinook salmon smolts. The 2010 study is part of a 10-year “checkup” to assess whether project passage survival at Wells Dam has changed since compliance with the Habitat Conservation Plan a decade ago. The performance standard remains the same; a project passage survival of  $\hat{S}_{\text{Dam}} \geq 0.93$  with a standard error of  $SE(\hat{S}) \leq 0.025$ .

Unlike past PIT-tag survival studies at Wells, in 2010 fish will be released at both the Methow (Pateros) and the Okanogan rivers. This joint release will be pooled and paired with a common tailrace release below Wells Dam for purposes of estimating project passage survival. The Methow and Okanogan fish will be released in a ratio of 3:1 to mimic the contributions of the two fish sources to the overall Chinook and steelhead population migrating past Wells Dam.

This report summarizes the statistical design and analysis of the 2010 yearling Chinook salmon PIT-tag survival study. This report covers four key factors of the spring investigation as follows.

1. Release-recapture design for the tagging study.
2. Estimation of project passage survival.
3. Tests of assumptions of the survival model.
4. Sample size determination.

Details of the field operations will be covered elsewhere.

## 2.0 Release-Recapture Design

The release-recapture design consists of two upstream release sites and one tailrace release site below Wells Dam (Figure 1). The two upstream release sites will be located at (1) mouth of the Methow River, near the town of Pateros, Washington, and (2) at the confluence of the Okanogan River. Proposed release numbers of yearling Chinook salmon smolts will be 30,000 and 10,000 at the Methow and Okanogan release sites, respectively (i.e., ratio of 3:1). While from separate release locations, data from these two releases will be pooled to represent a single fish source comprised of fish from the two locales. A total of 30,000 fish will be released at the Wells tailrace to serve as the downstream control group (Figure 1). The tailrace release will be approximately 1,000 ft downstream of the project.

The study will consist of 15 replicate releases over the course of the yearling Chinook salmon outmigration, spaced one day apart. On any particular release sequence, 2000, 667, and 2000 yearling Chinook salmon smolts will be released from the Methow, Okanogan, and Wells tailrace release locations, respectively. The Okanogan releases will occur the day before the releases at the Methow and tailrace to provide adequate mixing of the treatment and control release groups.

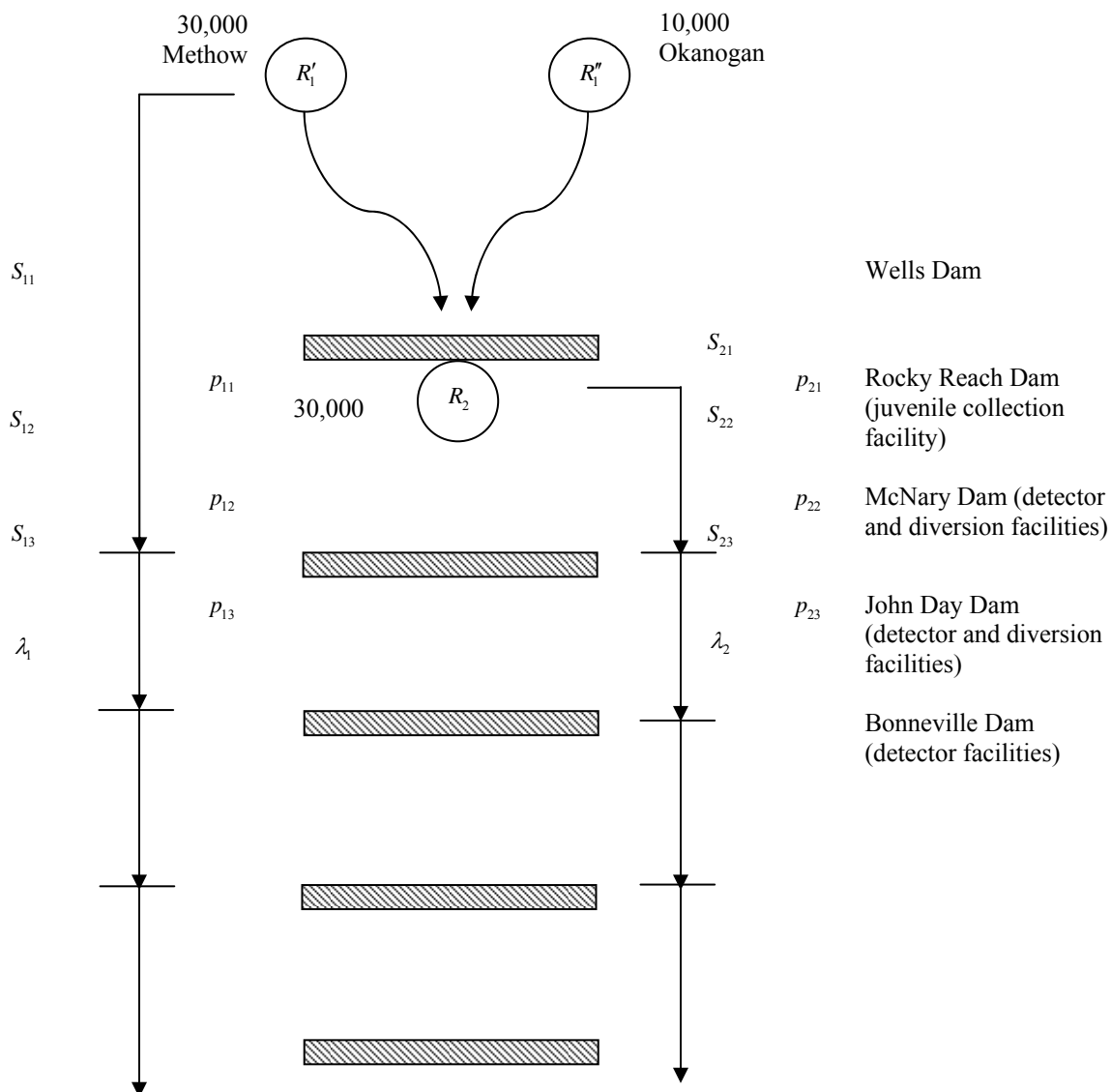


Figure 1. Schematic of release and PIT-tag detection facilities used in the 2010 Wells Dam survival study. Parameters that will be estimated from the release-recapture data are indicated.

PIT-tag detection sites used in the release-recapture study will be at Rocky Reach, McNary, John Day, and Bonneville dams. A new PIT-tag detection facility at the Rocky Reach juvenile collection facility is scheduled for operation in spring 2010.

### 3.0 Statistical Analysis

#### 3.1 Survival Estimation

The estimate of survival through the Wells project ( $\hat{s}_w$ ) will be estimated from the result of the upstream and downstream releases by the expression

$$\hat{s}_w = \frac{\hat{s}_{11}}{\hat{s}_{21}} \quad (1)$$

with an associated variance estimate, based on the delta method (Seber 1982:7-9) of

$$\begin{aligned} \text{Var}(\hat{s}_w) &= \left( \frac{\hat{s}_{11}}{\hat{s}_{21}} \right)^2 \left[ \frac{\text{Var}(\hat{s}_{11})}{\hat{s}_{11}^2} + \frac{\text{Var}(\hat{s}_{21})}{\hat{s}_{21}^2} \right] \\ &= \hat{s}_w^2 \left[ \text{CV}(\hat{s}_{11})^2 + \text{CV}(\hat{s}_{21})^2 \right] \end{aligned} \quad (2)$$

and where

$$\text{CV}(\hat{\theta}) = \frac{\sqrt{\text{Var}(\hat{\theta})}}{(\hat{\theta})}.$$

Capture histories will be pooled across the replicate Methow and Okanogan releases in estimating  $s_{11}$ . The data from the replicate tailrace releases will be pooled in estimating  $s_{21}$ .

The most efficient estimator of  $s_w$  will depend on the relationship between the releases ( $R_1$  and  $R_2$ ) and the downstream survival and capture probabilities. If all downstream parameters are different between releases, survival will be estimated by Equation (1). This is model  $H_{k-1,\phi}$  of Burnham et al. (1987:117-120). Intermediate models may also exist (Burnham et al. 1987:116,120-126). The most efficient estimate of Wells survival ( $s_w$ ) will be based on the statistical model for the releases  $R_1$  and  $R_2$  that properly share all common parameters. The best representation for the survival and capture processes of releases  $R_1$  and  $R_2$  can be found using Program SURPH.4. Sequential modeling will be performed to determine the most appropriate and precise estimate of  $s_w$  and its associated variance estimate.

The capture rates at John Day and Bonneville dams may be low. If this is indeed the case, capture data at the lower sites may be pooled to provide more precise estimates to fewer, more relevant parameters. Data analyses will explore the statistical benefits of pooling some of the downriver sites to improve the precision of  $\hat{s}_w$ .



### 3.2 Tests of Assumptions

Assumptions of the paired release-recapture design (Burnham et al. 1987) include the following:

- A1. The test fish are representative of the population of inference.
- A2. Test conditions are representative of the conditions of interest.
- A3. The number of fish released is exactly known.
- A4. PIT-tag codes are accurately recorded at the time of tagging and at all detection sites.
- A5. The fate of each individual fish is independent of the fates of all other fish.
- A6. All fish in a release group have equal survival and detection probabilities.
- A7. Prior detection history has no effect on subsequent survival and detection probabilities.

In order to estimate  $s_w$ , the survival  $s_{11}$  is assumed to be of the form:

$$s_{11} = s_w \cdot s_{21}, \quad (3)$$

leading to the relationship

$$\frac{s_{11}}{s_{21}} = \frac{s_w \cdot s_{21}}{s_{21}} = s_w.$$

The equality (3) implies two additional assumptions for valid estimation of Wells project survival. These are:

- A8. Survival in the Wells project ( $s_w$ ) is conditionally independent of survival in the Rocky Reach ( $s_{21}$ ) project.
- A9. Releases ( $R_1$ ) and ( $R_2$ ) experience the same survival probability in the Rocky Reach ( $s_{21}$ ) project.

Assumptions (A1) and (A2) regard making valid inferences from the test fish to the survival process of run-of-river fish. Wells hatchery fish will be used in the survival investigations, and are assumed to have similar survival as run-of-river fish. Conducting the study over the course of the yearling Chinook salmon outmigration should also help assure test conditions are similar to those experienced by run-of-river fish. Another implied assumption is the 3:1 ratio of Methow to Okanogan release numbers is representative of the actual proportions of these fish sources to the run-of-river fish.

Careful fish handling and data processing should help assure Assumptions (A3) and (A4) that the release-recapture data are accurate. Assumption (A5) is essentially for mathematically modeling the release-recapture investigation. Furthermore, in a system of tens of thousands of migrating smolts, the death of one fish should not influence the fate of other fish in the system.

Assumption (A6) will be violated by the pooling of the Methow and Okanogan upstream releases ( $R'_i$  and  $R''_i$ ). Fish from these different locations can be expected to have different survival probabilities because of the differences in travel distances, etc. Nevertheless, the release-recapture model will provide a weighted estimate of dam passage survival:

$$\frac{S'_w R'_1 + S''_w R''_1}{R'_1 + R''_1} = S'_w P_{METH} + S''_w P_{OKAN}$$

where

$S'_w$  = survival of released fish from Methow through the Wells project,

$S''_w$  = survival of released fish from Okanogan through the Wells project,

$P_{METH} = \frac{R'_1}{R'_1 + R''_1}$  = proportion of fish released from Methow,

$P_{OKAN} = \frac{R''_1}{R'_1 + R''_1}$  = proportion of fish released from Okanogan.

The survival of fish released at the Methow and Okanogan will be a pooled survival probability. Independent but not identically distributed survival probabilities, however, will affect the variance estimates produced by the model. The actual variance will be smaller than that produced by the mark-recapture model (Feller 1968). Consequently, the point estimate will be unbiased (i.e., as long as the proportions  $P_{METH}$  and  $P_{OKAN}$  are representative of the system) and the variance estimate biased but conservative (i.e., too big).

Assumption (A7) will be evaluated using Burnham et al. (1987) tests  $T_2$  and  $T_3$ .

Assumptions (A8) and (A9) will be facilitated by staggering the release times in order for downstream mixing of the test fish.

### 3.2.1 Tests between Releases

At each downstream PIT-tag recapture site (i.e., Rocky Reach, McNary, John Day, Bonneville), the assumption of mixing among the releases of smolts  $R_1$  and  $R_2$  will be tested. An  $R \times C$  contingency table test of homogeneous recoveries over time will be performed using a table of the form:

		$R'_1$	$R''_1$	$R_2$
Day of	1			
	2			
	3			
	$\vdots$	$\vdots$	$\vdots$	$\vdots$
	D			

(4)

A contingency table of the form (4) will be calculated for each of the PIT-tag detection sites. Each test will be performed at  $\alpha = 0.10$  significance level. Invariably, these tests of mixing are significant. More revealing are plots of the arrival distributions to assess important departures from mixing.

### 3.2.2 Tests within a Release

For the single release-recapture model to be valid, certain data patterns should be evident from the capture histories. For each release group, a series of tests of assumptions can be performed to determine the validity of the model (i.e., goodness-of-fit). The data from a single release can be summarized by an m-array matrix of the form below:

Release Site	Recovery Site			
	Rocky Reach (2)	McNary (3)	John Day (4)	Bonneville (5)
Initial (1)	$m_{12}$	$m_{13}$	$m_{14}$	$m_{15}$
Rocky Reach (2)		$m_{23}$	$m_{24}$	$m_{25}$
McNary (3)			$m_{34}$	$m_{35}$
John Day (4)				$m_{45}$

The value  $m_{ij}$  is the number of fish detected at site  $i$  that are next detected at site  $j$ .

Burnham et al. (1987: p. 65, pp. 71-74) presents a series of tests of assumptions called Test 2 that examine whether upstream detections affect downstream survival and/or detection. For each of the  $R_1$ ,  $R_1'$ , and  $R_2$  releases, the contingency table tests are as follows:

Test 2.2	$m_{13}$	$m_{14}$	$m_{15}$	$\chi^2_2$	(5)
	$m_{23}$	$m_{24}$	$m_{25}$		

Test 2.3	$m_{14} + m_{24}$	$m_{15} + m_{25}$	$\chi^2_1$	(6)
	$m_{34}$	$m_{35}$		

Overall significance of Test 2 will be based on the sum of the chi-square statistics  $\chi^2_2 + \chi^2_1 = \chi^2_3$ . Test-wise error rates will be adjusted for the experimental-wise error rate of  $\alpha_{EX} = 0.10$ .

Burnham et al. (1987: p. 65, pp. 74-77) also present a series of test assumptions called Test 3 which also examine whether upstream capture histories affect downstream survival and/or capture. For each of the releases  $R_1$  and  $R_2$ , contingency tables can be constructed of the form:

		Capture History to McNary Dam		
		101	111	
Capture History at John Day and Bonneville Dams	11			(7)
	10			
	01			
	00			

 $\chi^2_3$ 

Contingency table (7) tests whether capture at McNary Dam has a subsequent effect on capture histories at John Day and Bonneville dams. To test whether capture at McNary Dam and/or John Day Dam has a subsequent effect on the capture history at Bonneville Dam, a contingency table can be constructed of the form:

		Capture History at John Day Dam				
		1111	1101	1011	1001	
Capture History at Bonneville	1					(8)
	0					

 $\chi^2_3$ 

Contingency tables (7) and (8) are slight modifications from Burnham et al. (1987) to take into account more of the information from the individual capture histories.

## 4.0 Anticipated Precision

Considering a Project survival probability through Wells Dam of 0.93 or higher, precision calculations were performed. Release sizes of 30,000, 10,000, and 30,000 for Methow, Okanogan, and Wells tailrace were used. Survival probabilities between projects and detection probability at dams were based on PIT-tagged yearling Chinook salmon releases during spring 2008 (Figure 2). Based on the anticipated detection and survival probabilities, the estimate of Wells passage survival has a projected standard error of  $SE(\hat{s}_w) = 0.0179$ . This projected standard error is based on a detection probability of 0.41 at the new Rocky Reach PIT-tag detector. Should the detection rate drop to 0.30, the anticipated standard error is  $SE(\hat{s}_w) = 0.0227$ . These projections are much smaller than the requirement of  $SE(\hat{s}_w) \leq 0.025$ . Therefore, the proposed sample sizes should be adequate and provide for robustness if anticipated detection rates are lower than those used in the sample size calculations.

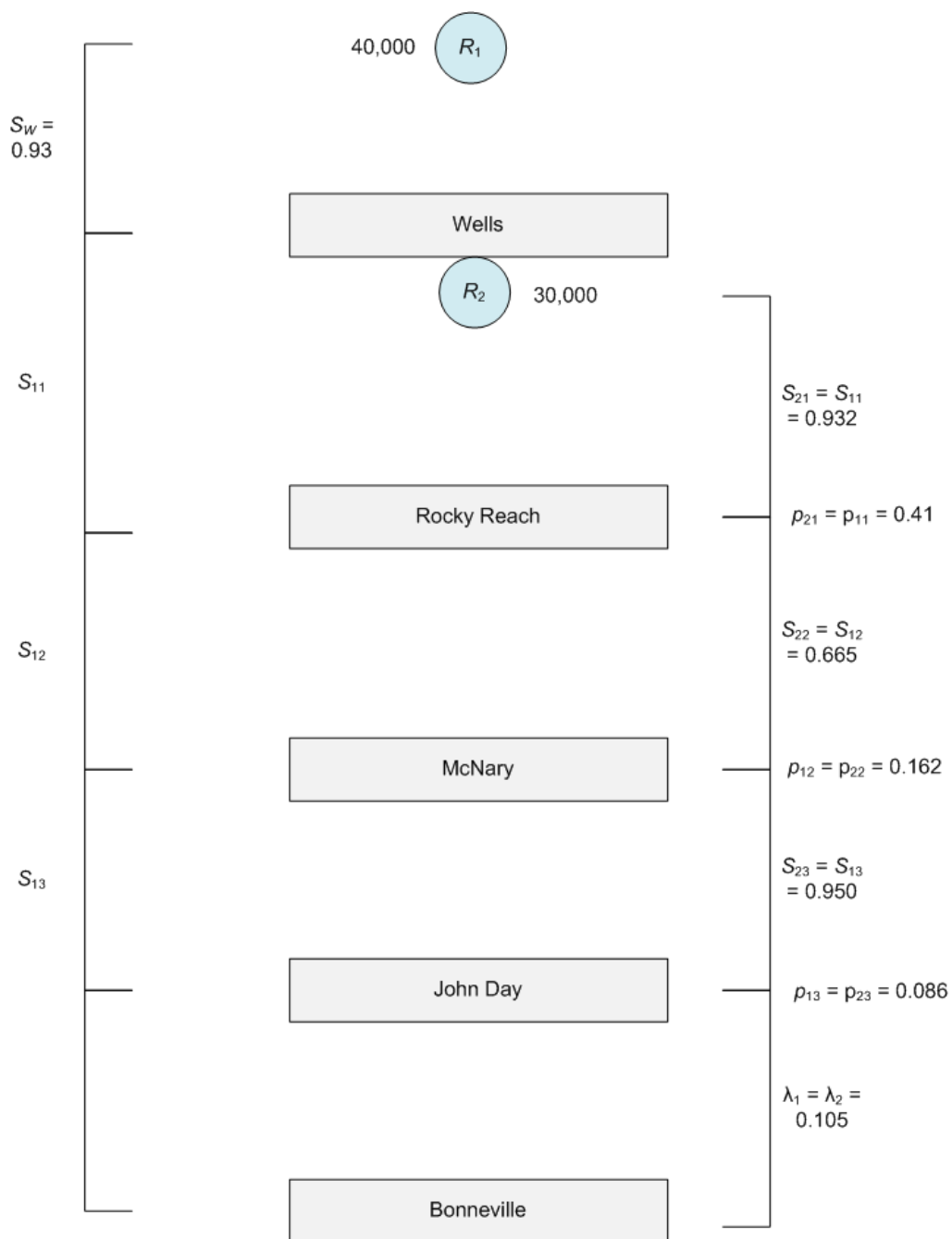


Figure 2. Parameter values used in precision calculations for the 2010 survival study.

## **5.0 Literature Cited**

- Burnham, K.P., Anderson, D.R., White, G.C., Brownie, C., and Pollock, K.H. 1987. Design and analysis methods for fish survival experiments based on release-recapture. American Fisheries Society Monograph **5**.
- Feller, W. 1968. An introduction to probability theory and its application. John Wiley & Sons, New York, New York, USA.
- Seber, G.A.F. 1982. The estimation of animal abundance. MacMillan, New York, New York.

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** August 25, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Josh Murauskas, and Steve Hemstrom

**Re:** Final Minutes of July 21, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met by conference call, on Tuesday, July 21, 2009, from 8:00 am to 9:30 am. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- There were no action items at this meeting.

### DECISION SUMMARY

- The Wells Coordinating Committee approved a 30-day modification of ladder entrance velocity between the hours of 9:00 pm and 1:00 am at Wells Dam to evaluate measures to enhance lamprey passage. Testing would begin the end of the third week in August (No SOA provided.) (Item II-A).

### I. Welcome

The Coordinating Committees approved the June 23 meeting minutes with revisions. Ali Wick will distribute the final Minutes to the Committees.

### II. Douglas PUD

#### A. *DECISION ITEM: Lamprey Study Plan*

Josh Murauskas provided a brief presentation on salmon and lamprey passage at Wells Dam. The Coordinating Committees reviewed this information to inform their decision on dam operations for the 2010 lamprey study. There was considerable discussion of the best time period for testing, with an emphasis on identifying a period during which impacts on



salmonids would be minimal and the opportunity to improve lamprey passage would be optimized. The Committees agreed that the tests will be conducted from 9:00 pm to 1:00 am instead of from 8:00 pm to 12:00 am, which was the time period that was originally considered. A summary of the experimental design is as follows: 10 replicate tests of 3-day blocks, each block testing 1.5-foot, 1.0-foot, and 0.5-foot head differentials. These tests would involve both fishway entrances simultaneously. The tests will span a 30-day period beginning on a date between August 16 and 20, depending on water conditions and downstream counts.

In response to a question from Bill Tweit on whether proposed reductions in head differential between the gallery and tailrace would change flows in the ladder, Murauskas explained that when velocities are reduced, there is a slight reduction in flow entering the lower half of the collection gallery, but there is no flow change in the upper half; there is also no change in the flow in the ladder itself. Tweit also said that the passage distribution at night appears to be different than other Mid-Columbia dams. Shane Bickford explained that a key reason for this difference is that there is no ambient light in the Wells Dam ladder, unlike in other Mid-Columbia dams, and this darkness functions as a cue for some fish to migrate. Mike Schiewe asked whether there would be an effect on statistical power due to changing the test time period; Murauskas responded that he has discussed this in conversations with John Skalski (statistician), and the effect is unknown at this time due to the lack of baseline data.

The Wells Coordinating Committees approved the 30-day operational change during which velocities at the adult fishway entrance would be modified between the hours of 9:00 pm and 1:00 am, in order to evaluate the efficiency of nighttime flow reductions at fishway entrances to facilitate lamprey passage.

### **III. Chelan PUD**

#### *A. Rock Island Powerhouse 1 Modernization*

Keith Truscott said that the modernization effort at Rock Island powerhouses is ongoing. He noted that unit B10 was the first unit to receive the new turbine with a horizontal flow vein installed in the draft tube at mid-height, spanning the full width. The runner design was changed from five blades to four. Wicket gates were replaced with a design that aligns with the stay vanes and lengthened to close the gap. The discharge liner was made partially

spherical and the hub shape changed to close the gaps with the runner. The construction outage started January 7, 2007 and was completed May 18, 2008. From May 2008 to May 2009 the unit was run extensively to prove out the design. Unit B9 was released for manufacturing June 30, 2009. The turbine design will be modified from B10 in that it will be capable of passing about 800 cfs more flow than the old Unit B9 by extending the stroke of the turbine blades and wicket gates. Additionally, the flow vane will not be installed, and instead the draft tube walls will be modified to reduce draft tube flow instabilities. The construction outage for B9 is planned for July 1, 2010 to April 15, 2011. Work on unit B4 will begin in August of this year. A major overhaul will be conducted on the turbine including: replacing wicket bushing with a greaseless design, modifying the turbine guide bearing from grease to water lubricated, and changing the gate ring to a non-lubricated design. The six turbine blades are sagging and in danger of striking the discharge liner so they will be welded in place at a blade position of 85% open.

An extensive condition assessment will be performed on one Powerhouse 2 Unit from July 2010 to December 2010. The purpose of outage is to disassemble the Unit and inspect the components to provide recommendations for future maintenance, repairs, and replacements.

#### *B. Pikeminnow Ladder Trapping*

Steve Hemstrom updated the group that Chelan PUD ceased trapping pikeminnow at Rock Island Dam on July 9 and ceased trapping at Rocky Reach on June 30. The total number of pikeminnow trapped was 2,610 at both dams combined. There were large numbers of sockeye entering the traps during this effort; all were released in good condition. Hemstrom also noted that there have been 21,255 pikeminnow caught thus far in the longlining effort.

### **IV. Tributary and Hatchery Committees Update**

Mike Schiewe updated the group that the Tributary Committees recently approved a Small Projects Proposal funding request for the Sleepy Hollow Reserve Protection Feasibility Assessment (\$20,000). The General Fund received 16 pre-proposals this year. One project was withdrawn from consideration by the project sponsor after submission and another was added. Of the 16 pre-proposals, the Tributary Committees identified one project that did not warrant a full proposal, because it had a low level of certainty of success. The Tributary Committees solicited full proposals for the remaining 15 projects, which are due on Friday, July 24. The projects are located in the Okanogan, Methow, Entiat, and Wenatchee basins.

Mike Schiewe updated the group that the Hatchery Committees are discussing the following topics:

- Passive Integrated Transponder tag (PIT-tag) detection arrays for the sockeye enumeration study have been installed in the White and Little Wenatchee rivers, and the study will start as soon as sockeye arrive.
- The Hatchery Committees preliminarily agreed that Chelan PUD can plan for another year of Blackbird Island Pond use.
- The Hatchery Committees reviewed National Marine Fisheries Service (NMFS) comments on the Chelan PUD 2010 Draft Monitoring and Evaluation (M&E) Plan.
- The Hatchery Committees received an update that 30,000 steelhead will soon be transferred to the Chiwawa Facility for the Chelan PUD water re-use acclimation study.
- There has been continuing discussion regarding fish anesthetic use at Tumwater Dam, and a working group of entities that use the dam (Yakama Nation [YN], U.S. Fish and Wildlife Service [USFWS], Washington Department of Fish and Wildlife [WDFW], Grant PUD, and Chelan PUD) will soon be convened to discuss needs and constraints and to develop a dam operational plan for review by the Hatchery Committees.
- Chelan PUD is investigating early rearing densities used in other hatcheries for sockeye salmon, and will be proposing facilities modification at the Eastbank Hatchery to accommodate rearing sockeye.
- The Hatchery Committees have preliminarily agreed to a pilot proposal to investigate distribution and spawn timing of hatchery origin (HOR) and natural origin (NOR) steelhead in the Upper Columbia River Basin. Final details are being worked out with Chelan and Douglas PUDs.
- The Hatchery Committees received a brief presentation on a YN multi-species acclimation proposal that is currently under review by the Independent Scientific Review Panel (ISRP).
- The YN is discussing the option of implementing over-winter acclimation of yearling summer/fall Chinook at Dryden given that results from Twisp, Chiwawa, and Similkameen suggest that acclimating juveniles over-winter can lead to increased survival.

- The Hatchery Committees approved the Colville Confederated Tribe's (CCT's) proposal to tag up to 10 summer Chinook at the west ladder at Wells Dam in order to support an upcoming salmon derby.
- The Hatchery Genetic Management Plans (HGMPs) for the Wenatchee programs will be finalized by the August Hatchery Committees meeting and submitted to NMFS.
- The Methow HGMPs are currently in progress, and the submission schedule will likely be shifted to October.
- The Non-Target Taxa of Concern (NTTOC) analysis will likely occur in late fall following the HGMP process.
- The Okanagan Nation Alliance (ONA) will attend a future meeting to update the group on the ONA sockeye program and the water management tool.

## **V. HCP Administration**

### *A. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: August 25, September 22, and October 27; all meetings will be in SeaTac.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Shane Bickford *	Douglas PUD
Josh Murauskas	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** September 22, 2009  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Greg Mackey, and Steve Hemstrom  
**Re:** Final Minutes of August 25, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met on Tuesday, August 25, 2009, from 9:30 am to 12:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- There were no action items at this meeting.

### DECISION SUMMARY

- There were no decisions or agreements at this meeting.

### I. Welcome

The Coordinating Committees approved the July 21 meeting minutes with revisions. Ali Wick will distribute the final Minutes to the Committees.

### II. Chelan PUD

#### A. Rocky Reach and Rock Island Spill Summary

Steve Hemstrom distributed a summary of spring and summer spill and reviewed the parameters and dates of the operations. Hemstrom noted that summer spill is scheduled to end August 31 due to declining fish passage.

#### B. Rocky Reach Fish Forum

Keith Truscott said that the Rocky Reach Fish Forum is underway as of this week. This forum is the mechanism for implementing the provisions of the new Federal Energy

---

Regulatory Commission (FERC) license for Rocky Reach Dam. Jeff Osborne is the designated representative for Chelan PUD.

*C. Dryden Weir Fish Passage*

Keith Truscott notified the group that recently a cobble bar has accumulated on the right bank of the Wenatchee River just downstream of the confluence of Peshastin Creek, which could impede fish from exiting the right bank fishway of the Dryden Weir. Chelan PUD will be working with the appropriate permitting agencies for a solution to this problem, which will likely involve removal or relocation of this material.

*D. Status of Rocky Reach Survival Study Analysis*

Steve Hemstrom provided an update to the group on the status of the Rocky Reach behavior and survival studies. The studies are now complete and the data are being analyzed, including a day/night analysis, a tag-life analysis, and a tagger effect analysis. Hemstrom anticipates that Chelan PUD will have data to share at the September meeting.

*E. Subyearling Summit*

The Coordinating Committees asked for an update on the work that is ongoing for the “subyearling summit,” which is an update on the status of the science and technology that would facilitate subyearling studies. Keith Truscott said that the PUDs are working on this and will likely have a presentation at the October meeting.

### **III. Douglas PUD**

*A. Wells Coordinating Committee Representation*

Tom Kahler updated the group that he will continue to be the Wells Coordinating Committee representative for Douglas PUD, but that Shane Bickford will now be the alternate in place of Rick Klinge, who is out on medical leave.

*B. Bypass Update*

Tom Kahler said that fish bypass operations at Wells Dam are scheduled to conclude at midnight on August 26.

*C. Update on Survival Study Planning*

Tom Kahler mentioned briefly that Douglas PUD 2010 survival study planning is ongoing.

*D. PIT-Tag Detector at Rocky Reach*

Tom Kahler said that Douglas PUD is working with its contractor and Chelan PUD on installation of the Passive Integrated Transponder tag (PIT-tag) antennas in the Juvenile Fish Bypass System at Rocky Reach. The antennas will be installed in the bypass flow spreaders, with the intention of maintaining the exact hydraulic configuration of the flow spreaders. Rather than modifying the existing flow spreaders, the contractor will fabricate duplicate flow spreaders with integrated antennas.

*E. Modifications to West Ladder Trap*

Tom Kahler said that Douglas PUD is in the preliminary stages of designing some modifications to the Wells west ladder trap, for several reasons. First, more fish have been using the west ladder in recent years; second, the Wells Dam multi-year Re-wind project began this year, and access to the west ladder has been somewhat limited relative to previous years. The intent of these modifications is to minimize fish handling. The schedule for this work is for construction to commence by February of 2010, which necessitates bid development by the end of November. Douglas PUD will be coordinating with the hatchery staff at Wells Dam, as well as other west ladder users, during the design process.

**IV. Tributary and Hatchery Committees Update**

Mike Schiewe updated the group on the Tributary Committees' recent work:

- The Tributary Committees have received the final applications for the 2009 General Salmon Habitat Program (GSHP). There were 14 applications, and the Tributary Committees have made initial evaluations of the proposals. The projects submitted were "cost-shares" with the Salmon Recovery Funding Board (SRFB). The Upper Columbia Regional Technical Team has conducted their technical review of these proposals and provided their scores and technical comments to the Tributary Committees for deliberation. Proposals were submitted to both the SRFB and the GSHP, and so the Tributary Committees will work with SRFB staff and members over the next few months to ensure close coordination.
- The Tributary Committees have recently discussed changes to the Policies and Procedures document that might allow them to provide funds for acquisition of lands where part of the land acquired could be used for hatchery production systems or facilities. Draft language will be reviewed by the Tributary Committees during the



---

September meeting. The Tributary Committees are not in agreement over the proposed changes; the draft language is for the purpose of discussion.

- At the next Tributary Committees meeting, there will be a presentation from the U.S. Fish and Wildlife Service (USFWS) on the Entiat National Fish Hatchery Habitat Improvement Project. On October 7 and 8, the Tributary Committees will visit the Okanagan River Restoration Initiative project in Canada.

Mike Schiewe updated the group that the Hatchery Committees are discussing the following topics:

- The Hatchery Committees agreed to a higher rearing density for Lake Wenatchee sockeye during the early rearing period.
- The Hatchery Committees approved the Wenatchee spring Chinook and steelhead Hatchery Genetic Management Plans (HGMPs).
- Chelan PUD will be holding both of their HGMPs for future submittal to the National Marine Fisheries Service (NMFS), following discussions and a NMFS decision on permit-related processes after submittal of the HGMPs.
- The Hatchery Committees approved a request for 150 summer/fall Chinook from Ringold Hatchery for a NMFS separation-by-code (SBC) study.
- The Hatchery Committees have reviewed WDFW collection of a surplus of summer Chinook broodstock at Wells Dam and agreed that these fish are in excess of HCP program broodstock needs.
- A letter has been provided to the Hatchery Committees on the status of the Yakama Nation's (YN's) Environmental Impact Statement (EIS) scoping process for the coho reintroduction program master plan; scoping meetings are currently underway.
- The Hatchery Evaluation Technical Team (HETT) was tasked with organizing the Non-Target Taxa of Concern (NTTOC) risk analysis.
- The USFWS has received approval from the Production Advisory Committee (PAC) for broodstock collection for the USFWS' new Entiat summer Chinook program. The next step is for USFWS to present the proposal to the policy committee under *U.S. v. Oregon*.
- Following the September Hatchery Committees meeting, the Okanagan Nation Alliance (ONA) will provide an update on the Skaha sockeye program (which provides sockeye mitigation for Chelan and Douglas PUD), and Kim Hyatt (Department of Fisheries and Oceans - Canada) will present the latest information

from the Okanogan Basin Water Management Tool (which provides sockeye mitigation for Douglas PUD).

## **V. USFWS**

Steve Hemstrom asked for an update on the status of bull trout critical habitat designation in the Wenatchee basin. Jim Craig said that he is not clear on the status at this time and he would get back to the Coordinating Committees with this information. His recommendation is to go forward with addressing critical habitat in the event that critical habitat is designated.

## **VI. HCP Administration**

### *A. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: September 22, October 27, and November 24; all meetings will be in SeaTac. The October meeting will be an all-day meeting to facilitate inclusion of the subyearling information. At the November meeting, John Skalski will be present Chelan PUD survival study results.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Tom Kahler *	Douglas PUD
Greg Mackey	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW

\* Denotes Coordinating Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** November 5, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick and Steve Hemstrom

**Re:** Revised Minutes of September 22, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met on Tuesday, September 22, 2009, from 9:30 am to 12:00 pm at the Radisson Gateway Hotel in SeaTac, Washington. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- There were no action items at this meeting.

### DECISION SUMMARY

- There were no decision items at this meeting.

### I. Welcome

The Coordinating Committees approved the August 25 meeting minutes with revisions. Ali Wick will distribute the final Minutes to the Committees.

### II. Chelan PUD

#### A. Study Results for Rocky Reach and Rock Island Spring Survival Studies

Keith Truscott summarized some preliminary results of the 2009 Rocky Reach and Rock Island juvenile sockeye salmon studies at today's meeting. John Skalski (University of Washington) and Tracy Steig (Hydroacoustic Technology, Inc. [HTI]) will attend the November meeting to present more detailed results. Steve Hemstrom distributed handouts with the preliminary results; Ali Wick will scan these and provide them to the Coordinating Committees in PDF format. Preliminary results indicated that there was a significant tag effect for one tagger. After substantial analyses to identify the cause of this phenomenon,

Chelan PUD has identified that this tag effect was possibly the result of the tagger using water without anesthetic, instead of low-anesthetic water, during tag surgery on the sockeye. There was also a larger day/night survival effect for this one tagger, versus the other two taggers' individual and combined results. The effects observed at Rocky Reach were also evident in the Rock Island sockeye study for the same tagger. For the preliminary results, this one tagger's fish were removed from the survival analyses. With these results removed, project study-wide survival estimates were 0.9545 (0.0118 standard error) for the Rocky Reach study and 0.9457 (0.0159 standard error) for the Rock Island study. The standard errors required for the HCP survival estimates (0.025) at both Rocky Reach and Rock Island were still met even with the affected set of fish removed from both studies.

Given that the 2009 Rock Island sockeye study was a Phase Designation study, and Rocky Reach will begin Phase Designation studies soon, Keith Truscott asked the Committees to review the preliminary results with regard to the tag-tagger effect for the 2009 sockeye survival estimates at Rock Island and Rocky Reach with the tagger-biased fish removed (HCP study standard errors still achieved). Truscott noted that each year of survival study implementation allows acquisition of additional information that improves the study design/analyses, and this year's tag/tagger effect is another element to recognize as Chelan pursues the task of estimating project survival. It was anticipated that further discussion of this subject will occur in the October meeting.

#### *B. Rocky Reach 24-Hour/Diel Analysis*

Steve Hemstrom handed out graphs showing relative passage frequencies plotted on 24-hour clocks. An interesting result was that 9:00 pm appears to be a high frequency passage time for all juvenile species considered (sockeye, yearling Chinook, subyearling Chinook, steelhead, and coho), but overall, sockeye passed in greater proportions during daylight hours while yearling Chinook passed in noticeably greater proportions in night time hours. Keith Truscott said that Chelan PUD is not ready to set 2010 study plans, but that when those plans are set, they will include further research into diel passage.

#### *C. Tags as Budget Item for 2010 Studies*

Steve Hemstrom said that Chelan PUD will likely be using 100 percent microtags next year for all species, as there was no tag life effect or premature tag failure observed this year with

microtags as there was with the 795E tags. The Coordinating Committees agreed that microtags were acceptable for 2010.

Bob Rose asked whether Chelan PUD has discussed the use of juvenile salmon acoustic tag system (JSATS) tags. Keith Truscott said that Chelan PUD is aware of the tags, but that considering the progress that the PUD has made in conducting survival studies with HTI acoustic tags and the substantial investment involved with ownership of the equipment, doing a switch to JSAT at this time would be cost-prohibitive. Rose indicated his interest in keeping the discussion active in the future. Truscott agreed that going forward, keeping this discussion open is acceptable. He also mentioned that Grant PUD conducted a study this year with JSATS tags and it will be interesting to see these results.

*D. Proposal for Hydrokinetic Project on Rock Island Reservoir*

Keith Truscott updated the group that there is a proposal by Green Hydro for constructing a hydrokinetic project on Rock Island reservoir and noted that the PUD would be submitting a Notice of Intervention to FERC the week of October 19. This would be a pilot project generating approximately 2 megawatts.

*E. Pikeminnow Program*

Keith Truscott updated the group that the pikeminnow removal project is going well; as of the end of last week, there were approximately 82,750 pikeminnow removed. The long-line contractor will begin a fishing effort in November.

### **III. Douglas PUD**

*A. Additional Brood Fish for Potential 2011 Survival-verification Study*

Tom Kahler said that Douglas PUD is planning for a contingency follow-up survival-verification study on juvenile spring migrants in 2011 just in case the 2010 study is unsuccessful, does not meet precision requirements, or does not meet Representative Environmental Conditions. To plan for this, the Coordinating Committees would need to agree on whether planning for this study is necessary, and then the Hatchery Committees would need to agree on how to complete study fish collection. At this time, Douglas PUD proposes to collect additional broodstock as a contingency in case a 2011 study is needed; approximately 22 to 25 females would be needed. Kahler has discussed this with almost all of the Hatchery Committees members at this time, and will be completing those discussions

soon. The Coordinating Committees agreed that Douglas PUD shall plan for a contingency study, which includes obtaining broodstock for this study, and that Douglas PUD will work with the Hatchery Committees as necessary.

*B. 2009 Wells Bypass Summary*

Tom Kahler said that he will be providing the 2009 bypass summary soon.

#### **IV. Tributary and Hatchery Committees Update**

Ali Wick updated the group that the Tributary Committees did not meet this month.

Ali Wick updated the group of the following discussions that occurred at the Hatchery Committees meeting:

- The Hatchery Committees approved Grant PUD's annual request to Douglas PUD for space at Wells and Methow hatchery facilities for hatchery production.
- Douglas PUD is continuing work on its Hatchery Genetic Management Plans (HGMPs).
- Douglas PUD presented a draft study design for a Methow steelhead reproductive success study and will be convening a subgroup to further develop the study.
- Chelan PUD has developed a proposal for a steelhead spawning success study in the Wenatchee Basin and the Hatchery Committees will be providing comments soon for October approval.
- The Hatchery Committees are discussing the technical issues surrounding whether to use Blackbird Pond in 2010.
- The Hatchery Committees will consider reviewing the Upper Columbia Salmon Recovery Board's (UCSRB) Monitoring and Evaluation (M&E) Plan and commenting on data gaps identified in Upper Columbia salmon recovery efforts.
- The Hatchery Committees are reviewing potential paths forward for rearing yearling summer/fall Chinook in water reuse ponds for Chelan PUD's HCP production.
- The Chelan PUD sockeye enumeration study is progressing well.
- Chelan PUD is involved in contingency planning for fish care during low flows at the gravel bar at Dryden weir that has recently accumulated. The Hatchery Committees approved several courses of action that may be taken if necessary.
- The Yakama Nation (YN) provided an update on their proposal to implement multi-species acclimation in the Wenatchee and Methow subbasins.

- The YN has approached Washington Department of Fish and Wildlife (WDFW) on opening a non-tribal and tribal fishery on coho salmon, and the YN is currently waiting for a response.
- A public meeting was held in the Wenatchee and the Methow on the YN's coho Environmental Impact Statement (EIS); the meeting went well and the proposal was well received.
- There may soon be a workshop to discuss a web-based data sharing portal sponsored by the Pacific Northwest Ambient Monitoring Program (PNAMP).
- The Hatchery Evaluation Technical Team (HETT) presented preliminary plans to convene an expert panel to consider potential effects to Plan Species from Non-Target Taxa of Concern (NTTOC). The Hatchery Committees have tasked the HETT with this action item, which addresses Regional Objective 10 of the M&E Plan. The Hatchery Committees agreed with the proposed path forward and will be reviewing work products as this process develops.

## **V. HCP Administration**

### *A. Meeting Agreements not requiring a Statement of Agreement (SOA)*

- The Coordinating Committees agreed that removing the fish tagged by the individual tagger associated with a large tag effect is acceptable for 2009 survival study analyses (Item II-A).
- The Coordinating Committees agreed that Chelan PUD may use 100 percent microtags for survival studies in 2010 (Item II-C).
- The Coordinating Committees agreed that Douglas PUD shall plan for a contingency survival-verification study, which includes obtaining broodstock for this study, and that Douglas PUD will work with the Hatchery Committees as necessary (Item III-A).

### *B. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: October 27, November 24, and December 15; all meetings will be in SeaTac. The October meeting will be an all-day meeting to facilitate inclusion of the subyearling information (Note added after the meeting: The technical session on the feasibility of conducting subyearling Chinook salmon survival studies is being moved to November 2009). At the November meeting, John Skalski will be present to provide Chelan PUD survival study results and answer any questions.



## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Ali Wick	Anchor QEA, LLC
Keith Truscott *	Chelan PUD
Steve Hemstrom	Chelan PUD
Jerry Marco * (by conference call)	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bob Rose * (by conference call)	Yakama Nation

\* Denotes Coordinating Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** November 19, 2009  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick and Steve Hemstrom  
**Re:** Final Minutes of October 27, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met on Tuesday, October 27, 2009, from 9:30 am to 12:30 pm at the Radisson Gateway Hotel in SeaTac, Washington. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Steve Hemstrom will draft a Statement of Agreement (SOA) confirming that the Coordinating Committees agree that the analysis of the 2009 sockeye survival data should exclude fish tagged by Tagger No. 3 (Item II-A).
- Steve Hemstrom and John Skalski will develop draft guidelines for removing a tag group or lot from survival study results (Item II-A).
- Tom Kahler will circulate the preliminary designs for modifications to the flow spreaders in the Rocky Reach juvenile bypass to accommodate PIT-tag detection antennas (Item III-A).
- Mike Schiewe will confirm the date and agenda for the Mid-Columbia subyearling Chinook survival study workshop (Item V-A).

### DECISION SUMMARY

- There were no decision items at this meeting.

### I. Welcome

The Coordinating Committees will approve the September 22 meeting minutes with revisions by email. Ali Wick will distribute the final minutes to the Committees.

---

## II. Chelan PUD

### A. *Study Results for Rocky Reach and Rock Island 2009 Survival Studies*

Steve Hemstrom introduced John Skalski, who provided a presentation on 2009 sockeye studies at Rocky Reach and Rock Island. The objectives were to estimate and compare Rocky Reach passage survival for daytime and nighttime releases, and to estimate Rock Island passage survival (daytime only) under conditions of 10 percent spill. Skalski's analysis included a detailed examination of tagger effects. As discussed at a previous Coordinating Committees meeting, there was a marked reduction in post-release survival of sockeye smolts tagged by one of the three taggers (Tagger No. 3). Skalski said that it was possible and justifiable to remove fish tagged by Tagger No. 3 from the analysis (approximately one-third of all tags); he confirmed that precision of the survival estimate remained high because the reduced sample size was offset by the high detection efficiency. Based on the analysis of fish tagged by Taggers No. 1 and 2 only, Rock Island project passage survival was 0.9467 (standard error [SE] = 0.0159); Rocky Reach project passage survival for day-time releases was 0.9507 (0.0160), and it was 0.9592 (0.0175) for night-time releases. This latter result indicates that there was no significant diel passage effect for sockeye.

Bill Tweit asked whether there should be technological or other contingencies to minimize the potential that tagger effects will significantly impact a study. Skalski suggested that these contingencies would not be necessary as long as the sample size remains high enough to overcome the tagger effect. Skalski also said that analyzing tagger effects and tag lot effects will be part of all future studies. Bryan Nordlund asked that the analysis of tagger effects be included in the final report; Hemstrom confirmed that this would be the case and that this information may be included in an appendix. Mike Schiewe suggested that Skalski write up a set of general guidelines under which it would be appropriate to remove a tagged group in the future. These would be appended to the study report, but Chelan PUD will clarify that these constitute a working document and can be revised in the future. Bob Rose suggested that Chelan PUD might want to evaluate the quality assurance/quality control (QA/QC) process for taggers, and Hemstrom said that this had been done and the protocols had been communicated correctly to the taggers.

Hemstrom asked whether the Rock Island Coordinating Committee was comfortable with using this year's survival studies as a study contributing to Phase Designation for sockeye at Rock Island. Mike Schiewe said that that decision will be part of the approval of the

forthcoming 2009 survival study report. In the meantime, Hemstrom will draft an SOA that documents the Coordinating Committees' concurrence to remove fish tagged by Tagger No. 3 from the 2009 analysis. At the November meeting or after the study report is complete and reviewed by the Committees, the Committees will consider an SOA approving the study and its use for Phase Designation.

For 2010, Chelan PUD is considering investigating potential diel passage effects on steelhead and sockeye at Rocky Reach and Rock Island. In addition, they will conduct survival studies for Chinook and steelhead at Rock Island.

*B. 2010 Pikeminnow Acoustic Deterrent Study and Comparison of Biological Catch Statistics for Chelan PUD's 2007 to 2009 Pikeminnow Control Programs*

Lance Keller discussed Chelan PUD's preliminary plans for a pilot study on the use of underwater sound to modify pikeminnow behavior, identify a potential optimal acoustic frequency, and evaluate potential effects on salmonids and lamprey. Such an acoustic device could potentially be deployed at locations where pikeminnow would be unwanted, such as in the fish ladder or the entrance to the corner surface collector. Bill Tweit suggested that Chelan PUD consider looking at effects on sturgeon as well. Steve Hemstrom said that the pilot study is under development and that the Coordinating Committees would have an opportunity to review it once it is available.

### **III. Douglas PUD**

*A. Modification of Rocky Reach Juvenile Bypass for PIT-Tag Detector*

Tom Kahler updated the group on Douglas PUD's work on modification of the Rocky Reach juvenile bypass system to accommodate passive integrated transponder tag (PIT-tag) detection equipment. Kahler is awaiting preliminary designs for this structure and will circulate them to the Coordinating Committees when available.

### **IV. Tributary and Hatchery Committees Update**

Mike Schiewe updated the group that the Tributary Committees did not meet in September. They informally met on October 7 and 8 to visit several projects they have funded in Canada, including the Okanagan River Restoration Initiative.

---

Mike Schiewe updated the group of the following discussions that occurred at the recent Hatchery Committees meeting:

- The Hatchery Committees are discussing a potential Wenatchee steelhead spawning success study.
- The Hatchery Committees received presentations on results of fish health monitoring of the summer Chinook that were raised in the pilot study of the partial water reuse system at Eastbank Hatchery and results of a study on precocial (age 2 “mini jacks”) male maturation in summer Chinook in the reuse and control groups from the study.
- Chelan PUD will soon be providing a detailed update on future plans for Blackbird Pond for steelhead.
- The Hatchery Committees approved summer Chinook rearing at Ringold Hatchery and Eastbank Re-use Facility and agreed to the rearing of 400,000 yearling summer Chinook for acclimation and release at Chelan Falls and Turtle Rock (2009 brood year).
- Chelan PUD reported that Chiwawa spring Chinook are currently experiencing a *Saprolegnia* (“flag-tail”) outbreak with approximately 1 percent of the fish affected.
- The Hatchery Committees received an update on the Chiwawa steelhead reuse pilot study; construction is almost complete and fish will be transferred soon.
- The Hatchery Committees are considering a draft SOA for reduction of spring Chinook production levels and the implementation of testing early parental-based tagging (PBT) rearing.
- The Hatchery Committees approved the transfer of 200,000 Met-Comp fish currently at Winthrop Hatchery to Tonasket Pond and Omak Creek Acclimation Facility (in the Okanogan basin) in early November. The total transfer will be 200,000 fish; 50,000 to Omak and 150,000 to Tonasket.
- The Douglas PUD Methow spring Chinook and steelhead Hatchery Genetic Management Plans (HGMPs) are still in progress and most of the remaining work involves achieving consistency with the Hatchery Scientific Review Group’s (HSRG’s) recommendations; Douglas PUD will continue to work toward the October 31 deadline but informed National Marine Fisheries Service (NMFS) that it may not be met because the HGMP sub-group has not reached consensus on a few outstanding details of each program.
- Douglas PUD is planning some modifications for adult fish holding and sorting at Wells Hatchery.

- The 2010 Wells Monitoring and Evaluation (M&E) Implementation Plan is out for Hatchery Committees' review.
- The Yakama Nation (YN) provided an update on the status of the YN proposal to implement multi-species acclimation in the Wenatchee and Methow subbasins.
- NMFS is reviewing the Wenatchee basin HGMPs and will provide comments to the parties that have submitted these HGMPs in the near future.
- The Hatchery Evaluation Technical Team (HETT) has completed the draft letter of interest and the panel member list for the Non-Target Taxa of Concern (NTTOC) analysis.
- The HETT continues to work on the control group (aka reference stream) analysis.
- Joe Miller will be the new Chelan PUD representative on the Hatchery Committees; Steve Hayes will be the alternate.

## **V. HCP Administration**

### *A. Subyearling Survival Study Workshop*

Mike Schiewe distributed the draft agenda for the Coordinating Committees' Mid-Columbia Subyearling Chinook Survival Study Workshop scheduled for the morning of Tuesday, November 24. This meeting is currently scheduled for the Radisson Gateway Hotel in SeaTac from 8:00 am to 2:00 pm (same location as today's meeting). Attendance to this workshop will be limited to the members of the Wells, Rocky Reach, and Rock Island HCP Coordinating Committees, the Priest Rapids Coordinating Committees, and up to four members of their staff. Schiewe will confirm the dates and times with these groups in the next few days.

### *B. Next Meetings*

The next scheduled Coordinating Committees meetings are as follows: November 24, December 15, and January 26; all meetings will be in SeaTac. The November meeting will be an all-day meeting to facilitate inclusion of the subyearling information in the morning/early afternoon and the Coordinating Committees meeting in the late afternoon.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Steve Hemstrom *	Chelan PUD
Lance Keller	Chelan PUD
Joe Miller	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Bryan Nordlund *	NMFS
John Skalski	UW
Rich Townsend	UW
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate



## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** January 19, 2010

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick

**Re:** Final Minutes of November 24, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met on Tuesday, November 24, 2009, from 2:30 pm to 4:30 pm at the Radisson Gateway Hotel in SeaTac, Washington.

### ACTION ITEM SUMMARY

- Keith Truscott will send out the proposed 2010 Rock Island HCP Yearling Chinook Study Plan (Item III-D).

### DECISION SUMMARY

- The Rock Island Coordinating Committee approved the Statement of Agreement (SOA) "Approval of 2009 Rock Island Phase Designation Survival Study results (10% spill study) with tagger-affected sockeye removed from the survival analyses" (see Attachment B).

### I. Welcome

The Coordinating Committees approved the October 27 meeting minutes with revisions. Ali Wick will distribute the final minutes to the Committees.

### II. Douglas PUD

#### A. *Modification of Rocky Reach Juvenile Bypass for PIT-Tag Detector*

Tom Kahler showed conceptual plans for modification of the flow spreaders at the Rocky Reach juvenile bypass to accommodate antennas for PIT-tag detection. Bryan Nordlund provided his approval for the concept prior to the meeting, and there were no additional questions or comments from the rest of the committee on this conceptual design. The

---

Coordinating Committees approved Douglas PUD moving forward with design and implementation of this modification.

### **III. Chelan PUD**

#### *A. DECISION ITEM: 2009 Rock Island Sockeye Study Results with Tagger Affected Fish Removed*

Steve Hemstrom introduced this SOA for decision at this meeting. He and John Skalski had an action item from the last meeting to develop and include in the Rock Island study report a protocol for handling tag and tagger effects for this year's study and for future studies. This has been done and included in the draft report. The Coordinating Committees approved the SOA (Attachment B). The Committees will provide any comments to Chelan PUD before the December 15 meeting; the draft report will be considered for approval at the December meeting.

#### *B. Discussion of a Draft 2009 SOA approving Rock Island Sockeye Phase III Standard Achieved Under 10% Spill Operation*

Keith Truscott introduced for discussion at this meeting an SOA for approval of Phase III (Standard Achieved) for sockeye under a 10 percent spill operation. Truscott asked for comments on this SOA from Coordinating Committees members prior to the next meeting; the SOA will be considered for approval at the next meeting.

#### *C. Update and Schedule for 2010/2011 Rocky Reach Adult Fishway Maintenance Outage with AWS Pump Overhaul*

Keith Truscott updated the group that the Rocky Reach fishway will be dewatered from December 1 through March 1 to replace a shaft on the attraction water system (AWS) pump. There were no concerns from the Rocky Reach Committee about this activity.

#### *D. Summary of Proposed 2010 Rock Island HCP Yearling Chinook Study*

Keith Truscott said that Chelan PUD has begun planning the 2010 yearling Chinook study and asked for any preliminary Coordinating Committees' feedback. One key difference between 2010 and previous years will be that a representative portion of the tagged Chinook will be released off the mouth of the Wenatchee River, based on the proportion of fish entering the Rock Island pool from that location, and a portion of fish will be released in the Rocky Reach tailrace based on the appropriate proportion entering from above Rocky Reach. Prior HCP studies at Rock Island estimated survival of smolts originating only from above

Rocky Reach Dam (represented by Rocky Reach tailrace releases only), without survival representation for a large proportion of Chinook smolts (56 percent) entering further downstream from the Wenatchee River. Chelan PUD will finalize the proposal and Truscott will distribute a full draft study plan to the Committees. The study plan will be up for approval in early 2010.

Keith Truscott said that Chelan PUD will also be completing a day/night study at Rocky Reach in 2010 for yearling Chinook that mirrors the project operations and study protocol of the 2009 Rocky Reach day/night study that was performed with sockeye. Steve Hemstrom said that route-specific reports for sockeye at Rocky Reach will be distributed soon.

#### **IV. Tributary and Hatchery Committees Update**

Mike Schiewe updated the group that the Tributary Committees have 13 applications to review under the 2009 General Salmon Habitat Program and will make funding decisions in January 2010. The Tributary Committees also are discussing the issue of potentially allowing use of Tributary Funds for acquisition of lands for hatchery production systems or facilities. There has not been a decision on this issue at this time.

Mike Schiewe updated the group of the following discussions/actions that occurred at the recent Hatchery Committees meeting:

- The Hatchery Committees concurred with Washington Department of Fish and Wildlife's (WDFW's) recommendation to cull approximately 26,000 Chiwawa spring Chinook eggs from female broodstock that tested "high" BKD.
- The Hatchery Committees concurred with WDFW's recommendation to cull 57,000 Methow composite spring Chinook eggs that are excess to program needs at Methow Hatchery unless another HCP use can be identified before close of business Tuesday, December 1.
- Douglas PUD is continuing to work with WDFW on steelhead and spring Chinook Hatchery Genetic Management Plans (HGMPs).
- The Hatchery Committees approved the WDFW/Northwest Fisheries Science Center (NWFSC) Wenatchee Steelhead Spawning Success Study.
- The Hatchery Committees will soon be considering a SOA reducing Chiwawa spring Chinook production, and a linked SOA for pilot-scale testing of parental based tagging.

- Chelan PUD is re-evaluating the need for the new water right for the Chiwawa steelhead acclimation ponds.
- Chelan PUD is ready to move forward on final design and construction for the summer Chinook program at Chelan Falls, and is working with National Marine Fisheries Service (NMFS) to resolve any permitting issues.
- USFWS reported the removal of 62 Leavenworth National Fish Hatchery (NFH) spring Chinook adults at Tumwater in 2009.
- The potential transfer of 200,000 spring Chinook from Winthrop Hatchery to the Colvilles was cancelled due to some unforeseen Endangered Species Act (ESA) issues.
- There is a workgroup investigating protocols for handling hatchery adults at Tumwater Dam that are in excess to broodstock or natural spawning needs.
- The Hatchery Evaluation Technical Team (HETT) is currently working on the risk template for the Non-Target Taxa of Concern (NTTOC) process; this template will be available in January or February for Hatchery Committees review. For control groups, the HETT is completing the analysis and will have that to present to the Hatchery Committees by approximately March 2010.

## **V. HCP Administration**

### *A. Meeting Agreements not Requiring an SOA*

The Coordinating Committees approved Douglas PUD moving forward with design and implementation of the modification of the flow spreader at the Rocky Reach juvenile bypass to accommodate the PIT-tag detection antennas.

### *B. Next Meetings*

The next scheduled Coordinating Committees meeting will be on December 15 in Wenatchee. The two meetings after that (January 26 and February 23) will be in SeaTac.

## **List of Attachments**

Attachment A – List of Attendees

Attachment B – Final Statement of Agreement - Rock Island HCP Coordinating Committee Approval of 2009 Rock Island Phase Designation Survival Study results (10% spill study) with tagger-affected sockeye removed from survival analyses

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Steve Hemstrom *	Chelan PUD
Keith Truscott *	Chelan PUD
Joe Miller	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Josh Murauskas	Douglas PUD
Shane Bickford *	Douglas PUD
Bryan Nordlund *	NMFS
Jim Craig *	USFWS
Bill Tweit *	WDFW
Bob Rose *	Yakama Nation

\* Denotes Coordinating Committees member or alternate

**FINAL**  
**Statement of Agreement**  
**Rock Island HCP Coordinating Committee**  
**Approval of 2009 Rock Island Phase Designation Survival Study results (10% spill study) with tagger-**  
**affected sockeye removed from survival analyses**

**November 24, 2009**

**Agreement Statement**

The Rock Island HCP Coordinating Committee (RICC) has reviewed tagging and survival data for all juvenile sockeye used in Chelan PUD's 2009 Phase Designation study at Rock Island under a 10% spill operation. On October 27, 2009, the RICC determined that an obvious and statistically significant tagger effect (bias) was expressed in juvenile sockeye tagged by one of the three fish tagging teams in the 2009 study (Skalski et al. 2009), and that these fish can and should be removed from the paired-release analysis to estimate Project survival for juvenile sockeye at Rock Island in 2009. The RICC also agrees that the 2009 Rock Island sockeye study will remain a valid Habitat Conservation Plan (HCP) study given that both the Project survival estimate (0.9457) and the necessary HCP study precision (0.0159) were met with the affected fish removed. The RICC requests that results of the tagger effect analysis be appended to the 2009 Rock Island Survival Study report and Chelan PUD agrees to provide this as an appendix to the report.

**Background**

2009 marked the third year of survival testing for juvenile sockeye at Rock Island Dam in accordance with the Rock Island HCP under an alternative 10% spill level. Two paired-release studies (2008 and 2009) and one single-release study (2007) were conducted by Chelan PUD to test juvenile Project survival for sockeye. In 2009, significantly lower survival was observed for all groups of fish tagged by one tagger during the 24-day study (approximately 1/3 of the study fish). The effect was readily apparent at all four fish release locations used in the study, and was statistically significant when compared to survival of fish tagged by the other two fish taggers at the same four locations. A thorough analysis of individual tagger results was completed by John Skalski which showed that this tagger effect introduced a strong undesirable bias to the study. Chelan conducted a review of tagging procedures and determined that one tagger deviated consistently from tag surgery/anesthesia protocols which likely resulted in the poor survival of affected release groups. Skalski presented and discussed these results of the analyses with the RICC on October 27, 2009. Due to the very high detection efficiency of each of the acoustic detection arrays downstream of release sites, the study precision remained high with affected fish removed, and the Project survival estimate exceeded the 93% juvenile survival standard required by the HCP.

**References:**

Skalski, J.R., R.L. Townsend, T. W. Steig, and P. A. Nealson. 2009. Survival of Sockeye Salmon Smolts through the Rock Island Project in 2009. Prepared for: Public Utility District No. 1 of Chelan County.

**Table 1. Summary of Results for HCP Phase Designation Survival Studies (standard errors in parentheses) at Rock Island under a 10% Spill Level.**

Species	2007	2008	2009	3-Year Average
Sockeye	.9188 <sup>^</sup> (.0123)	.9335 (.0129)	.9457 (.0159)	.9327
Yearling Chinook	.9725 (.0185)	.8972 (.0157)	Study suspended*	NA
Steelhead	NA	.9699 (.0103)	Study suspended*	NA

<sup>^</sup>Single-Release Estimate

\*Study started but suspended due to malfunction of acoustic tags used for Chinook and Steelhead

RICC DRAFT SOA, November 24, 2009

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP  
Coordinating Committees

**Date:** January 26, 2010

**From:** Michael Schiewe, Chair, HCP Coordinating  
Committees

**Cc:** Ali Wick

**Re:** Final Minutes of December 15, 2009 HCP Coordinating Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met on Tuesday, December 15, 2009, from 12:30 pm to 2:30 pm at Chelan PUD in Wenatchee, Washington. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- The Coordinating Committees will send any edits on the subyearling workshop minutes to Ali Wick by January 19 (Item I-A).
- The Coordinating Committees will send any edits on the Draft 2009 Rocky Reach Juvenile Sockeye Day/Night Survival Study Report to Chelan PUD by January 15 (Item II-B).
- Chelan PUD will send out the 2010 Rock Island Yearling Chinook Study Plan (Item II-C).

### DECISION SUMMARY

- The Rock Island Coordinating Committee approved the Statement of Agreement (SOA) for Phase III HCP Standards Achieved for Juvenile Sockeye at Rock Island Project (Item II-A).

### I. Welcome

The Coordinating Committees discussed the November 24, 2009 meeting minutes. Jim Craig said that he will need additional time to review these. If there are not substantial edits from him, Ali Wick will distribute the final minutes to the group following his review. If there are substantial edits, Wick will send the revised minutes out for email approval.

Mike Schiewe noted that the minutes from this meeting and the minutes from the subyearling workshop that also occurred on November 24 were separated into two documents instead of one. The Committees said that they will need additional review time for the subyearling workshop minutes. They agreed to provide comments to Ali Wick by January 19 for considerations at the next meeting.

## **II. Chelan PUD**

### ***A. DECISION ITEM: SOA, Phase III HCP Standards Achieved for Juvenile Sockeye at Rock Island Project***

Steve Hemstrom introduced the SOA for Phase III HCP Standards Achieved for juvenile sockeye at the Rock Island Project, for decision at this meeting. The Coordinating Committees approved the SOA with minor edits (Attachment B).

### ***B. Draft 2009 Rocky Reach Juvenile Sockeye Day/Night Survival Study Report***

This report has been distributed to the Coordinating Committees for review; final comments are due January 15 to Chelan PUD. Bryan Nordlund provided several comments for Steve Hemstrom to consider for incorporation into the final report.

### ***C. Status of Rock Island Yearling Chinook Study Plan 2010***

Keith Truscott updated the group that Chelan PUD is currently planning the 2010 yearling Chinook 10 percent spill survival study at Rock Island Dam. Chelan PUD will have this completed soon and will distribute a full draft study plan to the Coordinating Committees for their review and approval in early 2010.

### ***D. PIT-Tag Monitoring Equipment at Rocky Reach and Rock Island Fishways***

Keith Truscott said that Chelan PUD is moving forward on acquiring and installing half duplex passive integrated transponder tag (PIT-tag) monitoring equipment at Rock Island and Rocky Reach fishways.

### ***E. HTI Route-Specific Passage Report***

Steve Hemstrom updated the group that he will soon be sending the Coordinating Committees the route-specific passage report for 2009.



#### *F. Rocky Reach Fish Forum*

Keith Truscott made a suggestion that he could provide notes from the Rocky Reach Fish Forum group meetings to the Coordinating Committees. The Committees agreed that they would like to be provided these minutes.

### **III. Douglas PUD**

#### *A. Wells Fish Ladder De-Watering*

Tom Kahler updated the group that the Wells east fish ladder would be dewatered for yearly maintenance starting on December 22. As usual, as part of this work, fish remaining in the ladder after de-watering will be removed and returned to the river. Bryan Nordlund asked Kahler to verify that there are no gaps between the collection gallery and the auxiliary water supply chamber that could entrain fish, and Kahler agreed to do so. Kahler added that west ladder maintenance work will occur in January 2010.

#### *B. Discussion of Design for West Ladder Fish Return Pipe Plan*

Tom Kahler updated the group that Douglas PUD has designed a pipe system to return fish to the west ladder. The function of this pipe is to return fish to the river that have been trapped but are not used for broodstock. Bryan Nordlund suggested that Kahler may want to connect with Kris Petersen on this action, and Kahler said that he would. The Coordinating Committees discussed that there was no need for formal Committees' approval for these drawings, and agreed that Douglas PUD may move forward with this design.

### **IV. Tributary and Hatchery Committees Update**

Mike Schiewe updated the group that the Tributary Committees will not meet until January 2010 and will be making 2009 funding decisions at that time. The Hatchery Committees will meet tomorrow (December 16), so there is no update today.

### **V. HCP Administration**

#### *A. Next Meetings*

The next scheduled Coordinating Committees meeting will be on January 26, February 23, and March 23, all in SeaTac.

## **List of Attachments**

Attachment A – List of Attendees

Attachment B – Statement of Agreement, Rock Island HCP Coordinating Committee

Approval of Rock Island Sockeye Phase III Standards Achieved with 10%  
Project Spill

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Steve Hemstrom *	Chelan PUD
Keith Truscott *	Chelan PUD
Jerry Marco * (by phone)	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Bryan Nordlund * (by phone)	NMFS
Jim Craig *	USFWS
Teresa Scott * (by phone)	WDFW

\* Denotes Coordinating Committees member or alternate

**Final  
Statement of Agreement  
Rock Island HCP Coordinating Committee  
Approval of Rock Island sockeye Phase III Standards Achieved with 10% Project spill  
(Approved December 15, 2009 HCP CC Meeting)**

**Agreement Statement**

The Rock Island HCP Coordinating Committee (RICC) agrees that Chelan PUD (Chelan) has conducted three years of valid HCP studies (2007-2009) with juvenile sockeye at the Rock Island Project with a 10% spill level. The RICC agrees that Chelan may move to Phase III Standard Achieved for juvenile sockeye at Rock Island with a 10% Project spill level.

**Background**

In 2009, Chelan completed the third year of survival testing for juvenile sockeye at Rock Island Project in accordance with the Rock Island HCP under an alternative 10% spill level. One single release study (2007) and two paired release studies (2008 and 2009) yielded Project Survival estimates of 0.9188, 0.9335 and 0.9457, respectively. Each study achieved the necessary precision of  $\leq 2.5\%$ . The three-year (2007-2009) arithmetic mean for these juvenile sockeye studies is 93.27%, exceeding the HCP Juvenile Project Survival Standard of 93%.

**Table 1. Summary of Results for HCP Phase Designation Survival Studies (standard error in parentheses) at Rock Island under a 10% Spill Level.**

Species	2007	2008	2009	3-Year Average
Sockeye	.9188 <sup>^</sup> (.0123)	.9335 (.0129)	.9457 (.0159)	<b>.9327</b>
Yearling Chinook	.9725 (.0185)	.8972 (.0157)	Study suspended*	NA
Steelhead	NA	.9699 (.0103)	Study suspended*	NA

<sup>^</sup>Single-Release Estimate

\*Study started but suspended due to malfunction of acoustic tags used for Chinook and Steelhead

APPENDIX B  
HABITAT CONSERVATION PLAN  
HATCHERY COMMITTEES MEETING  
MINUTES AND CONFERENCE CALL  
MINUTES

---

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** February 18, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Julie Pyper, Tom Kahler, Steve Hays, and Joe Miller

**Re:** Final Minutes of January 21, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, January 21, 2009, from 9:30 am to 4:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Ali Wick will send out the final document *Summary and Strategy for Monitoring and Evaluation Plan Objective 10 (NTTOC)*, with the edits made at today's meeting (Item II-A). (Attachment B)
- Julie Pyper and Alene Underwood, in coordination with Douglas PUD, will summarize the process for contracting for HCP studies for their respective PUDs, for the Hatchery Committees' information (Item II-C).
- Mike Schiewe will compile information on the scientific peer review and evaluation process used by other funding entities, with a special emphasis on the ranking criteria that they utilize (Item II-C).
- The Hatchery Committees will provide feedback on the Hatchery Committees study evaluation flowchart by February 4 (Item II-C).
- Kirk Truscott will provide today's WDFW handout on goals and objectives for the steelhead reproductive success study to Ali Wick for group distribution (Item II-D).
- Hatchery Committees members will provide recommended changes/comments on the Washington Department of Fish and Wildlife (WDFW) steelhead study handout to Ali Wick for group review by February 4 (Item II-D).

- 
- Hatchery Committees members will provide any comments to Douglas PUD on the 2009 Wells HCP Action Plan by February 4 (Item III-A).
  - Joe Miller will provide details on Chelan PUD's proposed approach for evaluating detection efficiency for the sockeye escapement study at the next meeting (Item IV-C).

## DECISION SUMMARY

- The Committees agreed to allocate 800 – 1,000 summer Chinook from the Pilot Water Re-Use Study for a study on precocity and fatty livers.
- The Committees agreed that Chelan PUD should PIT-tag 10,000 fish per group for the 2009 Pilot Water Re-Use study.

### I. Welcome

The Hatchery Committees approved the December 17, 2008 Meeting Minutes and confirmed the approval of the December 4, 2008 Conference Call Minutes; Ali Wick will distribute the final Minutes to the Hatchery Committees.

### II. All Committees

#### A. NTTOC

The Hatchery Committees discussed the document *Summary and Strategy for Monitoring and Evaluation Plan Objective 10 (NTTOC)*, which was previously sent out to memorialize the October 2008 Committees decision on Non-Target Taxa of Concern (NTTOC). Todd Pearsons suggested coordinating the NTTOC expert panel analyses for HCP programs' Plan Species with the Priest Rapids Hatchery Subcommittee NTTOC analyses. Because both Committees would be conducting similar analyses, conducting them at the same time and place would more efficient. Pearsons confirmed that the PRCC Subcommittee would be finalizing the details of their NTTOC process soon. Mike Schiewe said that he would be open to the coordination of both processes, provided they align similarly in content (species to be analyzed and containment objectives).

The Committees discussed whether to remove Little Wenatchee spring Chinook from the Wenatchee sockeye analysis, for the sake of consistency, or to add it to the list of interactions for other Wenatchee basin species. Currently, Little Wenatchee spring Chinook are not listed as a species of potential interaction with other species groups except for the sockeye group, which was an oversight when preparing the document. The Committees agreed to

---

add it to the other species groups in the Wenatchee Basin. Ali Wick will send out the final document with this update (Attachment B).

*B. HGMP Update and Schedule*

Rob Jones of NMFS called in to the meeting for this discussion. Mike Schiewe said that he had sent the National Marine Fisheries Service (NMFS) a letter in late December requesting a revision of the schedule for completing the Hatchery Genetic Management Plans (HGMPs), and that NMFS had agreed to the new schedule; Rob Jones was calling in today to confirm NMFS agreement. Rob Jones then confirmed that NMFS concurs with the revised schedule in the letter; the new completion dates are March 2009 for Wenatchee steelhead and May 2009 for Chiwawa spring Chinook salmon.

Mike Schiewe then summarized the January 7 meeting of the HGMP workgroup (which included staff from Chelan PUD, WDFW, and NMFS), and reviewed the new schedule, which, for reference, was included as part of the notes from the January HGMP meeting. Rob Jones indicated that NMFS would be sending out by the end of next week a list of key considerations that NMFS will weigh when reviewing the HGMPs. He expects that this list will be helpful to the group preparing the HGMPs. Regarding schedule, Jerry Marco said that the Colville Tribes are particularly interested in the Wenatchee spring Chinook HGMP and want to make sure that they have adequate time to review the proposed management plan being jointly developed by WDFW and the Yakama Nation (YN). This comment prompted a discussion about YN and WDFW progress in preparing the spring Chinook management plan and the accompanying implementation plan. Keely Murdoch said that the process has been delayed by some policy issues and genetics questions that needed to be addressed. The expected date of release has been changed from the end of January to the first or second week of February. Mike Schiewe suggested that when complete, the YN/WDFW should provide the plan to NMFS and the Hatchery Committees at the same time, which would help provide some extra time for the review by the Committees (including the Colville Tribes). Murdoch agreed, and said that she will ask the YN/WDFW to do this. Rob Jones indicated that NMFS concurred with this approach,

*C. Hatchery Committees Protocol for Developing and Reviewing Study Plans*

Mike Schiewe introduced this topic by noting that the Hatchery Committees did not have a formal protocol for developing study plans and soliciting proposals, nor for reviewing, ranking, and funding research study plans. The Committees acknowledged this need, and



---

discussed developing a formal process, including establishing a priori technical criteria that would be used judge the technical merits and acceptability of a proposal. Schiewe provided a flowchart for discussion that showed a conceptual approval and implementation process for HCP studies. Julie Pyper and Alene Underwood, in coordination with Douglas PUD, will summarize the processes for contracting for HCP studies for their respective PUDs; Pyper noted that the PUDs have strict contracting regulations that the Committees should be aware of. Regarding the technical review, Mike Schiewe will compile information on the scientific peer review and evaluation process used by other funding entities, with a special emphasis on the ranking criteria that they utilize. Schiewe asked for feedback by February 4 from Committees members on the flowchart handed out today. Schiewe then indicated that an additional aspect of the review process that would need to be addressed was a mechanism for dealing with potential bias and conflict of interest. The Committees provided preliminary thoughts on this topic, and will have a more robust discussion at upcoming meetings. The final criteria and flowchart as eventually agreed upon will be an addendum to the Hatchery Committees Operating Protocols that were approved in 2005.

#### *D. Steelhead Reproductive Success Study*

Mike Schiewe initiated a discussion on goals and objectives for the steelhead reproductive success study. The Hatchery Committees previously agreed to bring these goals and objectives to this meeting. Joe Miller provided a handout that included some possible hypotheses that might be tested in a steelhead reproductive success study and how different results of testing might be interpreted. Steve Hayes emphasized that it was important that HCP research produce information that could be applied to HCP hatchery programs. Kirk Truscott provided a handout with some goals and objectives that WDFW had developed. Truscott will send this handout to Ali Wick for group distribution. Committee members will provide recommended changes/comments on the WDFW handout to Ali Wick by February 4, and for discussion at the next meeting. Seaman asked that the Committees review Joe Miller's objectives for consideration in providing their comments.

### **III. Douglas PUD**

#### *A. 2009 Wells HCP Action Plan*

Rick Klinge noted that the 2009 Wells HCP Action Plan has been sent out for review and comment. Comments are due by February 4. The document will be up for approval at the February meeting.

---

*B. Grant PUD Request for Hatchery Access in 2009*

Rick Klinge provided a memorandum from Grant PUD describing Grant PUD's recent request for hatchery production at Douglas PUD facilities in 2009. This has been provided for the Hatchery Committees' information. This request will be up for approval at the February meeting.

## **IV. Chelan PUD**

*A. Hatchery Induced Life History Variability Study*

Mike Schiewe said that Kris Petersen had informed him that she has sent to Brian Beckman and Don Larsen of NMFS the Hatchery Committees' comments on the Beckman/Larsen study plan to evaluate selected hatchery populations for proportions of male fish likely to undergo early maturation. Beckman and Larsen have reviewed those comments and are preparing a response, which Petersen will share with the Committees.

*B. Testing Pilot Study Fish for Precocity*

Joe Miller informed the Hatchery Committees that Chelan PUD would like to test the fish produced in the Pilot Water Re-Use Study (summer Chinook) for precocity and fatty livers. The test would be completed similarly to the process proposed in the Beckman/Larsen study (see Item IV-A). The sacrifice of approximately 800 to 1,000 fish would be needed for this testing. Chelan PUD will send out more information to the Committees on the test details. The Committee agreed to use the fish for this study.

*C. Sockeye Escapement Study Update*

Joe Miller gave an update on the sockeye escapement study, saying that the final logistical details are being worked out. Chelan PUD is in the process of purchasing the Passive Integrated Transponder tags (PIT-tags). Miller said that the timeline will be finalized once the contracts are in place. He agreed to provide the Hatchery Committees with additional details on an approach for evaluating PIT-tag detection efficiencies at the next meeting.

*D. PIT-tags for 2009 Pilot Water Re-Use Study*

Joe Miller updated the group that he has contacted John Skalski about the numbers of PIT-tags needed for the 2009 Pilot Water Re-Use study, and in particular how reduced detection probabilities at McNary Dam would affect the statistical power. Miller summarized that while the detection efficiency is changing slightly at McNary Dam because of the temporary spillway weirs (TSWs), the study numbers are still expected to provide results similar to

---

2008. The Committee agreed that Chelan PUD should tag 10,000 fish per group as previously planned.

*E. Hatchery Program Summary*

Julie Pyper said that Chelan PUD had sent out the Hatchery Program Summary earlier this month. For the Chelan Falls and Chiwawa rearing facilities, Chelan PUD is nearing a 30 percent design for both projects. In addition, Chelan PUD is considering a land swap with the U.S. Forest Service (USFS) to acquire the property on which the Chiwawa rearing facilities (for both spring Chinook and summer steelhead) is located. Currently, Chelan PUD has access to this property through a special use permit with the USFS.

*F. Meetings with BPA*

Shaun Seaman said that Chelan PUD would be meeting on February 6 with Bonneville Power Administration (BPA) to better understand the programs that BPA will be funding under the Federal Columbia River Power System (FCRPS) Biological Opinion and the recent Tribal Fish Accord Memorandums of Agreement.

*G. Blackbird Island Pond*

Shaun Seaman updated the group that Blackbird Island Pond in-ground facilities have been completed and that they were ready for use in early 2009. Work on other equipment such as the pump station is progressing over the winter.

**V. Colville Tribes**

*A. Bonaparte Pond Update*

Jerry Marco provided an update on the Colville Tribes development of a well water supply to minimize ice formation at Bonaparte Pond. He indicated that as the temperature dropped in December, a small snow-covered island of ice had formed in the pond prior to the addition of groundwater, but that once some warmer groundwater was added, the ice had melted. The pond water is currently at approximately 37 degrees F. Air temperatures have ranged from 0 to mid-30s degrees F. The Tribes intend to keep operating the pond as planned and do not anticipate any temperature problems. Marco also said that some goldeneye ducks have been able to penetrate the avian netting; approximately 170 dead fish have been observed, not counting bird predation. Overall, fish health exams have been excellent.

---

## **VI. WDFW**

### *A. Broodstock Collection Protocol Schedule*

Kirk Truscott gave an update on the schedule for broodstock collection protocols. He will provide his first draft to the Hatchery Committees by the end of February. The review and comment period will be approximately 2 weeks, and then the document will be finalized at the March Hatchery Committee meeting in order to meet the April 15 NMFS submittal deadline. Keely Murdoch commented that the YN's coho broodstock collection protocols are not due to NMFS until June, so those will be provided at a later point.

## **VII. Yakama Nation**

### *A. Coho Master Plan*

Keely Murdoch said that the YN is planning public meetings for the National Environmental Policy Act (NEPA) process and preparation of an Environmental Impact Statement (EIS) for the Coho Master Plan.

### *B. Multi-Species Acclimation in YN Memorandum of Agreement*

Keely Murdoch said that the YN is working toward contracting in March for preparation of a formal proposal for multi-species acclimation (spring Chinook and steelhead), which is an action identified in the YN Memorandum of Agreement (MOA). The YN will be working with Anchor staff to help write the plan.

### *C. Kelt Reconditioning*

Regarding the YN's plan to recondition kelts, Keely Murdoch said that the YN is currently working with the USFS on facilities issues. She also said that the YN would like to organize a meeting with WDFW and USFWS to discuss fish health concerns.

## **VIII. HCP Administration**

### *A. Next Meetings*

The next scheduled Hatchery Committees meetings are as follows: February 18, March 18, and April 15; all meetings are at the Chelan PUD offices in Wenatchee. The HGMP Workgroup will be meeting on February 10 and March 11.

## **List of Attachments**

Attachment A – List of Attendees

Attachment B - Summary and Strategy for Monitoring and Evaluation Plan Objective 10  
(NTTOC)

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor Environmental, L.L.C.
Ali Wick	Anchor Environmental, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Steve Hays	Chelan PUD
Jerry Marco *	Colville Tribes
Rick Klinge *	Douglas PUD
Tom Kahler	Douglas PUD
Todd Pearsons	Grant PUD
Rob Jones * (10-11 am by conference call)	NMFS
Bill Gale *	USFWS
Pat Phillips	WDFW
Kirk Truscott *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**FINAL**

**Rocky Reach, Rock Island, and Wells HCP Hatchery Committees  
Summary and Strategy for Monitoring and Evaluation Plan Objective 10 (NTTOC)**

**January 22, 2009**

Over the past year, the HCP Hatchery Committees considered several approaches and methods for addressing Objective 10 of the Chelan and Douglas PUD M&E Plans. Objective 10 directs the Committees to evaluate the potential effects of hatchery supplementation on non-target taxa:

- **Chelan PUD** Objective 10: Determine if ecological interactions attributed to hatchery fish reduce the abundance, size, or distribution of non-target taxa (NTT).
- **Douglas PUD** Objective 10: Determine if the release of hatchery fish impact non-target taxa of concern (NTTOC) within acceptable limits.

At the October 15, 2008 Hatchery Committees meeting, the members agreed to convene an expert panel to conduct a preliminary evaluation of potential effects of supplemented Plan Species on non-target taxa using an approach similar to that used in the Yakima Basin (Ham and Pearsons, 2001, Fisheries 26: 15-23). The Committees agreed to convene the panel in spring or early summer 2009, and focus this initial effort on HCP Plan Species and the two non-Plan Species westslope cutthroat trout and lamprey. The Hatchery Committees explicitly discussed the addition of bull trout to the list of species to be considered, but agreed that a recently completed Biological Opinion by USFWS had already considered this species' interactions. It was agreed that containment objectives will include broad categories of percent ranges within which impacts are acceptable, and will not include a 0% category because that would be difficult, if not impossible, to verify. The table below summarizes species interactions, containment objectives for non-target species, and individuals identified as possessing the expertise to contribute as panel members.

### Summary of NTTOC Interactions

<i>Hatchery program and NTT with spatial overlap</i>	Containment Objective Category <sup>1</sup>	List of Potential Panel Members (will include HETT) <sup>2</sup>
<b>Wenatchee steelhead</b>		
Chiwawa spring Chinook	L	Todd Pearsons
Nason spring Chinook	L	
Westslope cutthroat	M	
Summer Chinook	L	
Pacific lamprey	VL	
Ltl. Wen. spring Chinook	VL	
Wenatchee sockeye	L	
<b>Chiwawa spring Chinook</b>		
Chiwawa steelhead	VL	Todd Pearsons
Nason spring Chinook	VL	
Westslope cutthroat	M	
Summer Chinook	L	
Pacific lamprey	VL	
Ltl. Wen. spring Chinook	VL	
Wenatchee sockeye	L	
<b>Wenatchee sockeye</b>		
Wenatchee steelhead	VL	Todd Pearsons
White spring Chinook	VL	
Ltl. Wen. spring Chinook	VL	
Westslope cutthroat	M	
Summer Chinook	L	
<b>Turtle Rock summer Chinook</b>		
Summer Chinook	L	Todd Pearsons
Wenatchee summer Chinook	L	
Wenatchee steelhead	VL	
Wen. spring Chinook	VL	
Westslope cutthroat	M	
Ltl. Wen. spring Chinook	VL	
Pacific lamprey	VL	
Wenatchee sockeye	L	
<b>Methow summer Chinook</b>		
Methow steelhead	VL	Todd Pearsons Jenny Molesworth Charlie Snow John Jorgenson
Methow spring Chinook	VL	
Westslope cutthroat	M	
Pacific lamprey	VL	
<b>Okanogan summer Chinook</b>		
Okanogan steelhead	VL	Todd Pearsons John Arterburn
Pacific lamprey	VL	
Okanogan sockeye	L	

<sup>1</sup> "Categories" is defined as Moderate (M; 11 to 41%), Low (L; 6 to 10%), and Very low (VL; 5% or less), and does not include a No Impact (0%) objective that would be difficult (if not impossible) to verify.

<sup>2</sup> Preliminary list of panel members. Panel will be finalized during planning for this expert panel meeting.



<i>Hatchery program and NTT with spatial overlap</i>	Containment Objective Category <sup>1</sup>	List of Potential Panel Members (will include HETT) <sup>2</sup>
<b>Upper Columbia coho</b>		
Spring Chinook	VL	None identified at this time
Steelhead	VL	
Ltl. Wen. spring Chinook	VL	
Wenatchee sockeye	L	
<b>Twisp spring Chinook</b>		
Methow spring Chinook	VL	Todd Pearsons Jenny Molesworth Charlie Snow John Jorgenson
Chewuch spring Chinook	VL	
Methow steelhead	VL	
Summer Chinook	L	
Westslope cutthroat	M	
Pacific lamprey	VL	
<b>MetComp spring Chinook</b>		
Twisp spring Chinook	VL	Todd Pearsons Jenny Molesworth Charlie Snow John Jorgensen
Summer Chinook	L	
Methow steelhead	VL	
Westslope cutthroat	M	
Pacific lamprey	VL	
<b>Wells steelhead</b>		
Methow spring Chinook	VL	Todd Pearsons Jenny Molesworth Charlie Snow John Jorgensen John Arterburn
Chewuch spring Chinook	VL	
Twisp spring Chinook	VL	
Summer Chinook	L	
Methow steelhead	VL	
Okanogan steelhead	VL	
Okanogan sockeye	L	
Westslope cutthroat	M	
Pacific lamprey	VL	
<b>Wells summer Chinook</b>		
Spring Chinook	VL	Todd Pearsons Jenny Molesworth Charlie Snow John Jorgensen John Arterburn
Summer Chinook	L	
Methow steelhead	VL	
Okanogan steelhead	VL	
Okanogan sockeye	L	
Westslope cutthroat	M	
Pacific lamprey	VL	

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** March 18, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Alene Underwood, Julie Pyper, Steve Hays, Bob Pfeifer, and Joe Miller

**Re:** Final Minutes of February 18, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, February 18, 2009, from 9:30 am to 4:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Mike Schiewe asked the Hatchery Committees to review the draft flowchart and protocol for Hatchery Committees study review and provide feedback by March 4 (Item II-C).
- Julie Pyper will provide the Integrated Hatchery Improvement Program (IHIP) summary to Ali Wick for distribution to the Hatchery Committees, and will provide hard copies to Kris Petersen, Tom Scribner, and Keely Murdoch (Item III-A).
- Joe Miller will send to Ali Wick for distribution the handout that discusses estimation of Passive Integrated Transponder tag (PIT-tag) array efficiency for the Wenatchee sockeye enumeration study (Item III-C).
- Jerry Marco will check with the Colville Tribes staff regarding their interest in supporting installation of a PIT-tag detection array at Zoesel Dam (Item III-D).
- The Hatchery Committees will provide feedback on the 2009 Chelan PUD Action Plan by March 4 (Item III-F).
- Tom Kahler will circulate for Hatchery Committees' review the spreadsheet comparing alternative approaches to reproductive success studies (Item IV-B).
- Douglas PUD will work with Andrew Murdoch to refine the design of the Methow basin reproductive success study, for discussion at the next meeting (Item IV-B).

- 
- Rick Klinge will provide the final 2009 Douglas PUD Action Plan to Ali Wick for distribution (Item IV-D).

## **DECISION SUMMARY**

- The Hatchery Committees approved the annual agreement for Douglas PUD to rear 80,000 summer steelhead at Wells Hatchery and 201,000 spring Chinook at the Methow Hatchery on behalf of Grant PUD (Item IV-E).

### **I. Welcome**

The Hatchery Committees approved the January 21, 2009 Meeting Minutes; Ali Wick will distribute the final Minutes to the Hatchery Committees.

### **II. All Committees**

#### *A. HSRG Update*

Tom Scribner said that the Hatchery Scientific Review Group (HSRG) will be meeting with Representative Norm Dicks and other legislative officials in Portland on March 27, 2009, to summarize their findings, and will be finalizing the HSRG recommendations that were sent out in draft form in November 2008.

#### *B. HGMP Update*

##### Wenatchee steelhead

Kirk Truscott summarized that the Wenatchee steelhead Hatchery Genetic Management Plan (HGMP) Workgroup is discussing implementation of a two-zone approach to management in the basin, one for above and one for below Tumwater Dam. Tom Scribner said that in concept, this appears to be consistent with the Yakama Nation's goals, but he will need to discuss this internally and he looks forward to seeing the HGMP draft when it is available. Mike Schiewe updated the group that on February 26, the Hatchery Committees will receive the draft plan for a 10-day review period.

##### Chiwawa spring Chinook

It was agreed that Washington Department of Fish and Wildlife (WDFW) would defer sending a revised draft of the Chiwawa spring Chinook HGMP back to Chelan PUD for continuing review. There are several elements of the HGMP that depend on information that is being developed by WDFW and the Yakama Nation in their spring Chinook management implementation plan; Keely Murdoch said that their working group is within 2

---

weeks of sending the plan out for broader review (the first week of March). She gave a brief preview on the plan, for the Hatchery Committees' information. Her update focused on the targeted percent of natural and hatchery origin fish in the broodstock and the disposition of these fish once they arrive at Tumwater Dam. The Committees gave some preliminary feedback on this information and will discuss this further once the plan is available.

NOTE: The HGMP Workgroup meeting on March 3 is now cancelled and will be rescheduled once the spring Chinook management implementation plan is available.

*C. Hatchery Committees Protocol for Developing and Reviewing Study Plans*

Mike Schiewe reviewed additions to the flowchart and protocol for the development and review of study plans by the Hatchery Committees. This was an action item from the last meeting. He mentioned that the Committees may want to consider establishing time limits for completing the review steps. He also asked the Committees to look at the flowchart and protocol and provide feedback to him by March 4.

### **III. Chelan PUD**

*A. Integrated Hatchery Improvement Plan (IHIP)*

Julie Pyper gave an update on Chelan PUD's progress on the Chelan PUD IHIP. She said that the IHIP is a comprehensive planning tool that will guide hatchery improvements over the coming years. It builds on the Hatchery Facility Evaluation Plan and Hatchery Committees decisions, and is intended to help the PUD meet long term resident and anadromous fish agreements, which include the HCPs as well as the Rocky Reach, Rock Island, and Lake Chelan Dam licenses. One of the key issues to address in developing this plan is to validate moving sockeye to Chelan Hatchery in a bio-secure facility (e.g., fish disease containment, vandalism protection). Sam Dilly is working on a feasibility study to look at this.

Julie Pyper will provide the IHIP to Ali Wick for distribution to the Hatchery Committees (Item III-A). She will provide hard copies to Kris Petersen, Tom Scribner, and Keely Murdoch.

*B. Testing Pilot Study Fish for Precocity*

The Hatchery Committees had previously agreed to complete precocity testing on pilot water re-use study fish. Sam Dilly said that Chelan PUD has identified a battery of clinical tests that will be conducted; the Committees said today that they agree with this testing plan.

*C. Sockeye Escapement Study Update*

Joe Miller distributed a handout that discusses approaches to estimating efficiency of the PIT-tag detection array for the Wenatchee sockeye escapement study. The handout also provides some key assumptions for determining the total number of fish to be PIT-tagged. He reviewed some of these assumptions to confirm Hatchery Committees' agreement. Miller will send the handout to Ali Wick for distribution, and the Committees will provide any feedback to him so that he can incorporate it into the final study design.

*D. Update on Portland Meetings with Bonneville Power Administration*

Shaun Seaman updated the group that Chelan PUD has met in Portland with Bonneville Power Administration (BPA) (Jeff Gislason and others) regarding coordination and potential project opportunities associated with the Federal Columbia River Power System (FCRPS) Biological Opinion and other recently signed agreements. Seaman said that Chelan initiated these meetings in order to foster collaboration between BPA and Chelan PUD regarding the projects that may be implemented under the Tribal Memoranda of Agreement (MOAs).

On this topic, Tom Scribner provided an update on preliminary discussions between Columbia River Inter-Tribal Fish Commission (CRITFC) and Chelan PUD regarding the possible installation of a PIT-tag array for adult detection in the fishway (or at additional sites) at Zoesel Dam in the Okanogan basin. He wanted to know whether the Colville Tribes would object to this project; Jerry Marco said that he did not know. Marco will check in with the Colville staff regarding their interest in supporting a PIT-tag array at Zoesel Dam.

*E. Hatchery Program Summary*

Julie Pyper answered several brief questions on the Hatchery Program Summary that was provided to the Hatchery Committees. Mike Schiewe suggested that projects discussed in the Hatchery Program Summary be linked to the recommendations provided in the IHIP, as applicable.

*F. 2009 Chelan PUD HCP Action Plan*

Julie Pyper distributed a copy of the 2009 HCP Action Plan for review and discussion by the Hatchery Committees. This is a document that is distributed to the Coordinating and Policy Committees to inform them of action items in the upcoming year. The Committees will provide any comments to Chelan PUD by March 4. Kris Petersen noted that Chelan PUD

---

may want to include summer Chinook HGMPs on the 2009 schedule, as submittal of this HGMP is scheduled to occur in 2010. Julie Pyper said that she will look into this.

*G. Grant PUD's use of Chelan PUD's Lake Wenatchee Net Pens*

Julie Pyper said that Grant PUD has approached Chelan PUD regarding the use of Chelan PUD's Lake Wenatchee net pens to acclimate White River spring Chinook. Pyper wanted to make sure that the Hatchery Committees were aware that there is a possibility (although highly unlikely) that the net pen frames could be damaged during installation and moving of the pens to the anchoring location at the top of Lake Wenatchee, which could potentially impact the sockeye program (if they were damaged). The Committees agreed with Chelan PUD that this is an acceptable risk.

*H. Steelhead Tissue Sampling at Tumwater Dam*

Julie Pyper updated the group that Chelan PUD has signed an interim measure with WDFW to collect steelhead tissue samples at Tumwater Dam as part of the study begun last year by WDFW under funding from NOAA.

On a related topic, Shaun Seaman said that Washington State Department of Transportation (WSDOT) is planning substantial repaving work in Tumwater Canyon this summer that will close the highway in the evenings. Chelan PUD will need to work with the users of the trapping facility to ensure access. Shaun Seaman will work on scheduling a meeting or other means of communication with the users to work through these concerns.

*I. Wenatchee Steelhead Reproductive Success Study Goals and Objectives*

Mike Schiewe said that he has compiled the comments on WDFW's goals and objectives document and sent it to the Hatchery Committees. He said that he recommends that this item be tabled until the HGMP is completed in a month or so, and the Committees can come back to it at that time. Schiewe also recommended that the HGMP state that a study will occur, identify goals and objectives, and then note that the details of the study are still being developed by the Hatchery Committees. Kris Petersen added that the HGMP should include as much detail as possible regarding the study. Kirk Truscott and Joe Miller will meet to discuss how to address the specificity that National Marine Fisheries Service (NMFS) is looking for in the HGMP. The Committees agreed to table the discussion of the study for today's meeting.

Schiewe asked whether there was a potential scenario in which other agencies or entities would contribute funding to support a steelhead reproductive success study. Tom Scribner said that he did not think so, as he sees the study as directly linked to the questions that are laid out in the HCP Monitoring and Evaluation (M&E) Plan regarding whether the HCP programs are having an effect on wild fish populations. Shaun Seaman noted that Chelan PUD considered the requirement for a steelhead reproductive success study as articulated in the HCP to be the primary basis for a PUD-funded study.

#### **IV. Douglas PUD**

##### *A. Committee Members*

Rick Klinge said that he and Tom Kahler are going to switch roles on the HCP Committees such that Kahler will be the Committee Member on the Hatchery and Coordinating Committees and Klinge will be the Alternate. Douglas PUD will send a letter to Mike Schiewe for the record.

##### *B. Methow Steelhead Reproductive Success Study*

Tom Kahler said that Douglas PUD was having internal discussions about how to proceed on a steelhead reproductive success study in the Methow basin. He would like to gain clarification from the Hatchery Committees on the goals and objectives of the study. Tom Scribner suggested implementing the Wenatchee and Methow studies concurrently, consistent with a holistic approach for steelhead as a species. Kirk Truscott said that WDFW is less concerned with performing the two studies concurrently as they are with doing the right study for each population. Rick Klinge said that in the next 5 years, Douglas PUD will be considering some modifications to the Wells Hatchery facility, so this is a good time to be discussing any study that might use hatchery facilities, such as the spawning channel study that was suggested by WDFW in 2007. Steve Hays said that he did not think that a study using a spawning channel would get at the real question contemplated by the HCP, which is to test for a difference in reproductive success (and if there is a difference, potentially find the reasons for this difference) between hatchery and wild steelhead. Tom Kahler will circulate a spreadsheet for Committees review that compares some of the suggested approaches for studying reproductive success. This spreadsheet was put together last year by several Committees members to assist the Committees in coordinating multiple studies in different subbasins. Also, Douglas PUD will work with Andrew Murdoch to consider whether to bring the spawning channel study back before the Committees for discussion at the next meeting.

*C. Twisp Weir Operation as part of M&E Activities and Dates*

Tom Kahler updated the group that, due to ice buildup just upstream from the Twisp Weir, Douglas PUD will not be able to begin operation of the weir on March 1 as planned because damage to the weir could occur from ice impact. The PUD will keep monitoring the ice and will operate it once the danger to the weir has passed.

*D. 2009 Douglas PUD HCP Action Plan*

Tom Kahler distributed the 2009 Douglas PUD HCP Action Plan. Mike Schiewe asked whether the Hatchery Committees had any additional comments to this plan, which was previously sent out. There were no additional comments. Rick Klinge will provide a final copy to Ali Wick for distribution.

*E. Approval of 2009 Grant PUD Hatchery Access*

Rick Klinge asked for approval of this year's agreement for Douglas PUD to rear 80,000 summer steelhead at Wells Hatchery and 201,000 spring Chinook at Methow Hatchery on behalf of Grant PUD. This activity would bring the Methow Hatchery production up to full program. Bill Gale asked whether there is any impact to Winthrop Hatchery broodstock from this action. Kirk Truscott said that the impact is minimal, as the removal of broodstock to create these progeny is very low compared to what is required for the Winthrop Hatchery program. Truscott also reminded the Hatchery Committees that these fish are required to be "below low" in terms of Enzyme-Linked Immunosorbent Assay (ELISA) test category, and thus the protocols will include culling as an option if ELISA values are higher than this. The Committees gave their approval for Douglas PUD to raise these fish.

*F. Access to East Ladder during Re-Wind at Wells Dam*

Rick Klinge updated the group that Douglas PUD is still working through the details of access to the east ladder during the generator re-wind construction project at Wells Dam. Douglas PUD will keep the Hatchery Committees informed of any changes.

## **V. NMFS**

*A. Follow-up on Larsen/Beckman Precocity Study*

Kris Petersen said that Don Larsen and Brian Beckman are still reviewing the Hatchery Committees' comments to the precocity study.



## **VI. HCP Administration**

### *A. Next Meetings*

The next scheduled Hatchery Committees meetings are as follows: March 11, March 18, April 15, and May 20; all meetings will be at the Chelan PUD offices in Wenatchee. The HGMP Workgroup will be meeting on February 23 and March 11.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, L.L.C.
Ali Wick	Anchor QEA, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Steve Hays	Chelan PUD
Sam Dilly (morning only)	Chelan PUD
Jerry Marco *	Colville Tribes
Rick Klinge *	Douglas PUD
Tom Kahler *	Douglas PUD
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Bob Pfeifer	WDFW
Kirk Truscott *	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## MEMORANDUM

---

**To:** Rocky Reach, Rock Island, and Wells HCP Hatchery Committees  
**Date:** April 6, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Joe Miller, Alene Underwood, Steve Hays

**Re:** Final Minutes of February 23, 2009 HGMP Workgroup Meeting

---

The Wenatchee Basin HGMP Workgroup, including representatives from Chelan PUD, NMFS and WDFW, met on Monday, February 23, 2009, from 9:00 am to 1:00 pm to reconcile Chelan PUD, WDFW, and Yakama Nation comments to the Wenatchee steelhead HGMP. Attendees are listed in Attachment A.

### **I. Discussion (Mike Schiewe)**

Mike Schiewe opened the discussion, saying that today's meeting is to review WDFW comments on the HGMP, as well as hear from the Yakama Nation on some concerns they have on the two-zone approach for separate management strategies above and below Tumwater Dam.

#### ***Yakama Nation Concerns***

Tom Scribner and Keely Murdoch joined the call. Scribner said that the Yakama Nation has concerns that the two-zone approach for separate management strategies for the areas upstream versus downstream of Tumwater Dam may reduce the likelihood of meeting program production goals. This is because under two-zone management, only wild by wild (W X W) fish would be allowed to proceed above Tumwater Dam, which Scribner said could limit broodstock choices in low-run years. Kirk Truscott said that WDFW is aware of this concern, and is looking at ways to address this.

#### ***WDFW Comments***

The group discussed the details of this type of program (Integrated Harvest) and agreed that the HGMP should be somewhat flexible in this regard so that adaptive management could be employed in the future. The remainder of the call was focused on integrating WDFW and

Chelan PUD edits on a case-by-case basis. The schedule for completion is to send the HGMP to the Hatchery Committees for their review on February 26.

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Michael Schiewe	Anchor Environmental, L.L.C.
Ali Wick	Anchor Environmental, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Steve Hays	Chelan PUD
Tom Kahler *	Douglas PUD
Kirk Truscott *	<b>WDFW</b>
Bob Pfeifer *	<b>WDFW</b>
Keely Murdoch *	<b>Yakama Nation</b>
Tom Scribner *	<b>Yakama Nation</b>

\* Denotes Rocky Reach, Rock Island, and Wells Hatchery Committees members or alternates

## MEMORANDUM

---

**To:** Rocky Reach, Rock Island, and Wells HCP Hatchery Committees  
**Date:** April 23, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Joe Miller, Alene Underwood, and Bob Pfeifer

**Re:** Final Minutes of March 9, 2009 Hatchery Committees Meeting

---

The Hatchery Committees met on Monday, March 9, 2009, from 10:00 am to 4:00 pm at the Chelan PUD Auditorium in Wenatchee, Washington, to review and resolve any outstanding issues in the draft Wenatchee steelhead Hatchery Genetic Management Plan (HGMP). Attendees are listed in Attachment A.

### ACTION ITEM SUMMARY

- Washington Department of Fish and Wildlife (WDFW) will draft a new Section 1.7 for the Hatchery Committees to review by March 12 (Item II).
- Julie Pyper will email the new Section 13 (Roles and Responsibilities) for Hatchery Committees' distribution and discussion (Item IV).
- Kirk Truscott will meet with Jeff Korth to verify the WDFW position on adult management roles (Item IV-A).
- Shaun Seaman and Kirk Truscott will meet to discuss the issue of permit holder(s) offline (Item IV-B).

### I. Welcome (Mike Schiewe)

Mike Schiewe opened the discussion by making a list of several topics that need to be addressed during today's review and revision of the draft HGMP. These included:

- The need for a complete description of the two-zone management concept early in the document, and revision of the remainder of the document to make sure subsequent sections of the HGMP are consistent with this description
- The need for additional details regarding adult management, broodstock collection, and escapement goals
- The need to reconcile recreational fisheries with U.S. v. Oregon, and clarification of relationships between the Wenatchee steelhead program and other programs

- 
- Greater clarity on roles and responsibilities for implementation and funding

The remainder of these minutes covers these topics; some topics are discussed within the context of others.

## **II. Two-zone Concept and Consistency of Explanation**

Mike Schiewe began by asking for Hatchery Committees discussion on the two-zone management concept set forth in the current draft of the HGMP. Kirk Truscott gave an overview of the management zones, saying that the concept is that there would be a program in the upper basin that is actively managed, with an acclimation and smolt release strategy that allows movement and outplanting of these fish to other locations. One goal of this strategy would be to enhance the contribution of natural-origin fish in the brood. Keely Murdoch suggested that the two-zone management concept be described earlier in the document and that more clarity be provided, as the concept is not currently clear to the reader. She suggested listing the assumptions and uncertainties, as well as contingency plans in the case that homing fidelity does not match what was expected. She said that the main issue for the Yakama Nation (YN) is that the draft HGMP currently limits the parental crosses (i.e., hatchery by hatchery [HxH]) that are allowed for fish released below Tumwater Dam; the YN has concerns that releasing only WxW crosses above Tumwater may, in some years, constrain the ability to meet HCP mitigation requirements. She also said that the management priorities (such as escapement, Percent Natural Influence [PNI], meeting program production goals) need to be clarified earlier in the document. Kris Petersen commented that National Marine Fisheries Service (NMFS) would not likely approve a program in which meeting escapement above Tumwater would be a higher priority than meeting PNI. She also said that the apparent plan for a lower PNI above than below Tumwater would seem to lead to less, not more, natural origin fish in the program. Responding to a comment from U.S. Fish and Wildlife Service (USFWS), Kirk Truscott said that he would provide additional information regarding the disposition of hatchery fish removed at Tumwater. Kirk Truscott suggested that if PNI is low after conducting upper basin releases, then the upper basin releases would be reduced in favor of lower basin releases. Keely Murdoch also thought that releasing HxH fish in the lower basin while stating that the lower basin would be unsupplemented, sends a mixed message. Another concern of the YN is that selective harvest could affect the treaty/non-treaty harvest balance and would need to be addressed through US v. OR. Kirk Truscott said that the selective

---

fishery would only act as a tool that can be used to manage PNI in the lower basin. Murdoch suggested that a contingency plan be added to the HGMP that could direct such actions.

Following these discussions, Mike Schiewe suggested that Kirk Truscott re-work the draft to be clear on the two-zone management concept, with 200,000 smolts released above and 200,000 below Tumwater Dam, with an emphasis on HxH in the lower basin, and the HCP Hatchery Committees involved in adaptive management for this program. To support these revisions, Schiewe then asked the JFP members of the Committees to state their priorities for the following: mitigation/production, escapement, and PNI. All JFP members indicated that their highest priority was mitigation/production, but there was no agreement regarding the priority of escapement versus PNI. Schiewe suggested that the Committees might want to assign equal weight to escapement and PNI, noting that the difference between priorities is largely artificial, and will in the end be determined by the management actions taken for the program. The Committees provisionally agreed to this. WDFW will draft a new Section 1.7 for the Committees to review by Thursday of this week (March 12). The YN and NMFS are meeting next week on a number of other issues, and Mike Schiewe asked that a discussion of priorities be added to their agenda.

### **III. Recreational Fisheries Reconciled with U.S. v. Oregon**

Keely Murdoch provided some text to WDFW suggesting that the U.S. v. Oregon Settlement be mentioned as a legally binding condition for WDFW and the YN. After some discussion regarding the placement of this text in the HGMP, the Hatchery Committees agreed that although this text will not be added, text will be included indicating that this HGMP is consistent with WDFW and YN U.S. v. Oregon hatchery production agreements.

### **IV. Roles and Responsibilities**

#### *A. Permit holders*

Kirk Truscott asked for clarification on who should be listed as the permit holder(s). Kris Petersen said that the cover letter should describe the purpose of submitting the HGMP and this will help dictate who the permit holder should be. Shaun Seaman said that Chelan PUD is not anticipating submitting the HGMP as a permit application, and so expects that Chelan PUD will be listed as the “responsible organization” and others involved will be listed as “authorized agents.” The intent of this designation is to be consistent with the HCP. Kirk Truscott said that WDFW would like to be included on the permit because they are legally



---

mandated to manage the resource. Shaun Seaman and Kirk Truscott agreed to meet to resolve this offline.

*B. Adult management roles*

Shaun Seaman said that Chelan PUD would like the HGMP to include clarity on roles for adult management. The PUD has drafted a new Section 13 of the HGMP that describes these roles, which says that Chelan PUD is responsible for producing fish and the co-managers are responsible for implementation of adult management actions. Kirk Truscott said that he believes that Chelan PUD may be responsible for removal of hatchery fish at Tumwater Dam in order to be able to maintain consistency with No Net Impact (NNI). Shaun Seaman said that his understanding, based on conversations with Jeff Korth of WDFW, is that WDFW may have a different view of this responsibility and that the issue still warrants further discussion, and so Truscott will meet with Korth to verify this. Julie Pyper will email the new Section 13 for Hatchery Committees' distribution and discussion.

## **V. Additional USFWS Comments**

*A. Residuals and genetics*

Bill Gale said that he would like more discussion on genetics and recent research on residualization of hatchery steelhead. Kirk Truscott said that there are currently no available data that can identify the percentage of residuals in the program. The HGMP does say that once empirical data can be collected, the scope of residuals will be addressed.

*B. Ecological risk / interactions section*

Bill Gale suggested that there are additional scientific citations that would help support the ecological risk/interactions section regarding what impacts are occurring and what might be done to minimize these. He also said that there should be an acknowledgment of the impact of residuals, as they may contribute to additional hatchery spawners in the wild. Kirk Truscott said that the current section may seem short because it only addresses key issues, and that most risk aversion measures are imbedded within the other applicable sections.

## **VI. Additional NMFS Comments**

*A. Maps*

Kris Petersen suggested that some maps be added to the document if possible. It was decided that maps would be added if time allows.

***B. Spawner distribution***

Kris Petersen suggested additional text be added regarding spawner distribution and redd counts.

**VII. Additional Chelan PUD Comments**

Shaun Seaman asked whether the HGMP needed to mention that there could be a future reduction in program size based on future Hatchery Committees' agreement; the Committees decided that such language was not necessary. Seaman indicated that Chelan PUD may also incorporate some aspects of the bull trout Biological Opinion into the draft HGMP.

**VIII. Schedule**

The group clarified that by the end of the day Thursday, March 12, WDFW will provide to the Hatchery Committees a rewritten Section 1.7. During that time, Chelan PUD will look through the entire list of recent comments (USFWS, NMFS, and YN) and determine those that can be addressed. The Committees will have a conference call on Monday afternoon at 1 pm to discuss the new sections, and a revision will be provided by the end of day Wednesday, March 18. The draft is due on March 31 to NMFS.

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Michael Schiewe	Anchor QEA, L.L.C.
Ali Wick	Anchor QEA, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Tom Kahler *	Douglas PUD
Rick Klinge *	Douglas PUD
Kris Petersen * (by conference call)	NMFS
Kirk Truscott *	WDFW
Bob Pfeifer	WDFW
Bill Gale *	USFWS
Keely Murdoch *	Yakama Nation

\* Denotes Rocky Reach, Rock Island, and Wells Hatchery Committees member or alternates

## MEMORANDUM

---

**To:** Rocky Reach, Rock Island, and Wells HCP Hatchery Committees  
**Date:** April 15, 2009  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Joe Miller  
**Re:** Final Minutes of March 16, 2009 HGMP Workgroup Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met by conference call on Monday, March 16, 2009, from 1:00 pm to 3:30 pm to reconcile final comments to the Wenatchee steelhead HGMP. Attendees are listed in Attachment A to these Meeting Minutes.

### I. Discussion (Mike Schiewe)

Mike Schiewe opened the discussion, saying that today's meeting is to resolve comments on the HGMP, particularly Sections 1.6 – 1.8 and Section 13, which have been modified since the last Hatchery Committees meeting. The purpose and focus of the call was to integrate Committee edits on a case-by-case basis. The Committees worked through the various comments and by 3:00 pm, agreement had been reached for Sections 1.6 and 1.7. There were still comments to be addressed in subsections of Section 1.8, and Section 13. Near the end of today's discussions, NMFS and the Colville Tribes had to leave the call due to prior commitments, and so the Committees continued to address sections that did not require their direct input.

At the close of the call, it was agreed that Chelan PUD and WDFW will revise and re-send Section 1.8 with today's edits by the end of the day tomorrow (Tuesday, March 14) and will incorporate other comments provided by the Committees for the other Sections. The Hatchery Committees will re-convene on Wednesday for their regularly scheduled meeting with the goal of coming to agreement on these edits as well as any parts not covered on today's call.

The schedule for completion of the document is to submit the HGMP to NMFS on March 31.

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Michael Schiewe	Anchor QEA, L.L.C.
Ali Wick	Anchor QEA, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Tom Kahler *	Douglas PUD
Jerry Marco *	Colville Tribes
Kris Petersen *	NMFS
Bill Gale *	USFWS
Kirk Truscott *	WDFW
Bob Pfeifer *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Rocky Reach, Rock Island, and Wells Hatchery Committees members or alternates

## MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** April 14, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick and Joe Miller

**Re:** Final Minutes of March 18, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, March 18, 2009, from 9:30 am to 4:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Julie Pyper will send out the current version of Sections 1.6 through 1.8 of the Wenatchee steelhead Hatchery Genetic Management Plan (HGMP) at the end of the day on March 18 (Item II-A).
- The Hatchery Committees will provide any remaining changes to Sections 1.6 through 1.8 of the Wenatchee steelhead HGMP as modified in today's meeting by noon Friday, March 20 (Item II-A).
- The Hatchery Committees will provide any comments to the final Wenatchee steelhead HGMP Hatchery Committees draft by noon on Thursday, March 26, and will meet by conference call at 1 pm on that Thursday (Item II-A).
- Sam Dilly will send out the information on steelhead and sockeye salmon trough rearing densities that has been compiled by Chelan PUD to the Hatchery Committees (Item III-C).
- Ali Wick will burn and send a CD copy of the 2008 Draft Monitoring and Evaluation (M&E) Plan to Kris Petersen (Item III-D).
- Sam Dilly will send the Wenatchee steelhead pilot water reuse proposal to the Hatchery Committees for their review (Item III-E).
- The Hatchery Committees will send initial comments to Chelan PUD by April 1 on the Wenatchee steelhead pilot water reuse proposal, along with requests for further information (Item III-E).

- 
- Shaun Seaman will update the Hatchery Committees by email on recent progress on Blackbird Island Pond (Item III-G).
  - Mike Schiewe will work with National Marine Fisheries Service (NMFS) to develop, for Committees consideration, a plan for the integration of steelhead reproductive success studies for the Upper Columbia (Item IV-B).
  - The Hatchery Committees will send any final comments on broodstock collection protocols to Kirk Truscott by April 1 (VI-A).
  - Jerry Marco will send the notice on an upcoming summer/fall Chinook workshop to Ali Wick for distribution to the Hatchery Committees (Item VI-A).

## **DECISION SUMMARY**

- There were no decision items at this meeting.

## **I. Welcome**

The Hatchery Committees approved the February 18, 2009 Meeting Minutes; Ali Wick will distribute the final Minutes to the Hatchery Committees.

## **II. All Committees**

### *A. HGMP Update*

#### Wenatchee steelhead

Mike Schiewe gave an update on the progress on the Wenatchee steelhead HGMP. The Hatchery Committees met by conference call this past Monday to attempt to resolve any remaining comments to the document. Kris Petersen also said that she had met with Kirk Truscott yesterday to help draft text for a program overview section in the document. The Committees discussed the usefulness of including an executive summary in future HGMPs

### *Section on Priorities*

The Committees then turned their attention to the draft overview section in the HGMP (Section 1.8) on program priorities; the current draft includes a statement that the priorities are mitigation or production, escapement, and management for a Proportion of Natural Influence (PNI) objective of 0.67. Mike Schiewe asked the Committees members for their opinions on this section because it had not been discussed during the Monday conference call.

Keely Murdoch said that the Yakama Nation favored having a priorities section that establishes a clear path for future actions. Kirk Truscott agreed with this, but thought that prioritizing escapement ahead of managing for a PNI of 0.67 would be a concern. Jerry Marco said that the Colvilles do not think that the priorities necessarily are needed in the HGMP. Bill Gale said that the U.S. Fish and Wildlife Service (USFWS) also does not think the section is necessary, primarily because each year's actions could be managed on a year-by-year basis. Keely Murdoch said that this situation is what the Yakama Nation is working to avoid. Shaun Seaman said that Chelan PUD would be in favor of leaving the section out, but noted that the fisheries co-managers are the parties that deal with the PNI and escapement issues. He stressed that Chelan PUD believes in the importance of a balanced approach that is consistent with the HCP, the Recovery Plans, and the principles of the Hatchery Scientific Review Group (HSRG). (Because this was brought up, Kris Petersen noted that she would like to clarify that NMFS has not communicated that the HSRG recommendations must be implemented.) She went on to say that NMFS sees the priorities as a balance but thinks that ranking the priorities in the way they have been ranked in the HGMP will be problematic in NMFS review. She suggested a paragraph that would describe the importance of each of these goals rather than ranking them in priority order. The Committees worked with this paragraph until the group agreed that it adequately captured program goals, emphasizing their intent to balance mitigation, escapement, and PNI goals.

### *Section 13 on Roles and Responsibilities*

Shaun Seaman said that Chelan PUD has met (via phone) with Hatchery Committees members and their policy staff individually to discuss responsibilities and obligations that should be included in the HGMP. He handed out a copy of a Chelan PUD draft of Section 13 that discusses these roles and identifies responsible parties.

Kirk Truscott commented that the current draft section does not describe the level of support Chelan PUD will provide in implementing adult management at Tumwater Dam. Shaun Seaman agreed, saying that under the terms of the HCP, Chelan PUD does not have responsibility for removal of excess adults at Tumwater Dam. Seaman said that Chelan PUD legal counsel had reviewed the HCPs, and concurred with this interpretation. Seaman did note, however, that they were open to discussing some level of participation. Kirk Truscott said that Washington Department of Fish and Wildlife (WDFW) policy staff would be reviewing this section. Keely Murdoch, Jerry Marco, Kris Petersen, Kirk Truscott, and Bill Gale said that their opinion was that funding removal of adult fish at Tumwater should be a



---

Chelan PUD responsibility; they also said that they believed that post-removal management of fish removed is a separate issue. Mike Schiewe suggested that Chelan PUD's responsibilities for adult management were largely a matter of legal interpretation of the HCP. The Committees agreed that they would check in with their legal/policy staff on interpretation of the HCP and would bring this information back to the Committees for further discussion. It was discussed that Chelan PUD would likely state in their cover letter transmitting the revised HGMP to NMFS that responsibility for adult management is a topic under continuing discussion.

### *Schedule*

The Hatchery Committees will provide any remaining changes to Sections 1.6 through 1.8 as modified in today's meeting by noon on this Friday, March 20 (tomorrow). Julie Pyper will send out these sections at the end of the day today (March 18).

The schedule for the final Hatchery Committees draft is for Chelan PUD to send out a document with changes accepted for Committees' review by Wednesday morning, March 25, at 8 am. The Committees will provide any comments by noon on Thursday, March 26, and will meet by conference call at 1 pm on the same day.

### Chiwawa spring Chinook

Keely Murdoch reported that the Yakama Nation (YN) and WDFW will be addressing final internal comments on the spring Chinook management plan at a conference call tomorrow (Thursday, March 19).

### *B. Hatchery Committees Protocol for Developing and Reviewing Study Plans*

The Hatchery Committees agreed that the flowchart and protocol for the development and review of study plans by the Hatchery Committees is on hold, as the HGMPs are currently taking most of the work time available.

## **III. Chelan PUD**

### *A. IHIP Follow-Up*

Julie Pyper said that the Integrated Hatchery Improvement Plan (IHIP) has now been distributed to the Hatchery Committees.

---

*B. Hatchery Program Summary*

Julie Pyper distributed copies of the Hatchery Program Summary and welcomed any questions. There were no questions. Mike Schiewe asked that Chelan PUD continue to alert the Hatchery Committees of progress toward implementing changes to hatchery programs that are identified in the IHIP.

*C. Intermediate Trough Densities for Rearing Steelhead and Sockeye*

Sam Dilly joined the meeting to discuss a potential study of rearing densities of steelhead and sockeye salmon. Dilly said that early life stages of steelhead and sockeye are reared at Eastbank Hatchery in separate intermediate troughs concurrently, which creates a pinch point in space for these fish. Dilly noted that it may be necessary to add infrastructure, but before making a decision, the PUD is compiling information on design criteria. Dilly said that Chelan PUD would like to investigate how other facilities/institutions deal with rearing these species/life stages. The Hatchery Committees agreed that a review of existing information is a good starting point to address this issue. Chelan PUD will send out the information that has been compiled thus far to the Committees.

*D. Draft 2008 Chelan PUD M&E Report Out for Review*

The Draft 2008 Chelan PUD M&E Report is now out for 60-day review and comments are due to Julie Pyper by Friday, May 1. Ali Wick will burn and send a CD copy of this to Kris Petersen.

*E. Chiwawa Steelhead Ponds*

Shaun Seaman said that Chelan PUD would like to conduct a pilot water reuse study at Chiwawa Ponds for rearing and acclimating Wenatchee steelhead, and invited Sam Dilly to discuss this. Dilly said that the study could be conducted using the existing Wenatchee River water right. Wastewater from the reuse ponds would be collected and filtered by a wastewater treatment system consisting of a settling tank and purifier. Dilly noted a pilot study would provide important data on the proportion of steelhead that residualized. Volitional release would be accomplished by providing fish an outlet from the pond into a raceway, allowing volitional movement in the typical fashion. Dilly noted that because there are currently no steelhead being reared at the Chiwawa site, the study results would not be evaluated against a reference or control. Dilly indicated that the reuse system could be ready for testing by this fall; steelhead reared in this configuration could potentially be released by 2011 or 2012. Sam Dilly will send the study proposal to the Hatchery

---

Committees for their review; the Committees will send initial comments to Chelan PUD by April 1 along with requests for further information. Chelan PUD will prepare a Statement of Agreement (SOA) for the next meeting.

*F. Sockeye Enumeration Study Comments*

Joe Miller said that comments on the sockeye enumeration study are currently being addressed. Bill Gale will be providing comments to Joe Miller for incorporation.

*G. Blackbird Island Pond Update*

Shaun Seaman reported that the concrete pad will soon be poured at Blackbird Island Pond in Leavenworth. Chelan PUD is currently anticipating fish to be on station by the end of next week, but Shaun Seaman will check on this and update the Hatchery Committees.

*H. NMFS Grants*

Shaun Seaman updated the group that Chelan PUD is looking at recent information regarding newly available NMFS funding for coastal and marine habitat restoration projects. Chelan PUD will be evaluating whether any PUD projects may qualify.

## **IV. Douglas PUD**

*A. Access to East Ladder at Wells*

Tom Kahler said that Douglas PUD and WDFW have identified that the best interim solution for access to the east ladder at Wells Dam during turbine re-wind at the dam will be to periodically move the portable building that currently blocks access to the ladder. Kirk Truscott asked that Douglas PUD coordinate with them on the schedule for the re-wind and Kahler agreed to do so. Rick Klinge noted that Douglas PUD may need to minimize trips across the project in order to facilitate the re-wind construction schedule. He also said that Douglas PUD will be working on some improvements to the west ladder and is open to suggestions for configurations from the Hatchery Committees.

*B. Methow Steelhead Reproductive Success Study Follow-Up*

Tom Kahler said that Douglas PUD is willing to implement a version of the steelhead reproductive success study proposed by WDFW in November 2007 if it was agreed that it would fulfill the Douglas PUD HCP required study; however, Kahler indicated that he would rather see the Hatchery Committees decide on goals and objectives before planning the study. The Committees agreed. Mike Schiewe mentioned that he had been in contact with

---

NMFS about developing an integrated plan for conducting steelhead reproductive success studies in the Upper Columbia. An integrated study plan would consider not only the HCP required studies, but also the studies required by the Reasonable and Prudent Measures (RPAs) in the Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) and the Grant PUD Settlement Agreement. The Committees agreed to defer further discussion of steelhead reproductive success studies until Schiewe hears back from NMFS.

## **V. NMFS**

### *A. Expanding Scope of EIS on Mitchell Act Funding and Operation of Columbia River Hatcheries*

Kris Petersen updated the group that NMFS has released a Federal Register notice on expanding the scope of the Environmental Impact Statement (EIS) that analyzes Mitchell Act funding and the operation of Columbia River hatcheries. She said that this release relates to the distribution of Mitchell Act funds, will not determine Endangered Species Act (ESA) compliance or make any decisions on any individual hatchery programs, and is intended to be a policy direction that applies only to Mitchell Act funding of programs. None of this is expected to affect any of the HCP hatchery programs that are in place. Shaun Seaman added that in his conversations with Rob Jones on this topic, Jones said that any National Environmental Policy Act (NEPA) analysis that may be done on the HCP programs as a result of this scope will rely on the work that has already taken place for these programs.

### *B. 9<sup>th</sup> District Court of Appeals Ruling in NMFS Case*

Kris Petersen said that the 9th District Court of Appeals has made a ruling in NMFS' favor on a legal case against NMFS regarding how NMFS views hatchery programs in the context of ESA listings. The decision upheld NMFS' policy to determine which hatchery fish are part of an Evolutionarily Significant Unit (ESU) or Distinct Population Segment (DPS) and upheld that hatchery fish could be included in listings but managed differently than natural origin fish.

### *C. Follow-up on Larsen/Beckman Precocity Study*

Kris Petersen said that Don Larsen and Brian Beckman of NMFS request permission to collect 200 summer Chinook from each of several programs for a precocity study. The collected fish would come from stocks at Dryden, Similkameen, Carlton, and Wells hatchery facilities. The Hatchery Committees agreed to support the study.

## **VI. WDFW**

---

*A. Comments to Broodstock Collection Protocols*

Kirk Truscott updated the group that broodstock collection protocols have been sent out and comments were received from USFWS and Douglas PUD. Final comments need to be turned in by April 1. He will incorporate these and will submit the protocols to NMFS by the April 15 deadline.

On another note, Jerry Marco will send the notice on an upcoming summer/fall Chinook workshop to Ali Wick for distribution to the Hatchery Committees for their information.

*B. Comments to Twisp Weir Operations Protocol*

Kirk Truscott noted that the Twisp Weir Operations Protocol has been sent out and no comments have been received. Tom Kahler added that most of the ice has been removed from the weir and the weir is now in operation. Pat Phillips added that WDFW has not moved spring Chinook juveniles into the Twisp River acclimation pond this year because there is an ice jam on the intake to the ponds that is preventing operation of the intake gate, and an ice/debris jam upstream that could break loose and clog the intake, resulting in injury to or loss of fish. The alternative that is likely will be to transport the fish by truck higher into the Twisp River watershed for release. Phillips will alert the Hatchery Committees when fish are moved.

*C. New Methow Hatchery Broodstock Collection Trap*

Tom Kahler updated the group that Methow Hatchery staff have asked Douglas PUD to design a new broodstock collection trap at the hatchery outfall. Douglas PUD is developing designs for the trap and intends to complete and install it by the end of April.

*D. Smolt Releases in Salmon Creek*

Kirk Truscott informed the Hatchery Committees that the Colville Tribes have requested 25,000 Wells summer steelhead smolts for release in Salmon Creek again this year, as in the past 3 years. The Committees concurred with this request.

*E. Study to Assess Egg-to-Fry Survival of Upper Columbia Spring Chinook*

Andrew Murdoch joined the meeting to provide an update on a proposed study to measure egg-to-fry survival in several spring Chinook populations in the Upper Columbia. The principal investigator will be Phil Roni, a NMFS watershed ecologist at NMFS' Northwest Fisheries Science Center. These data will be used in habitat-based population modeling.

This study began last year on fish in the upper Yakima River, but the researchers would like to expand to the Wenatchee and Methow basins. This expanded and multi-year study will entail collecting gametes from hatchery origin fish (species unknown at this time) and raising juveniles from those fish in both artificial redds and in hatcheries. The study will begin in September of this year, and he will forward information as it becomes available. Murdoch may visit the Hatchery Committees at a later date to provide a further study description. Murdoch said that, in the meantime, questions are welcome.

*F. Request For Samples from Upper Columbia Salmon and Steelhead for Predator Study in Priest / Wanapum Pools from Grant PUD*

Andrew Murdoch said that Dave Burgess from Grant PUD is conducting a predator impact study in Priest Rapids Reservoir and will be requesting 20 reference samples (fish specimens; e.g., fresh hatchery mortalities) from each Upper Columbia hatchery program in 2009. Murdoch said that he believes that this study will contribute to understanding of survival of these program fish. Shaun Seaman pointed out that bone samples from the avian predation study exist and may be useful for this study. Murdoch said that he will look into this. Murdoch will forward additional information on the needs of this study to the Hatchery Committees as this information is available.

## **VII. Colville Tribes**

*A. Update on Colvilles Position on PIT-Tag Array at Zosel Dam for Sockeye Monitoring*

Jerry Marco reminded the group that at the last Hatchery Committees meeting, Tom Scribner suggested that the Colvilles may have some concerns about a Columbia River Inter-Tribal Fish Commission (CRITFC) proposal to install a Passive Integrated Transponder tag (PIT-tag) array at Zosel Dam. Jerry Marco said today that it turns out that there may have been a miscommunication at some point, and the Colvilles support installing this array. The Colvilles expect to coordinate with CRITFC as implementation occurs, but that construction may not occur this year due to funding constraints.

## **VIII. HCP Administration**

*A. Meeting Agreements Not Requiring an SOA*

- The Hatchery Committees agreed that Don Larsen and Brian Beckman of NMFS have permission to collect 200 summer Chinook from various programs for a precocity study from stocks at Dryden, Similkameen, Carlton, and Wells hatchery facilities.

- The Hatchery Committees concurred that WDFW may provide 25,000 Wells summer steelhead smolts to the Colville Tribes for release in Salmon Creek again this year, as in the past 3 years.

*B. Next Meetings*

The next scheduled Hatchery Committees meetings are as follows: April 15, May 20, and June 17; all meetings will be at the Chelan PUD offices in Wenatchee.

**List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, L.L.C.
Ali Wick	Anchor QEA, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Sam Dilly (afternoon only)	Chelan PUD
Jerry Marco *	Colville Tribes
Rick Klinge *	Douglas PUD
Tom Kahler *	Douglas PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Bob Pfeifer	WDFW
Pat Phillips	WDFW
Andrew Murdoch (update only)	WDFW
Kirk Truscott *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate



## MEMORANDUM

---

**To:** Rocky Reach and Rock Island Hatchery Committees  
**Date:** April 15, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Joe Miller

**Re:** Final Minutes of March 26, 2009 RI and RR Hatchery Committees Conference Call

---

The Rock Island and Rocky Reach Projects HCP Hatchery Committees met by conference call on Thursday, March 26, 2009, from 1:00 pm to 4:00 pm to reconcile comments on the Wenatchee steelhead draft Hatchery Genetic Management Plan (HGMP). Attendees are listed in Attachment A to these Meeting Minutes.

### **I. Discussion (Mike Schiewe)**

Mike Schiewe opened the discussion, by thanking the group for all of their hard work to bring the draft HGMP to this near-final stage. He indicated that today's meeting is to resolve any final issues prior to Chelan PUD submitting the HGMP to National Marine Fisheries Service (NMFS) on March 31, 2009.

The Workgroup then discussed outstanding issues associated with each section of the draft HGMP. The subjects included the need for consistent nomenclature for the Dryden facility (i.e., dam versus weir), the rationale and need for the use hormones to synchronize spawning of hatchery broodstock, and the proposed text comprising Section 13 on roles and responsibilities.

By end of the conference call, the Hatchery Committees members were in general agreement on Sections 1 through 12 of the draft HGMP; however, there was no agreement on Section 13, which articulated Chelan PUD's interpretation of its responsibility under the HCP. Chelan PUD indicated that it would include Section 13 with the submittal, but would indicate the HGMP was not yet approved by the HCP Hatchery Committees. Chelan PUD agreed to provide its draft transmittal letter to the Committees on Monday, March 30, with formal transmittal to NFMS on Tuesday, March 31.

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Michael Schiewe	Anchor QEA, L.L.C.
Shaun Seaman *	Chelan PUD
Julie Pyper	Chelan PUD
Joe Miller	Chelan PUD
Tom Kahler *	Douglas PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Kirk Truscott *	WDFW
Bob Pfeifer	WDFW
Keely Murdoch *	Yakama Nation
Alene Underwood	Chelan PUD

\* Denotes Rocky Reach, Rock Island, and Wells Hatchery Committees members or alternates

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** May 20, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick and Joe Miller

**Re:** Final Minutes of April 15, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, April 15, 2009, from 9:30 am to 4:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- The Hatchery Committees will provide any additional comments to the March 9 and 18 meeting minutes by next Wednesday, April 22, and then the minutes will be finalized. Keely Murdoch will provide revised text for the March 9 minutes to Ali Wick (Item I
- Sam Dilly will provide the final 2008 Pilot Water Reuse Study Report when available (Item III-A).
- Shaun Seaman will provide the letter from the U.S. Forest Service (USFS) to Chelan PUD on land use at the Chiwawa Rearing Facility and the National Environmental Policy Act (NEPA) process (Item III-B).
- Julie Pyper will provide a spreadsheet on timing and schedule for the Chiwawa Rearing/Acclimation Facility project so that the Hatchery Committees can track progress (Item III-B).
- Kirk Truscott will relay responses on the Chiwawa Steelhead Reuse Study to Bob Rogers, Washington Department of Fish and Wildlife (WDFW) fish health specialist, and Chelan PUD will provide information as needed to address Rogers' comments (Item III-C).
- Chelan PUD will finalize and send out a draft final Statement of Agreement (SOA) for the Chiwawa Steelhead Reuse Study (Item III-C).

- Joe Miller will compile information on the number of juvenile Chinook recently collected in the Rocky Reach bypass and provide this information to Douglas PUD so that they can estimate the total number of summer Chinook that may have escaped Wells Hatchery (Item IV-A).
- WDFW will meet with Douglas PUD to consider possible ways to eliminate problems with plugging of the screens at the Twisp acclimation ponds and will report back at the June Hatchery Committees meeting (Item IV-B).
- Ali Wick will send the presentation on the Wenatchee Spring Chinook Implementation Plan to the Hatchery Committees (Item V-A).
- Julie Pyper will let the Hatchery Committees know when Chelan PUD can provide a draft Chiwawa spring Chinook Hatchery Genetic Management Plan (HGMP) to the Committees (Item V-A).
- The Hatchery Committees will provide comments on the Wenatchee Spring Chinook Implementation Plan to the Yakama Nation (YN) and WDFW no later than the end of the day on May 1 (Item V-A).
- Tom Scribner will contact Bill Gale and Ray Brunson at USFWS to discuss the disposition of fish to be potentially removed at Tumwater dam (Leavenworth strays and potentially Chiwawa fish) (Item VI-A).

## **DECISION SUMMARY**

- The Hatchery Committees provisionally approved the Chiwawa Steelhead Water Reuse Pilot Study and SOA contingent on WDFW approval by next Wednesday, April 22 (Item III-C).

## **I. Welcome**

The Hatchery Committees approved the March 16 and March 26 meeting minutes. Ali Wick will distribute the final Minutes to the Hatchery Committees, and will provide revisions to the Committees on the March 9 and March 18 meeting minutes for the Committees' email comment and approval.

## **II. All Committees**

### *A. Steelhead Reproductive Success Studies*

Mike Schiewe reported that he had contacted National Marine Fisheries Service (NMFS), Bonneville Power Administration (BPA), and the Northwest Power Planning and

Conservation Council (NPPC) staff regarding interest in developing an integrated plan for steelhead reproductive success studies in the Upper Columbia River. One issue that Schiewe wanted to resolve upfront was whether participating in the planning would trigger a conflict of interest for parties later interested in submitting proposals to conduct the planned research. Schiewe indicated he has contacted BPA staff regarding this concern, and is waiting for their response. Also, BPA staff indicated that they are working with the NPPC on a targeted solicitation for the steelhead reproductive success study identified as a Reasonable and Prudent Alternative (RPA) in the Federal Columbia River Power System (FCRPS) Biological Opinion, and that an integrated plan could be consistent with their process. If the path were to be followed, a next step would be for the Hatchery Committees to identify a smaller group that would develop the study plan. Tom Scribner voiced concern that the multiple jurisdictions involved in such a study would cause a delay. Schiewe agreed, but indicated that he felt that the benefits of having a single integrated plan were worth the additional time and effort.

#### *B. HETT Update*

Tom Kahler provided a progress report on the Hatchery Evaluation Technical Team's (HETT's) recent analytical efforts to identify Monitoring and Evaluation (M&E) control populations. The HETT has been working to include an estimate of carrying capacity in its spawner recruit relationships for use in identifying control populations. Spring Chinook populations were the first data to be analyzed, beginning with Chiwawa spring Chinook; Wenatchee steelhead populations will be next, followed by sockeye populations.

#### *C. HGMP Update*

##### Wenatchee Steelhead

Mike Schiewe noted that Chelan PUD had submitted the draft HGMP for Wenatchee steelhead to NMFS on March 31. Kris Petersen acknowledged that NMFS has received the document, but was unsure of when NMFS would be providing comments back to Chelan PUD and the Hatchery Committees.

##### Chiwawa Spring Chinook

The deadline for this HGMP is May 31. Chelan PUD intends to move forward drafting sections of the HGMP that are not likely to change from the previous HGMP, while the

---

implementation plan prepared by WDFW and the YN is being reviewed by the Hatchery Committees.

### Methow Populations

The deadline for these HGMPs is the end of July. A schedule for these will be developed soon.

## **III. Chelan PUD**

### *A. Review of 2008 Pilot Water Reuse Study Report*

Sam Dilly gave an overview of the 2008 Pilot Water Reuse Study Report. He discussed fish health issues, saying that fish health specialists observed some gill irritation, possibly due to slightly elevated carbon dioxide levels caused by algal growth in the pond. Dilly said that increased water flow and pond covers should greatly reduce algal growth next year. In terms of fish morphology, the reuse pond fish were less fatty and more torpedo-shaped than raceway fish. However, they were somewhat fattier than naturally-reared fish. Chelan PUD is working with NMFS to understand whether fattiness in these juveniles might cause these fish to return early as adults.

Tom Scribner asked whether gill irritation has been previously reported in water reuse systems. Dilly and Steve Hays indicated that their research had not shown that it was common, but noted that elevated concentrations of suspended particulates can be an issue in ponds that are not being flushed well; therefore, the next year's study plan is to increase water velocities to increase flushing. Kirk Truscott noted that elevated ammonia and carbon dioxide levels can sometimes cause gill irritation and asked whether these could have been a factor. Dilly said that ammonia was consistently non-detectable and that carbon dioxide levels were consistently low. Oxygen levels were supplemented up to saturation by bottled oxygen that was added as needed. Dilly said that in order to take extra precautions for fish safety, oxygen levels will, in the future, be monitored and supplemented with an automatic system backed up with an alarm. Julie Pyper added that a dedicated Chelan PUD-funded staff member will be hired to monitor this project. Dilly will add the water quality information to the report as an appendix. The Hatchery Committees approved this report with this addition, and Dilly will provide the final report when available.

### *B. Hatchery Program Summary*

Julie Pyper reviewed for the group the topics covered in the Hatchery Program Summary. This discussion included the schedule for the Chiwawa Rearing/Acclimation Facility permitting. Tom Scribner raised a concern that the steelhead water reuse pilot study might affect progress on the planning and permitting of the traditional acclimation ponds at the Chiwawa facility. Shaun Seaman spoke to this, saying that the pilot study will not delay the Chiwawa facility work. Seaman noted that there have been discussions between Chelan PUD and USFS regarding NEPA compliance for site preparation; he will provide the letter to Chelan PUD from the USFS regarding this issue. Also, Julie Pyper will provide a spreadsheet on schedule and timing for the Chiwawa Rearing/Acclimation Facility project so that the Hatchery Committees can track progress. Kirk Truscott asked about progress on the Chelan County shorelines permit; Pyper responded that the County and Federal Emergency Management Agency (FEMA) are negotiating on the floodplain fill mitigation requirement. Other requirements related to the shorelines permit will include Chelan PUD getting a new easement to facilitate construction on the water supply line because the existing easement was only wide enough to allow maintenance.

### *C. DECISION ITEM: Chiwawa Steelhead Water Reuse SOA*

Mike Schiewe invited comment on the proposed Chiwawa steelhead pilot water reuse SOA. Kirk Truscott said that WDFW's main concerns are with the use of surface water as a water source, such that there is a potential for increased pathogen loading, and increased sediment and particulate loading. In addition, there could be growth of filamentous algae, which could affect the ability to provide a constant water supply. Kris Petersen said that NMFS is in agreement with the proposal in concept and requested periodic project updates to track progress. Jerry Marco said that the Colvilles' key concern is also the use of surface water and the potential problems with gill irritation due to suspended materials.

Sam Dilly said that the experience gained with the summer/fall Chinook pilot study at Eastbank would be extremely helpful in anticipating and minimizing or avoiding problems in the steelhead study. Regarding water quality, changes to be made include reducing residence time of water in the ponds and retaining the ability to have a flow-through option. Regarding the possibility of increased sediment particulates from surface water, the design includes sending water through a settling basin and filters prior to first use, as well as using

the swirling action of the ponds themselves to segregate particulates at the bottom of the pond, which are then flushed out of the pond and re-filtered by the water reuse system.

Kirk Truscott will relay these responses to Bob Rogers, WDFW fish health specialist, and Chelan PUD will provide information as needed to address any of Rogers' comments. The Hatchery Committees provisionally approved the proposal and SOA, contingent on WDFW approval by next Wednesday, April 22, and following such approval, Chelan PUD will finalize and send out the final SOA.

*D. Adult Sockeye Holding*

Julie Pyper asked for Hatchery Committees' approval to hold adult sockeye at Eastbank as described in March 27, 2009, WDFW memo on the recommendation for short-term adult sockeye broodstock holding at Eastbank Hatchery. The Committees gave their approval.

*E. Sockeye Enumeration Study Update*

Joe Miller said that installation of the Passive Integrated Transponder (PIT)-tag detection arrays are going well and they will be operational by June 1 for collecting sockeye and spring Chinook information. Todd Miller has obtained access to PIT Tag Information System (PTAGIS) for achieving data from both the White and Little Wenatchee arrays. Keely Murdoch said that detections from the Entiat and Peshastin arrays may be included the Integrated Status and Effectiveness Monitoring Project (ISEMP) arrays, which will soon also be achieved in the PTAGIS database. Joe Miller anticipates that the study will proceed as planned.

*F. Blackbird Island Update/Tour*

Shaun Seaman said that all is well at Blackbird Island Pond and he invited the Hatchery Committees to visit the pond after the meeting today. He commended the Committees for their teamwork in helping to get the project accomplished. Fish were placed into the pond on March 27 and will likely be released in early May.

*G. Reminder: Draft 2009 M&E Report Comments due by May 1*

Julie Pyper reminded the Hatchery Committees that the Draft 2009 M&E Report comments are due May 1 and Chelan PUD anticipates approval of this at the May meeting.



## **IV. Douglas PUD**

### *A. Subyearling Summer Chinook Escape from Wells Hatchery*

Pat Phillips updated the group that several thousand hatchery subyearling summer Chinook (sized 60 to 75 millimeters) have been observed arriving at Rocky Reach Dam; CWTs indicate an escape from Wells hatchery at some point. This escape likely happened at the time of marking (approximately 3 weeks ago), but the exact cause is not known at this time. Kirk Truscott asked whether Chelan PUD might be able to look at the number of fish that entered the Rocky Reach bypass and provide information to calculate a rough estimate of the number of fish that may have escaped. Joe Miller confirmed that he would do this.

### *B. Update on Twisp Acclimation Ponds*

Pat Phillips said that a large log/ice jam upstream of the Twisp weir could block the water intake to the Twisp acclimation pond once the ice melts. Currently, fish have not been moved into the pond, but WDFW is willing to accept the potential risk and is poised to place fish in the pond if there is Hatchery Committees approval. Phillips said that if the river were to begin to quickly rise, increasing the likelihood of a blockage, fish in the pond could be released in a matter of several hours. Alternatively, to avoid this situation, fish could be drop-planted upstream instead of placed into the pond. Because of the value of even a short acclimation, the Committees agreed to accept the potential risk of moving fish into the pond. WDFW will meet with Douglas PUD to look at possible ways to minimize the possibility of water intake blockage at the Twisp holding pond in future years, and will report back at the June Hatchery Committees meeting.

## **V. WDFW / Yakama Nation**

### *A. Presentation: Wenatchee Spring Chinook Implementation Plan*

Keely Murdoch began the presentation by acknowledging that the group preparing the plan is still meeting to discuss further issues. The plan is essentially a set of principles to guide the management of spring Chinook in the Wenatchee basin, to document the rationale for various goals and targets, and to provide a reference for operations on an annual and long-term basis. The general approach is to use genetic data to segregate all unmarked spring Chinook arriving at Tumwater Dam based on tributary-of-origin, and use this information for broodstock collection and decisions to pass fish upstream for natural spawning.

Management priorities of the plan are to meet mitigation objectives, meet escapement goals, and implement the first two priorities so that proportion of natural influence (PNI) goals will be met. Management objectives for recovery are based on the Viable Salmon Population (VSP) parameters of abundance, productivity, spatial structure, and genetic diversity. Adult management methods will include pre-season run sizes and in-season run size updates. The Off-Ladder Adult Fish Trap (OLAFT) at Priest Rapids Dam will be used to collect unmarked, returning adults and conduct parental broodstock genetic testing. Broodstock needed will consist of natural origin recruits (NOR) and hatchery origin recruits (HOR). Percentages of NOR and HOR taken will depend on fish numbers and timing of arrival at Tumwater Dam. The goal will be to typically take 33 percent, with a maximum of 40 percent, of the NOR for broodstock. Weekly escapement goals will be in place and used to determine how many HOR fish should be passed upstream of the Tumwater Dam to spawn depending on the number and origin of fish arriving weekly. The plan includes contingency planning for short- and long-term scenarios. Monitoring and evaluation will occur in coordination with Chelan PUD's M&E Plan, as well as the performance standards listed in this implementation plan.

The Hatchery Committees discussed some of the questions that came up during the presentation. The Committees requested more time to internally process the information that was presented today and to have an opportunity to ask questions. Ali Wick will send this presentation to the Committees. Julie Pyper will let the Committees know when Chelan PUD can provide a draft HGMP to the Committees, minus the sections that NMFS and WDFW/YN still need to discuss. The Committees will likely need an extension on the submittal date to NMFS because of limited NMFS staff availability to meet to discuss until early May. Rob Walton indicated that NMFS would be flexible on a submission date as long as good progress was being made toward completing the HGMP.

## **VI. USFWS**

### *A. Leavenworth Strays at Tumwater Dam: 2009 Management Activities Update*

Dave Carie provided a memorandum from the USFWS detailing plans for removal of ad-clipped and non-Coded-Wire-Tagged (CWT) Leavenworth Hatchery strays at Tumwater Dam. He acknowledged that this action may lead to unintentionally removing Chiwawa Hatchery fish that have shed CWT tags. Carie confirmed that any mortalities would be

passed through a tunnel CWT detector at Leavenworth Hatchery in order to document any tagged Chiwawa fish.

Carie noted that these fish cannot be distributed for human consumption because they have been treated with MS-222; Tom Scribner said that he was uncomfortable with the idea of euthanizing these fish and not using them. Carie said that there may be a possibility of holding them in a raceway, but he could not be sure about this. To follow up, Scribner will call Bill Gale and Ray Brunson at USFWS to discuss this matter.

## **VII. HCP Administration**

### *A. Meeting Agreements Not Requiring an SOA*

- The Hatchery Committees approved the 2008 Summer/Fall Chinook Pilot Water Reuse Study Report, with the addition of a water quality appendix (Item III-A).
- The Hatchery Committees approved WDFW holding adult sockeye at Eastbank as described in the March 27, 2009, WDFW memo on the recommendation for short-term adult sockeye broodstock holding at Eastbank Hatchery (Item III-D).
- The Hatchery Committees agreed that WDFW could proceed with placing fish into the Twisp acclimation pond (Item IV-B).

### *B. Next Meetings*

The next scheduled Hatchery Committees meetings are as follows: May 20, June 17, and July 15; all meetings will be at the Chelan PUD offices in Wenatchee.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Sam Dilly	Chelan PUD
Gregg Carrington	Chelan PUD
Jerry Marco *	Colville Tribes
Rick Klinge *	Douglas PUD
Tom Kahler *	Douglas PUD
Shane Bickford	Douglas PUD
Russell Langshaw	Grant PUD
Todd Pearsons	Grant PUD
Kris Petersen *	NMFS
Rob Walton	NMFS
Dave Carie *	USFWS
Bob Pfeifer	WDFW
Pat Phillips	WDFW
Kirk Truscott *	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Hatchery Committees  
**Date:** June 8, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Steve Hays, Heather Bartlett,

**Re:** Final Minutes of May 11, 2009 HCP Rock Island and Rocky Reach Hatchery Committees Conference Call

---

The Rock Island and Rocky Reach Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met via conference call on Monday, May 11, 2009, from 1:00 pm to 2:45 pm regarding comments on and the schedule for the Wenatchee Spring Chinook Management Plan. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Jeff Korth will send the Management Implementation Plan (MIP) draft to the Yakama Nation (YN) today or early tomorrow, and will copy National Marine Fisheries Service (NMFS) as an FYI, noting that the YN and Washington Department of Fish and Wildlife (WDFW) have not resolved the comments yet.
- The YN, NMFS, and WDFW will meet on May 14 to discuss and resolve comments to the extent possible.
- The YN, NMFS, and WDFW will send a document to the Hatchery Committees on Monday, May 18, summarizing the progress of the discussions and noting whether any outstanding Hatchery Genetic Management Plan (HGMP) issues will be resolved by the May deadline.
- The Hatchery Committees will discuss the MIP at the Hatchery Committees meeting on Wednesday, May 20.

### DECISION SUMMARY

- No Hatchery Committees decisions were made at this meeting.

---

**I. Wenatchee Spring Chinook Management Implementation Plan (Mike Schiewe)**

Mike Schiewe stated that the purpose of today's call is to review Hatchery Committees' comments on the Wenatchee spring Chinook MIP, and establish a schedule to resolve outstanding issues. Kirk Truscott said that WDFW is currently reviewing comments submitted by Committees members and the draft comments that NMFS circulated to the Committees today. He noted that review will require additional time, as responses will need to be vetted with the YN. Jeff Korth said that WDFW is currently rewriting certain sections and is prepared to submit a revised draft MIP to the YN today or tomorrow. Mike Schiewe reminded everyone that information in the MIP is needed to complete the Wenatchee spring Chinook HGMP, and it may be that the MIP will not be finished in time to supply this information to Chelan PUD for the HGMP. Rob Jones said that NMFS understands this but is not prepared to change the HGMP deadline, which is currently May 31. Shaun Seaman said that if co-manager agreement is not reached on the MIP, Chelan PUD will be ready to submit an HGMP to NMFS based on the current program along with a cover letter that summarizes the issues that are still outstanding to ensure Chelan has met the timelines specified by NMFS. Chelan also noted their reluctance to submit an HGMP with new management actions that have not been approved by the entire HC. Chelan discussed the difficulties of meeting the current timeline based on the level of work still to be completed and the uncertainty of reaching consensus in time to complete the HGMP.

The Rocky Reach and Rock Island Hatchery Committees members on the call today and the HGMP authors agreed to the following steps and schedule:

- Jeff Korth will send the MIP draft to the YN today or early tomorrow, and will copy NMFS as an FYI, noting that the YN and WDFW have not resolved the comments yet.
- The YN, NMFS, and WDFW will then meet on May 14 to discuss and resolve comments to the extent possible.
- The YN, NMFS, and WDFW will send a summary document to the HC on Monday, May 18, summarizing the progress of the discussions and noting whether any outstanding HGMP issues will be able to be resolved by the May deadline.
- The Hatchery Committees will discuss the MIP at the Hatchery Committees meeting on Wednesday, May 20. If the Hatchery Committees agree with the way that the YN, NMFS, and WDFW have addressed comments to the MIP, then the Hatchery

Committees will set a schedule for finalizing the HGMP for the purposes of meeting the deadline.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Alene Underwood	Chelan PUD
Steve Hays	Chelan PUD
Shaun Seaman *	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
Kris Petersen *	NMFS
Rob Jones	NMFS
Elizabeth McManus	Ross and Associates
Patrick Donovan	Ross and Associates
Kirk Truscott *	WDFW
Heather Bartlett	WDFW
Bob Pfeifer *	WDFW
Jeff Korth	WDFW
Bill Gale *	USFWS
Steve Parker	Yakama Nation
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate



## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** June 25, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick , Joe Miller, Steve Hays, Shane Bickford, Bob Pfeifer, Pat Phillips

**Re:** Final Minutes of May 20, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, May 20, 2009, from 9:30 am to 4:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- The Hatchery Committees will provide comments on the May 11 conference call minutes to Ali Wick by Wednesday, May 27 (Item I).
- Washington Department of Fish and Wildlife (WDFW) will meet with Douglas PUD to consider possible ways to eliminate problems with plugging of the screens at the Twisp Acclimation Pond and will report back at the June Hatchery Committees meeting (from last meeting).
- Shaun Seaman will inform the Hatchery Committees by the end of next week whether Chelan PUD will continue to pursue Ringold Springs as a possible rearing location for HCP production summer/fall Chinook. If yes, Chelan PUD will provide a new Statement of Agreement (SOA) for Committees' discussion. (Item II-A).
- Chelan PUD will work with WDFW to develop a plan to manage non-migrating steelhead juveniles from Blackbird Island Pond. Chelan PUD will document the strategy in a letter to National Marine Fisheries Service (NMFS). A draft of the letter will be circulated to the Hatchery Committees for review by Wednesday, May 27 (Item II-D).

- 
- Julie Pyper will provide the project schedules for the Chelan Falls summer Chinook salmon and Chiwawa steelhead rearing and acclimation facilities to Ali Wick for distribution to the Hatchery Committees (Item II-E).
  - Julie Pyper will send out a draft letter to the Hatchery Committees that they can use to document their support for Chelan PUD's water right application at the Chelan Falls and Chiwawa River acclimation and rearing facilities; this letter will include information on minimum flow, average flow, and minimum instream flows at the Plain gauge (Item II-F).
  - By the end of next week, Keely Murdoch will check with Tom Scribner to ensure there is no U.S. v. Oregon issue if the Wells Dam survival verification study fish are not marked with coded-wire-tags (CWTs) (Item III-E).
  - Kirk Truscott will check with WDFW research staff to determine if not marking the Wells Dam survival verification fish with a CWT will adversely affect the HCP hatchery Monitoring and Evaluation (M&E) programs (Item III-E).
  - By July, Chelan PUD will investigate options for handling fish at Tumwater Dam to support varied uses of surplus fish (Item IV-B).
  - Bill Gale will provide information to Keely Murdoch on how the Entiat summer Chinook program could potentially impact the HCP coho program; (Item V-A).
  - Kris Petersen will send Bill Gale comments on the SOA for the proposed summer Chinook program at Entiat Hatchery (Item V-A).
  - Bill Gale will provide a revised draft of the SOA for the summer Chinook program at Entiat Hatchery to the Hatchery Committees in June (Item V-A).
  - The Hatchery Committees will meet by conference call on Tuesday, June 2 at 8:00 am to discuss the NMFS determination on whether the draft Wenatchee spring Chinook Management Implementation Plan (MIP) is consistent with Endangered Species Act (ESA) regulations; Grant PUD staff working on the White and Nason Creek Hatchery Genetic Management Plans (HGMPs) will be invited to participate. Ali Wick will send out a conference call line for this call (Item VI-A).
  - Kris Petersen noted that Chuck Peven has been hired as a contractor to write "Status of the Species" sections for the Upper Columbia Hatchery Biological Opinions; she will ask Peven to check with Bill Gale and Ali Wick regarding the schedule for completing these sections (Item VI-A).
  - Ali Wick will send the previously-approved SOA for Okanogan spring Chinook out to the Hatchery Committees for their information (Item VII-A).

## DECISION SUMMARY

- There were no decision items approved at this meeting.

### I. Welcome

The Hatchery Committees approved the April 15 meeting minutes. Ali Wick will distribute the final Minutes to the Hatchery Committees. The Committees will provide comments on the May 11 conference call minutes to Wick by Wednesday, May 27. These will be approved by email.

### II. Chelan PUD

#### A. *SOA for Possible Use of Ringold Springs Hatchery*

Julie Pyper summarized a Chelan PUD proposal to test rear 200,000 summer/fall Chinook (2008 brood) at the Ringold Springs Hatchery during the summer of 2009. The purpose of the test would be to evaluate Ringold Springs as an alternative to Eastbank Hatchery, and thereby reduce demand for water from the Eastbank Aquifer. After the summer rearing period, these fish would be transferred to the Bonaparte Rearing Pond in October 2009 for over-winter rearing and acclimation, followed by release in the Okanogan River in spring 2010. If fish are successfully produced in 2009, Chelan PUD will propose using Ringold Springs Hatchery to summer rear the 600,000 yearling summer/fall Chinook that will be over-winter reared and acclimated at Chelan Falls.

Kirk Truscott raised several questions about the Chelan PUD proposal. His questions included the proposed rearing densities, the temperature regimes, and any implications for precocity. Pyper addressed these questions and described how Chelan PUD plans to consider these in the program. Bill Gale asked about what flexibility the facility has for accommodating various densities that may be needed due to disease. Kris Petersen commented that she had questions about several longer-term issues: the future of the summer Chinook program, including the role of the reuse project; long-term availability of the Ringold Springs facility; and provisions for monitoring juveniles and adults. Julie Pyper said that WDFW staff at Ringold had confirmed that the facility would be available longer-term.

Jerry Marco commented that he would like additional information about how capacity could be increased at Ringold in order to test different rearing densities. Tom Scribner commented

that in order for this proposal to go forward, WDFW would need to coordinate it with the U.S. v. Oregon Production Advisory Committee, as Ringold is currently under consideration for mitigation production for John Day Dam. He also had concerns about high density rearing, as some of the facility's water supply is from irrigation return flow. Shaun Seaman addressed some of Petersen's concerns regarding the direction of the future of the summer Chinook program, saying that Chelan PUD is pursuing this proposal as part of its long-term plan to protect the Eastbank aquifer, primarily in terms of temperature. Seaman said that by the end of next week, Chelan PUD will make a decision on whether it will pursue Ringold as a rearing location. If their decision is to pursue this option, then Chelan PUD will provide a new SOA for Hatchery Committees' discussion.

*B. CRITFC Use of Tumwater Dam*

Julie Pyper notified the group that Columbia River Inter-Tribal Fish Commission (CRITFC) notified the District they will use Tumwater Dam for their annual sockeye data collection at Tumwater Dam. Keely Murdoch said that there may be efficiencies for coordinating with the Sockeye Enumeration Study because fish could be tagged for the sockeye study at the time that fish will already be anesthetized for CRITFC data collection.

*C. Sockeye Enumeration Study Update*

Joe Miller updated the group that the Passive Integrated Transponder tag (PIT-tag) detectors for this study are ready to be installed.

*D. Blackbird Island Pond Update*

Shaun Seaman updated the group that the water level in the Wenatchee River at Blackbird Island Pond is so high that water is not exiting the pond and it appears the juvenile steelhead have ceased to volitionally leave the pond. Chelan PUD is seeking ideas for encouraging the fish to migrate and ideas for how to manage non-migrating steelhead juveniles. There is concern that the non-migrant steelhead, if released into the Wenatchee River after the flow subsides, might pose a predation risk to juvenile salmonids. Chelan PUD will work with WDFW to develop a proposed management plan that will be forwarded to NMFS for evaluation for consistency with their ESA permit. The draft plan will be distributed to the Hatchery Committees for review by Wednesday, May 27.

*E. Hatchery Program Summary*

Julie Pyper distributed spreadsheets that summarized the timelines for planning and permitting new hatchery facilities at Chelan Falls and the Chiwawa Rearing Ponds, and she invited several Chelan PUD staff to summarize for the Hatchery Committees selected aspects of the projects. George Velazquez gave an update on the design phases of the Chiwawa and Chelan Falls rearing facilities, and Waikele Hampton answered several questions on permitting issues. Velazquez reviewed the schedule for tracking important dates and activities. Pyper will provide these schedules to Ali Wick for distribution to the Committees.

*F. Ecology Letters for Chiwawa Cost Reimbursement regarding Water Right*

Julie Pyper informed the Hatchery Committees that the Washington State Department of Ecology (Ecology) has asked for letters of support from the Hatchery Committees for the water right applications for the new Chiwawa rearing facilities for summer steelhead. Pyper will provide Committees members with a draft letter to consider and help with their response to the request. The letter will include information on average flow and minimum instream flows at the Plain gauge.

*G. 2008 Chelan PUD M&E Report*

Julie Pyper reminded the Hatchery Committees that comments on the 2008 Chelan PUD M&E Report were due May 1; however, Chelan PUD has extended the deadline to June 1 to accommodate a WDFW request. Chelan PUD will plan to finalize the document at either the June or July 2009 meetings. The overall M&E Report schedule will be revised over the coming year.

*H. 2010 M&E Implementation Plan Due Date*

Julie Pyper requested an extension for distribution of the Chelan PUD 2010 M&E Implementation Plan, which was originally due June 1. The Committees agreed that the new distribution date will be July 1.

*I. Preliminary PIT-tag Readings at McNary Dam*

Steve Hays reported some preliminary information on McNary Dam detections of juvenile summer Chinook from the Pilot Water Re-use Study. So far, there has been about a 3.5:1 ratio of pilot water re-use study fish compared to raceway-reared fish arriving at McNary. Hays was unsure at this time whether there will be enough fish detected to estimate survival.

*J. Chiwawa Steelhead Pilot Water Re-use Update*

Julie Pyper said that the design for the Chiwawa steelhead pilot water re-use study is proceeding as expected. The current plan is to implement the study in fall 2009.

*K. Hatchery Improvement Budgets*

Shaun Seaman alerted the Hatchery Committees that Chelan PUD's budgets for hatchery activities were limited this year due to the general economic downturn. Changes to Chelan PUD's bond rating have made it more difficult and expensive to borrow capital for projects.

### **III. Douglas PUD**

*A. CRITFC Request for Adult Sockeye at Wells*

Tom Kahler reported that CRITFC had requested access to the Wells Dam adult ladder to sample and tag adult sockeye salmon. He indicated that the request was for collecting scale samples from 400 fish, and for acoustic tagging an additional 100 fish. Keely Murdoch said that she believed that the 100 fish to be acoustic tagged were included in the 400 fish total. Murdoch also clarified that the permit specifies that sockeye trapping can occur only when WDFW is collecting summer Chinook broodstock.

Kahler noted that the main concern for the Hatchery Committees was whether this additional tagging activity would interfere with Chinook broodstock trapping, especially because of the access issues posed by the turbine rewind project at Wells Dam this year. Douglas PUD has previously said that access to the east ladder, where trapping is typically conducted, may be limited. Murdoch and Truscott agreed that there would need to be closer coordination between the Yakama Nation (YN) tagging crew and the WDFW trapping crew, so that both projects could proceed smoothly. Changes that may occur include trapping at the west ladder instead of the east ladder. The Committees agreed that the intent is for WDFW to accommodate the YN to the greatest extent possible, with the priority being collection of HCP broodstock.

*B. Douglas PUD Representation on Hatchery Committees*

Tom Kahler informed the Hatchery Committees that Shane Bickford will now be the alternate for Douglas PUD on the Wells Hatchery Committee.

*C. New Broodstock Trap at Methow Hatchery*

Tom Kahler reported that the new broodstock collection trap at the Methow Hatchery outfall has now been completed and is operational.

*D. Update at Water Metering at Methow Hatchery*

Tom Kahler said that Douglas PUD will be modifying the location of the water meter on Well #6 at Methow Hatchery so that it reads correctly, as it has been located in a position that is not ideal for providing accurate readings. Douglas PUD engineers and contractors will be working to rectify this situation.

*E. WDFW Request to Change Mark of Future Survival Verification Study Fish*

Tom Kahler said that Douglas PUD would rather not CWT yearling spring migrant Chinook fish because they will already be tagged externally and PIT-tagged. Keely Murdoch will check with Tom Scribner to ensure there is no U.S. v. Oregon issue if the CWT mark is eliminated. Kirk Truscott will check with WDFW staff to ensure there would not be an adverse effect on Douglas or Chelan PUD HCP M&E implementation. Murdoch and Truscott will report back to the Hatchery Committees by the end of next week.

## **IV. Yakama Nation**

*A. Lake Cle Elum Sockeye Reintroduction*

Tom Scribner reported that he had recently provided a proposal to the U.S. v. Oregon Production Advisory Committee (PAC) for Lake Cle Elum sockeye reintroduction. The proposal has been approved by the PAC. The proposal specified the collection of the initial broodstock at either Priest Rapids or Wells dam. Julie Pyper noted that it was important that broodstock collection for this new program did not compromise broodstock collection for the existing Skaha Lake program, and will follow up with Howie Wright regarding Okanogan Nation Alliance future needs to see if there may be some impact. Currently, Chelan PUD does not believe that there are any issues but also wanted to ensure that the Lake Wenatchee sockeye program was not impacted by the collections.

*B. Use of Fish Anesthetics at Tumwater Dam and other Adult Trapping Locations*

Tom Scribner raised the topic of the use of fish anesthetics that limits the use of the fish for harvest or human consumption. He noted that if MS-222 is used at Tumwater Dam, then there is a 21-day required lag time between MS-222 anesthesia and release of fish back into

the fishery or outplanting that could result in human consumption. Scribner asked the Hatchery Committees for their current thinking regarding potential other anesthetics that would provide more flexibility for beneficial use of these fish following anesthesia. Shaun Seaman indicated that Chelan PUD will, by the July HC meeting, investigate options for handling fish at Tumwater Dam to support varied uses of surplus fish. The Joint Fisheries Parties (JFP) agreed to meet and discuss future adult management options and, in particular, the disposition of surplus Leavenworth Hatchery adults captured at Tumwater Dam.

### *C. Fish Ladder Filming*

Tom Scribner mentioned that a videographer he knew had inquired about filming in the Wells Dam fish ladder. Scribner will discuss this request with Douglas PUD.

## **V. USFWS**

### *A. Wells/Entiat Summer Chinook Collection SOA*

Bill Gale introduced a SOA that had been previously sent to the Hatchery Committees that described broodstock collection for a new summer Chinook program at Entiat Hatchery. Gale asked for feedback on the SOA. He indicated that he hoped to obtain Hatchery Committees' approval before taking the proposal to the U.S. v. Oregon PAC. Keely Murdoch indicated that the YN would like some information on how this could potentially impact the coho program; Gale agreed to provide this information. Tom Kahler thanked Bill for including Douglas' suggestion for collection of broodstock from the hatchery outfall channel rather than the Wells ladder traps

Jerry Marco said that the Colvilles are not ready to approve the SOA, and that they will not be prepared to consider it until after the next summer Chinook summit on June 11. Committee members agreed to provide comments on the SOA by June 3; Gale will provide a revised draft to the Committees in June. The Committees will discuss the SOA again in June.

### *B. Methow River Brood Collection at Winthrop Hatchery*

Bill Gale summarized for the Hatchery Committees that the U.S. Fish and Wildlife Service (USFWS) completed an investigation of methods for collecting steelhead broodstock for Winthrop Hatchery. Results were that hook-and-line sampling was the most effective method, and that collecting broodstock at Foghorn Dam was not a realistic option because fish avoid the trap at the dam.



## VI. All Committees

### A. HGMP Update

- *Wenatchee Programs*

The Wenatchee steelhead HGMP has been submitted to NMFS. Kris Petersen said that NMFS has completed a preliminary review and will provide comments to Chelan PUD on the HGMP by June 8.

The Wenatchee spring Chinook HGMP is still in progress. The YN, WDFW, and NMFS will be meeting again on June 1 to discuss revision of the plan. Kris Petersen said today that immediately after the June 1 meeting, NMFS would inform the Hatchery Committees whether the MIP was consistent with ESA requirements and was appropriate to consider in preparation of the Chiwawa spring Chinook HGMP. If not, NMFS would work directly with Chelan PUD to prepare an HGMP that was consistent with NMFS ESA regulatory responsibility. Rob Walton confirmed that in either case a draft HGMP is due to NMFS on June 17. Shaun Seaman confirmed that Chelan PUD will deliver an HGMP to NMFS by this date, but reminded the Committees that there would not be time for the draft to be approved by the full Committees before submission. There was no further discussion on this point. The Hatchery Committees will meet by conference call on Tuesday, June 2 at 8:00 am to receive guidance from NMFS on the acceptability of the draft YN and WDFW spring Chinook MIP; Grant PUD staff working on the White and Nason Creek HGMPs will be invited to participate. Ali Wick will send out a conference call line for this call.

- *Methow and Okanogan spring Chinook and Steelhead Programs*

Mike Schiewe asked the Hatchery Committees members about their interest in participating in preparation of the Methow and Okanogan HGMPs. The group agreed that Douglas PUD, WDFW, USFWS, and Anchor QEA staff would participate in the early drafting workgroup. The YN and Chelan PUD will be part of the review process, but not in early drafting. The Colvilles will be involved in the early drafting of the Okanogan steelhead HGMP, and will be involved in review of the Methow steelhead and Methow spring Chinook HGMPs. Kris Petersen noted that Chuck Peven has been hired as a contractor to write "Status of

the Species” sections for the Upper Columbia hatchery program Biological Opinions. Petersen will ask Peven to contact Bill Gale and Ali Wick regarding the schedule.

In response to a question from Kris Petersen as to the status of the WDFW Region 2 Steelhead Plan, Kirk Truscott said that WDFW is almost finished developing the plan.

## **VII. Colville Tribes**

### *A. Chief Joseph Hatchery Tier 2 Approval Secured*

Jerry Marco updated the group that Step 2 approval by the Northwest Power Planning and Conservation Council has been secured for Chief Joseph Hatchery. As a follow-up to questions about the status of mitigation for Okanogan spring Chinook required by the HCP, Ali Wick will send the previously approved SOA for Okanogan spring Chinook to the Hatchery Committees for their information.

## **VIII. HCP Administration**

### *A. Meeting Agreements Not Requiring an SOA*

- The JFP agreed to meet and discuss future adult management and disposition of surplus fish at Tumwater Dam.
- The Hatchery Committees agreed that the Chelan PUD 2010 M&E Implementation Plan will now be due July 1.

### *B. Next Meetings*

The next scheduled Hatchery Committees meetings are as follows: June 17, July 15, and August 19; all meetings will be at the Chelan PUD offices in Wenatchee.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Shaun Seaman *	Chelan PUD
Julie Pyper *	Chelan PUD
Joe Miller (afternoon only)	Chelan PUD
Waikele Hampton (afternoon only)	Chelan PUD
Steve Hays	Chelan PUD
George Velasquez	Chelan PUD
Jerry Marco *	Colville Tribes
Tom Kahler *	Douglas PUD
Russell Langshaw	Grant PUD
Todd Pearsons	Grant PUD
Kris Petersen * (by conference call)	NMFS
Rob Walton (by conference call)	NMFS
Bill Gale *	USFWS
Bob Pfeifer	WDFW
Pat Phillips	WDFW
Kirk Truscott *	WDFW
Tom Scribner * (by conference call)	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Hatchery Committees  
**Date:** July 15, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Steve Hays, Joe Miller, Alene Underwood, Todd Pearsons, Russell Langshaw, Steve Parker

**Re:** Final Minutes of June 2, 2009 HCP Rock Island and Rocky Reach Hatchery Committees Conference Call

---

The Rock Island and Rocky Reach Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met via conference call on Tuesday, June 2, 2009, from 8:00 am to 9:00 am regarding the Chiwawa Spring Chinook Hatchery Genetic Management Plan (HGMP) path forward. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- The Yakama Nation (YN) and Washington Department of Fish and Wildlife (WDFW) will send a revised draft Management Implementation Plan (MIP) to the Hatchery Committees by the close of business on Friday, June 5.

### DECISION SUMMARY

- No Hatchery Committees decisions were made at this meeting.

#### I. Wenatchee Spring Chinook Management Implementation Plan and Hatchery Genetic Management Plan (Mike Schiewe)

Mike Schiewe stated that the purpose of today's call is to hear and discuss the National Marine Fisheries Service (NMFS) guidance on whether the draft Wenatchee Spring Chinook MIP prepared by the YN and WDFW staff is appropriate to consider in preparing the Chiwawa spring Chinook HGMP. Kris Petersen began by saying that NMFS met over the past week with the YN and WDFW to work through several issues in the MIP and it appears that the MIP's approach would be appropriate for inclusion in an HGMP. Rob Walton added that NMFS would accept such an HGMP to initiate Section 10 consultation leading to a new

---

permit. Shaun Seaman asked for clarification, as Chelan PUD is not submitting the HGMP as a Section 10 application. Rob Walton responded that NMFS believes it is highly likely that a new permit will be needed. Kris Petersen said that it would likely be a 10-year permit.

Keely Murdoch provided an overview of the MIP for the group. The MIP is based on both a conservation component and a safety net (segregated) component. The conservation component would in most years have a percent natural origin broodstock (PNOB) of 100 percent. Returning hatchery fish would be used in the safety net program. Murdoch further explained that the plan includes a sliding scale for Proportion Natural Influence (PNI) goals based on natural origin run size. Kris Petersen commented that implementation of this plan is not dependent on using the parental-based tagging (PBT) and genotyping approach, although the concept of PBT is being contemplated.

Keely Murdoch said that the YN and WDFW currently plan to have the MIP ready for delivery to the Hatchery Committees by June 8. Shaun Seaman expressed concern that it will be difficult for Chelan PUD to complete the HGMP by the NMFS deadline of June 17, including Hatchery Committees agreement on the document. After this discussion, the YN and WDFW agreed to send the final MIP to the Hatchery Committees for review by the close of business Friday, June 5. The Committees agreed to re-convene by conference call at 9:00 am on Tuesday, June 9, to discuss outstanding issues and concerns, and to review how the MIP will be integrated into the HGMP.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Alene Underwood	Chelan PUD
Steve Hays	Chelan PUD
Shaun Seaman *	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
Kris Petersen *	NMFS
Rob Walton	NMFS
Bob Pfeifer *	WDFW
Kirk Truscott *	WDFW
Bill Gale *	USFWS
Steve Parker	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Hatchery Committees  
**Date:** July 15, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Alene Underwood, Tom Kahler, Russell Langshaw, Todd Pearsons, Steve Parker

**Re:** Final Minutes of June 9, 2009 HCP Rock Island and Rocky Reach Hatchery Committees Conference Call

---

The Rock Island and Rocky Reach Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met via conference call on Tuesday, June 9, 2009, from 9:00 am to 10:30 am regarding the Wenatchee spring Chinook Hatchery Genetic Management Plan (HGMP). Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Ali Wick will send out call information for a follow up call on June 23 at 2:00 pm (subsequently rescheduled to 12:30 pm).

### DECISION SUMMARY

- No formal Hatchery Committees decisions were made at this meeting.

### I. Wenatchee Spring Chinook Management Implementation Plan and Hatchery Genetic Management Plan (Mike Schiewe)

Mike Schiewe stated that the purpose of today's call is to discuss the path forward for incorporating components of the draft Wenatchee Spring Chinook Management Implementation Plan (MIP) (prepared by Washington Department of Fish and Wildlife [WDFW] and the Yakama Nation [YN]) into a draft Chiwawa Spring Chinook Hatchery Genetic Management Plan (HGMP) .

Mike Schiewe started the discussion by inviting attendees to discuss big picture issues that were of continuing concern or needed clarification. Shaun Seaman said that Chelan PUD has a list of questions that they would like addressed. Jerry Marco said that the Colville

---

Confederated Tribes (CCT) also have a list of questions, primarily on the “safety net” program. Kris Petersen and Bill Gale both said that their agencies have no major concerns at this time, but needed more time to review the document and wanted to reserve the opportunity for additional comment. Keely Murdoch said that she had no questions. Steve Parker said that he has concerns about some of the harvest provisions included in the MIP; Parker stated that he also had questions about the interaction and integration of the Chelan PUD program in the Chiwawa River and the Grant PUD programs in the White River and Nason Creek. Kirk Truscott said that his main concerns related to the transition from the current to future programs, and to certain provisions of the safety net program.

Mike Schiewe reminded the group that the submittal date to National Marine Fisheries Service (NMFS) is June 17. Shaun Seaman said that Chelan PUD’s timeline will be to deliver the HGMP to NMFS and the Hatchery Committees as a draft on June 17. Chelan PUD will copy and paste relevant sections from the MIP into the HGMP draft as red-line edits. Seaman said that Chelan PUD would also be incorporating their institutional comments directly into the draft document. The cover letter will clearly indicate that the HGMP is a draft and will require additional review and editing by the Hatchery Committees before it can be considered a final HGMP. Schiewe encouraged those Hatchery Committees members who also have comments on any aspects or feature of the MIP to provide those to Chelan PUD by close of business on June 16 in the form of a letter to be attached to the MIP, which, in turn, will be an attachment to the HGMP. Jerry Marco indicated that the CCT would be submitting comments in the letter directly to NMFS, but was not certain that it would be ready by the June 16 deadline. Bill Gale indicated that it was unlikely that the U.S. Fish and Wildlife Service (USFWS) would submit a letter with comments at this time.

Shaun Seaman asked about any future purposes or uses for the MIP beyond informing the preparation of the HGMP. Steve Parker said that from the YN perspective, the plan is a resource document that records co-manager intent for the program. Kirk Truscott agreed and also added that it is a management plan that may be required to undergo an agency approval process; he will clarify this within WDFW and report back to the Hatchery Committees.

Schiewe then moved to specific comments on the document itself. These are captured here, but will be expanded upon in the comment letters and in further discussions to take place in the future:



- 
- 1) Section 2.1: Chelan PUD requested clarification on how some of the background data were used in developing the plan. Keely Murdoch said that the recruit/spawner values were used to construct the Beverton-Holt curves. Seaman said that Chelan PUD has additional technical questions about this, and will work these out with Murdoch and Bob Pfeifer (key authors of the document).
  - 2) Chelan PUD requested that more information be provided on the details and necessity for compositing broodstock. Keely Murdoch said that for smaller programs, the need to composite broodstock will be very low.
  - 3) Chelan PUD requested that more information on agency roles and responsibilities be included in the MIP; Mike Schiewe suggested that the most appropriate place to address roles and responsibilities would be in the HGMP.
  - 4) Chelan PUD requested more information on how the issue of any non-migratory spring Chinook would be handled. Keely Murdoch said that high levels of residualism are not anticipated; thus, specific information has not been included in the MIP.
  - 5) Chelan PUD requested additional information on future plans for releasing smolts, including whether the YN would pursue additional acclimation sites with Fish Accord funding. Steve Parker indicated that no final decisions had been made, but that additional acclimation facilities were definitely under consideration.
  - 6) Chelan PUD asked if Proportion Natural Influence (PNI) goals might be different for the different tributary populations (i.e., the Nason Creek, White River, and Chiwawa River). Kris Petersen said that NMFS intends to adaptively manage the Wenatchee programs and that if there is large disparity in PNI between these subpopulations, then NMFS would work with the Hatchery Committees to consider alternative approaches to achieve agreed-upon goals.
  - 7) Chelan PUD asked whether Tables 5 and 6 were based on the equilibrium population ( $N_{eq}$ ). Keely Murdoch said that the tables are for information only, as this plan is based on meeting PNI goals and not  $N_{eq}$ .
  - 8) Chelan PUD asked about any changes to the Monitoring and Evaluation (M&E) plan that were contemplated in the document. Keely Murdoch said that there were no M&E additions suggested, but several new monitoring questions were added that could be addressed with information already being collected. She said that these new aspects of the MIP will likely need to be reviewed on the existing 5-year M&E review cycle. The group discussed that the M&E Plan may need to be modified to address this.

- 
- 9) Chelan PUD asked several questions about the marking scheme, and will talk offline with Murdoch and Pfeifer about this.
  - 10) The CCT expressed concern about the impacts of a non-selective fishery, primarily how a non-selective fishery would avoid indirect harvest of natural origin fish. Steve Parker said that this issue was still being worked out, but one tool that could be used would be to segregate the two fisheries from one another by differential release strategies.
  - 11) Grant PUD requested more details on the safety net program, including release strategies, numbers, and locations. Keely Murdoch said that the logistics of the program were still under discussion. One option might be to do split releases in both the parent tributary and minor spawning areas.

Regarding schedule, Kris Petersen said that NMFS would likely provide comments on the draft HGMP submitted on June 17 approximately 1 to 2 weeks following submittal. Mike Schiewe scheduled a Hatchery Committees call on Tuesday, June 23, from 2:00 pm to 3:00 pm to reconvene and discuss the next steps. Ali Wick will send out call-in information.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Alene Underwood	Chelan PUD
Shaun Seaman *	Chelan PUD
Jerry Marco *	Colville Confederated Tribes
Tom Kahler	Douglas PUD
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
Kris Petersen *	NMFS
Bob Pfeifer *	WDFW
Kirk Truscott *	WDFW
Bill Gale *	USFWS
Steve Parker	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Rocky Reach and Rock Island Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** July 15, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Steve Hays

**Re:** Final Minutes of June 17, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, June 17, 2009, from 9:30 am to 3:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Julie Pyper will talk to Washington State Department of Ecology (Ecology) staff about what additional support from the Hatchery Committees members is needed for WDOE to approve minimum flows at the Chiwawa facility (Item I).
- Andrew Murdoch will provide the results of the 2009 study comparing Passive Integrated Transponder tag (PIT-tag) shedding rates between fish tagged in the body cavity versus those tagged in the pelvic girdle (Item II-A).
- Andrew Murdoch will provide the Hatchery Committees a summary of the literature on effects of Floy tags alone and multiple tagging and markings on survival of salmonids (Item II-A).
- Keely Murdoch will provide recent Yakama Nation (YN) information on Floy tagging of coho salmon to Andrew Murdoch (Item II-A).
- Andrew Murdoch will prepare a draft Statement of Agreement (SOA) on Washington Department of Fish and Wildlife's (WDFW's) proposal to evaluate spawn timing and location of hatchery and wild steelhead in the Upper Columbia Basin for consideration at the July meeting (Item II-A).
- Ali Wick will provide a link to the draft Washington Fish and Wildlife Commission policy on hatchery reform (Item II-C).
- Julie Pyper will provide the Hatchery Program Summary by email (Item III-A).

- 
- Kirk Truscott will talk to Todd Miller about timing for installing PIT-tag detection arrays in the Little Wenatchee and White River by July 1, given current runoff predictions (Item III-B).
  - Kris Petersen will provide the Hatchery Committees with the National Marine Fisheries Service (NMFS) letter approving the WDFW and Chelan PUD request to shut off the Blackbird Island pond outlet (Item III-D).
  - Kirk Truscott will talk to Art Viola about creel census work for the Blackbird Island pond youth fishery (Item III-D).
  - Julie Pyper and Kirk Truscott will coordinate a mark/recapture sampling prior to the start of the Blackbird Pond youth fishery (Item III-D).
  - Julie Pyper will send out the final SOA on use of Ringold Springs Hatchery for rearing summer Chinook prior to transfer to Bonaparte Pond (Item III-E).
  - Bill Gale will provide the Wells/Entiat Summer Chinook Collection SOA, showing tracked changes (Item V-A).
  - Kris Petersen will email out today's handout on the Endangered Species Act (ESA) consultation process for new hatchery permits (VII-A).
  - Ali Wick will send out conference line information for a call on June 23 at 12:30 pm to address the following issues: (1) NMFS' response to the draft Wenatchee spring Chinook Hatchery Genetic Management Plan (HGMP); (2) NMFS comments on the Wenatchee spring Chinook HGMP; (3) approval of the U.S. Fish and Wildlife Service (USFWS) Wells/Entiat Summer Chinook Collection SOA (Items V-A and VIII-A).
  - Kris Petersen will provide to the Hatchery Committees NMFS' response letter on the draft steelhead HGMP (Item VIII-A).
  - Ali Wick will re-send the Non-Target Taxa of Concern (NTTOC) decision document to the Hatchery Committees, for discussion this fall (Item VIII-B).
  - Ali Wick will talk to Mike Schiewe about which version of the hatchery programs will be analyzed by the NTTOC panel—the current programs or the HGMP-proposed hatchery programs (Item VIII-B).
  - Ali Wick will resend the draft study proposal review and approval protocols to the group and remind them of where they left off on the discussion (Item VIII-D).

## **DECISION SUMMARY**

- The Hatchery Committees approved the SOA for Possible Use of Ringold Springs Hatchery, as modified at today's meeting.

## **I. Welcome, Agenda Review, Meeting Minutes**

Ali Wick will incorporate recommended changes and redistribute the revised final May 20 meeting minutes to the Hatchery Committees for final approval by email. During the review of Action Items from the last meeting, it was discussed that Julie Pyper will talk with Ecology staff about what is still needed from the Hatchery Committees members regarding minimum flows at the Chiwawa facility.

## **II. WDFW**

### **A. *Preliminary results and recommendations for implementation of Objective 2 for the HCP M&E Plan (Andrew Murdoch.)***

Andrew Murdoch provided hard copies of preliminary results of an evaluation of 2009 steelhead spawn timing and distribution in the Twisp River, and recommendations for next year's evaluation. Results indicate that the combination of PIT-tags and Floy tags is a good approach for determining spawn timing and distribution for steelhead. Andrew Murdoch proposed the double-tagging approach for an additional year, with a report back to Hatchery Committees for future work. If it is determined that there is enough data to evaluate spawning timing and distribution of wild steelhead, then the evaluations will not need to be repeated annually.

Keely Murdoch voiced concern about abdominal cavity tagging because these tags are more likely to be shed at spawning, which limits collection of potential data on kelts and return spawners. She acknowledged there is currently no kelt reconditioning study being conducted, and that monitoring repeat spawners is not an objective of the current Monitoring and Evaluation (M&E) plan. However, she expressed interest in continuing to collect data on return spawners while meeting Objective 2 needs. Andrew Murdoch responded that radio telemetry was another option, but that WDFW would like to take advantage of existing PIT-tag arrays if possible. He also said that not all females lose tags, so some data will be collected, and there are already 2 to 3 years of data on returns of PIT tagged fish. The Committees asked for further information on shed rates between body tags and abdominal tags, and it was agreed that Andrew Murdoch will provide this information. Kris Petersen asked for a brief summary of the literature on effects of Floy tags and multiple tagging and markings on survival. Keely Murdoch said that the YN has some information on Floy tagging of coho and can provide this to Murdoch. WDFW would like to begin

implementation of this study next month, so Andrew Murdoch will prepare a draft SOA for consideration at the July meeting.

*B. Preliminary Wenatchee spring Chinook egg-fry survival study*

Andrew Murdoch presented a proposal for a NMFS Northwest Fisheries Science Center-sponsored spring Chinook egg-to-fry survival study. The proposal is to place egg boxes in two reaches of Nason Creek and two reaches of the Chiwawa River during fall of 2009 to estimate survival, with possible expansion to other tributaries in the Wenatchee subbasin or the upper Columbia Basin in later years. A similar study is in its second year in the Yakima River. Andrew summarized the study and provided a handout of the proposal. The objective is to see if there are habitat differences that contribute to some of the fitness differences between hatchery and wild fish. The proposal requires up to 5,000 HxH eggs to be collected in 2009 during spawning. WDFW would take eggs from nine females over the year to comprise the 5,000 egg take, such that any impacts to hatchery operations are minimized. HxH fish will not be released into the wild, but rather will be destroyed after hatching.

The Hatchery Committees asked several questions about the proposal. Keely Murdoch asked whether there is a plan to look at habitat effects later in the life cycle. Andrew Murdoch said that if no difference is observed, he agreed there would be a need to look at later stages in the life cycle. Andrew also commented that the study will not evaluate redd morphology, as there are differences in redd morphology across the stream in general. He acknowledged that if reduced survival is a result of redd morphology, there would be no signal in the study results. Andrew discussed the results from the Yakima River study, stating that extra eggs will be used for sentinel redds for use in determining when it is time to pull redd boxes. He stated that he does not anticipate problems with the redd boxes being scoured out, but this remains to be seen. Kris Petersen asked how sites will be selected; Andrew responded that knowledge of good spawning sites can be based on past annual surveys. Mylar ribbon will be used at each redd site to prevent fish from accidentally digging on the redd boxes.

Following these discussions, the Hatchery Committees approved the taking of 5,000 eggs in 2009 for this study.

*C. Washington Fish and Wildlife Commission policy on hatchery reform*

The group discussed that the Washington Fish and Wildlife Commission will consider for approval a draft policy on hatchery reform at their July Commission meeting. The draft

policy is available on the WDFW website. Kris Petersen asked if what is being proposed in the new HGMPs is consistent with proposed WDFW Commission policy, and Truscott responded that it was. Ali Wick will distribute to the Hatchery Committees a link to this policy.

### **III. Chelan PUD**

#### *A. Hatchery program summary*

Julie Pyper provided the Hatchery Program Summary and will email a copy to Hatchery Committee members. She welcomed any questions.

#### *B. Sockeye enumeration study update*

Julie Pyper updated the group that anchors have been installed for the PIT-tag detectors in the Little Wenatchee and the White River for this study, but antenna arrays have not yet been installed due to high river flows. The arrays will be installed as soon as flows diminish. Kirk Truscott will talk to Todd Miller (WDFW) regarding expectations for getting the PIT-tag detection arrays in by July 1, given current runoff predictions.

#### *C. Water reuse study*

Steve Hays provided a handout of preliminary results of downstream PIT-tag detections from the water reuse study for the Hatchery Committees' information. Lab results from physiological testing will not be back until almost August, and the final report is not due until later this year. John Skalski will be providing single release model survival estimates to McNary Dam.

#### *D. Blackbird Island pond*

Julie Pyper said that Chelan PUD has sent a request to NMFS for concurrence to leave the non-migrant steelhead in the Blackbird Island pond to be the subject of a recreational fishery. Kris stated that NMFS has prepared a letter approving this request and expects it to be signed today. She will provide this letter to the Hatchery Committees by email.

Kirk Truscott stated that on May 27, WDFW estimated that about 10,500 fish were left in the pond (based on PIT-tag data), and approximately one-third of the remaining fish still appeared to be in a smolted condition. He said that on June 22, WDFW will conduct a mark/recapture sampling study to provide a second assessment of numbers of fish that have



left the pond. Julie Pyper said that Chelan PUD will coordinate with Truscott on this sampling before the fishery is opened. Steve Hays asked whether there would be a creel census; Truscott said that he did not believe so, but would talk to Art Viola. Julie Pyper asked that the Committees start thinking about next year's potential program. This item will be on the agenda at the July meeting.

*E. Revised SOA for possible use of Ringold Springs Hatchery*

Julie Pyper provided a revised SOA for the use of Ringold Springs Hatchery for early rearing of yearling summer/fall Chinook. Chelan PUD is proposing to rear up to 200,000 Chinook at a density of 0.125 and the rest at 0.20 in 2009, while collecting standard monitoring and evaluation data like that being collected at Eastbank. In the event there is a problem rearing at the 0.20 density, fish could be moved to the lower density. The fish would be reared for 6 to 12 weeks before being moved to Bonaparte for over-winter acclimation and release. The Hatchery Committees acknowledged that approval of the SOA would by default also approve use of Bonaparte Pond for acclimation. Julie Pyper reiterated that Chelan PUD is looking for a decision for 2009 only.

The Committees discussed the proposed SOA and the mechanics of the density rearing test. Bill Gale suggested looking at smolt-to-adult returns (SARs) for these various rearing densities. Steve Hays stated that looking at SARs is reasonable for the future but is not the purpose of this year's evaluation. This year's test is limited to evaluating the difference of in-hatchery rearing density effects to evaluate Ringold as a summer rearing site. Kris Petersen stated that it may be worthwhile to do different coded wire tags (CWTs) for the different rearing density groups. Chelan PUD agreed to add this to the SOA. Julie Pyper confirmed that 100 percent of the fish will be coded-wire-tagged. The Committees approved the SOA as modified, and Pyper will send out the modified final SOA to the group by Monday, June 22.

*F. Lake Cle Elum sockeye reintroduction*

Julie Pyper stated that there was an action item from the last Hatchery Committees meeting regarding whether sockeye broodstock proposed to be collected for the sockeye reintroduction would impact other ongoing programs. She stated that 1,000 adult sockeye will be needed for outplanting into Lake Cle Elum for the Cle Elum Sockeye Reintroduction program; 200 pairs (400 total broodstock) will be needed for egg take with Okanagan Nation

Alliance (ONA) assistance in the Okanogan River. Her understanding is that there is not yet agreement between the YN and the tribes that comprise the ONA. Kirk Truscott, Jerry Marco, and Kris Petersen all stated they expect adult sockeye collection at the Off-Ladder Adult Fish Trap (OLAFT) will occur this year. Julie stated she does not know yet if there will be an impact on the ONA sockeye program from the Cle Elum Sockeye Reintroduction program, as there is not enough data at this time.

#### **IV. Douglas PUD**

##### *A. Request for video filming in the Wells fish ladder.*

Tom Kahler reported that Douglas PUD will be requesting more information about a videographer's proposal to film in the Wells fish ladder.

##### *B. Methow Hatchery vacuum system*

Tom Kahler said that the above-ground vacuum system at the Methow Hatchery for removing waste from the production raceways is performing poorly and Douglas PUD is in the process of replacing the existing system with an underground system.

#### **V. USFWS**

##### *A. Wells/Entiat summer Chinook collection SOA*

Bill Gale said that he has made changes to the SOA that were suggested by Tom Kahler and Kris Petersen and provided copies at today's meeting. He will send out to the Hatchery Committees an electronic version with tracked changes. USFWS will coordinate with the YN on the two options for adults: 1) to split the existing ponds into two separate areas, one for coho and one for Chinook; or 2) to move Coho to a separate facility in Leavenworth where a change in production has made room available. Bill Gale said the plan is to hold adults and spawn fish at Entiat this year, and that USFWS and YN could test the two pond alternative this year.

Steve Hays asked whether USFWS had considered protecting Entiat spring Chinook from summer Chinook looking to pioneer the upper Entiat. Bill Gale said there is a location to anchor a weir in the Entiat River but that USFWS would prefer not to construct one. The Hatchery Committees agreed to vote on the SOA at the previously planned June 23 conference call, now set for 12:30 pm. Gale said that if he has support from the Hatchery

Committees, his next step would be to take the proposal to the next U.S. v. Oregon PAC meeting.

## **VI. Yakama Nation**

### *A. Overwintering acclimation at Carlton and Dryden*

Keely Murdoch said that Tom Scribner had sent out information on overwintering acclimation of summer Chinook parr/smolts at Carlton and Dryden, including an opportunity to partner with Grant PUD. Based on Similkameen acclimation data and from experience with overwinter acclimation in other locations, it seems like there is a large SAR benefit, as well as conservation of water, if fish are moved out of hatcheries earlier. Keely asked for input from the Hatchery Committees, saying that the JFP have agreed with the concept, but that further JFP discussion is necessary.

Steve Hays commented that overwintering acclimation outside the hatchery would not serve water conservation needs at Eastbank, because water limitations only come into play during the summer, and after that the winter water supply is not a problem. Also, for overwintering, an entirely new water right would be needed for Dryden. Julie Pyper said that from a process perspective, Chelan PUD needs to look at their 5-year M&E plan for the potential priority for overwintering at Dryden. Chelan PUD is concerned about being able to provide certainty for Grant PUD programs past 2013. Keely Murdoch responded that an agreement could be used to address these uncertainties, as this overwintering would be a high priority for the YN regardless of Grant PUD's participation. The Hatchery Committees discussed that the proposal lines up well with the HGMPs. Tom Kahler stated that after 2013, Douglas PUD may need to increase summer Chinook production, and this may preclude Grant PUD participating at Carlton because Douglas PUD has reserved the excess capacity at the Carlton Pond.

## **VII. NMFS**

### *A. Overview of consultation process steps*

Kris Petersen provided a handout on the steps in the ESA consultation process. She will send the handout electronically to the Hatchery Committees, for their information.

---

## VIII. All Committees

### A. HGMP updates

- *Wenatchee programs*

Steelhead. Kris Petersen distributed NMFS' recent comment letter on the Wenatchee steelhead HGMP and will email a copy to the group. The letter provides page-by-page comments with suggestions and requested clarifications. The NMFS letter also requests that the HGMP template be followed and not include a section 13. She suggested that information in section 13 on funding responsibilities could be added into individual sections in the template, for example. Petersen stated that there is still some NMFS uncertainty as to whether the proposal to operate as a two-zone program is a feasible approach and adequate to reach recovery goals. Julie Pyper asked for clarification on whether Petersen was saying the two-zone approach is inadequate. Petersen said that NMFS could not make a call on this until after a consultation is complete, but she did say that percent hatchery-origin spawners (PHOS) are a concern.

Pyper said that the HGMP submittal cover letter to NMFS recommended a June 23 date to convene to discuss steps forward. Ali Wick will send out call information for this discussion. Kris Petersen will provide to the Hatchery Committees NMFS' response letter on the draft steelhead HGMP (Item VIII-A).

Spring Chinook. Julie Pyper said the draft spring Chinook HGMP will be submitted to NMFS today. NMFS' preliminary comments will be discussed during the June 23 call.

- *Methow and Okanogan programs*

Ali Wick said that the team of parties working on the first draft Methow and Okanogan spring Chinook and steelhead HGMPs has met, tasks have been assigned, and schedules set. The approach to the programs has been vetted with NMFS and the JFP parties, and detailed discussions are underway. The Hatchery Committees will get two draft HGMPs at the close of business on July 8, for review and discussion by the July 15 Hatchery Committees meeting. One HGMP will address Methow, Twisp, and Chewuch spring Chinook programs; one HGMP will address Methow steelhead. The Methow steelhead HGMP will include Methow and Wells Hatchery fish only,

and the Okanogan program will be covered in the Colville Confederated Tribes' (CCT's) HGMP for Okanogan steelhead. Jerry Marco confirmed that the Okanogan steelhead HGMP would need to be modified to accommodate this.

*B. NTTOC*

Ali Wick said that, next month, the Hatchery Committees should select final panel members for the NTTOC analysis, and should set a date for the analysis. Kris Petersen suggested that the panel meet no later than end of September 2009, so that the analysis could inform the hatchery program Biological Opinions that she will be preparing. Next month, the Hatchery Committees will come prepared to select panel members. Wick will re-send the NTTOC decision document for the Committees information. Todd Pearsons asked if there would be an effort to coordinate the HCP hatchery program analysis with the Priest Rapids Coordinating Committees Hatchery Subcommittee; the Hatchery Committees noted that a decision should be made as to whether or not the analysis will be coordinated. Bill Gale asked if the analysis will be of the current program or of the planned HGMP programs. Wick will talk to Mike Schiewe about this, and this will be on the agenda for discussion at the July meeting.

*C. Steelhead reproductive success study*

Ali Wick reported that Mike Schiewe had talked to Bonneville Power Administration (BPA) about the potential to implement a regional steelhead reproductive success study. The feedback received was that a regional study would be appropriate, but the process involved would likely slow the study down for the needs of the Hatchery Committees. This issue will be revisited in July.

*D. Study plans protocol*

Ali Wick said that earlier this year, the Hatchery Committees were developing a Study Plans Review Protocol to use to consider and approve proposals. The group will bring this discussion back up in the fall; Wick will resend the draft Protocols to the Hatchery Committees, reminding them of where they left off on this.

*E. HETT update*

Tom Kahler reported that the Hatchery Evaluation Technical Team (HETT) is currently working on how to standardize estimates of spawner recruits and is working with Mark Miller at BioAnalysts to develop and document this decision.

**IX. HCP Administration***A. Meeting agreements not requiring an SOA*

- The Hatchery Committee approved the taking of 5,000 Wenatchee spring Chinook HxH eggs for 2009.

*B. Next meetings*

The next scheduled Hatchery Committees meetings are as follows: July 15, August 19, and September 16; all meetings will be at the Chelan PUD offices in Wenatchee.

**List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Ali Wick	Anchor QEA, LLC
Carmen Andonaegui	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Steve Hays	Chelan PUD
Jerry Marco *	Colville Tribes
Tom Kahler *	Douglas PUD
Todd Pearsons	Grant PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Bob Pfeifer (by conference call in AM and in-person in PM) *	WDFW
Andrew Murdoch (morning only)	WDFW
Kirk Truscott *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** July 15, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Steve Hays, Joe Miller

**Re:** Final Minutes of June 23, 2009 HCP Wells, Rock Island, and Rocky Reach Hatchery Committees Conference Call

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met via conference call on Tuesday, June 23, 2009, from 12:30 pm to 2:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Bill Gale will add text to the Entiat Summer Chinook Statement of Agreement (SOA) to address comments discussed today and will provide it by email (Item I).  
[Completed on 6/23].
- Kirk Truscott will report back on the Washington Department of Fish and Wildlife (WDFW) path forward for the spring Chinook management implementation plan (MIP) (Item III).

### DECISION SUMMARY

- The Hatchery Committees approved the Entiat Summer Chinook SOA, as revised at today's meeting (Item I).

### I. Entiat Summer Chinook SOA

Mike Schiewe introduced this topic, and Bill Gale said that he had incorporated the edits to the SOA that were provided. Schiewe invited any further comment by the Hatchery Committees. These comments were:

- Tom Kahler said that Douglas PUD has concerns about the growing number of programs using Wells Dam and Wells Hatchery facilities, and the potential burden this places on hatchery staff. Gale said that the U.S. Fish and Wildlife Service (USFWS) will provide staff or other assistance for the adult management/egg



---

collection program at the discretion of the Wells WDFW hatchery staff.

Additionally, in the draft SOA the timeline is indefinite for establishing the capacity for adult holding at Entiat NFH, a prerequisite for moving adult holding from Wells Hatchery to Entiat NFH in future years. Douglas PUD seeks certainty in the SOA that adult holding at Wells will not continue beyond 2009.

- Schiewe suggested adding text saying that this agreement is to be in effect for only 1 year.
- Kirk Truscott asked for clarification that green eggs would be provided to USFWS staff.

Following these discussions, the Hatchery Committees approved the SOA with today's edits. Bill Gale will add text to the SOA to address comments discussed today and will provide it by email.

## **II. Wenatchee Steelhead HGMP**

Mike Schiewe introduced this topic, saying that the National Marine Fisheries Service (NMFS) has now provided comments to the Wenatchee steelhead Hatchery Genetic Management Plan (HGMP). He invited more discussion on significant or outstanding issues.

Kris Petersen outlined NMFS' key concerns:

- NMFS asked for the information in Section 13 to be folded back into the main document and for Section 13 to be removed, in order to conform to the NMFS HGMP template.
- NMFS asked for additional detail on the transition of Wenatchee steelhead to acclimation on Wenatchee River water.
- NMFS asked for additional detail on the certainty of managing hatchery fish on the spawning grounds above and below Tumwater Dam.
- NMFS asked for a consistency check among sections of the document that cover similar activities.
- NMFS asked for a clear linkage to the Recovery Plan or other existing agreements.

Members will provide any additional comments to the Hatchery Committees by June 26. Chelan PUD will review these comments and will provide a letter to NMFS by July 1 with a revised schedule for final submittal. On July 15, Chelan PUD and WDFW will provide an update to the Hatchery Committees on progress on the HGMP. Chelan PUD will provide a revised HGMP on July 24. Comments will be due on August 7, and a final draft will be

---

reviewed and considered for approval at the August 19 Hatchery Committees meeting. The goal is to submit this document to NMFS on August 21.

### **III. Wenatchee Spring Chinook HGMP**

Mike Schiewe said that the spring Chinook HGMP was submitted to NMFS on June 17. Because of timing constraints, this draft was not approved by Chelan PUD or the Hatchery Committees prior to submittal. The draft schedule is for Hatchery Committees members to submit comments by July 7. The Hatchery Committees will then review Committees members' comments by conference call on July 10. Chelan PUD and WDFW will update the Committees on progress on addressing comments at the July 15 Hatchery Committees meeting. On July 24, Chelan PUD will provide a revised HGMP to the Hatchery Committees. Any comments will be due on August 11. The final draft will be reviewed and considered for approval at the August 19 Hatchery Committees meeting, with a goal of submitting a Hatchery Committees-approved plan to NMFS on August 21.

Kris Petersen asked the Joint Fisheries Parties (JFP) to consider the path forward for the spring Chinook MIP. Keely Murdoch said that the document would be finalized. Kirk Truscott will report back on the WDFW process for this.

### **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Steve Hays	Chelan PUD
Shane Bickford *	Douglas PUD
Tom Kahler *	Douglas PUD
Josh Murauskas	Douglas PUD
Jerry Marco *	Colville Confederated Tribes
Kris Petersen *	NMFS
Bob Pfeifer *	WDFW
Kirk Truscott *	WDFW
Bill Gale *	USFWS
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** August 19, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Alene Underwood

**Re:** Final Minutes of July 9, 2009 Rock Island, and Rocky Reach Hatchery Committees Conference Call

---

The Rocky Reach and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met via conference call on Thursday, July 9, 2009, from 1:30 pm to 2:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- There were no action items from this meeting.

### DECISION SUMMARY

- There were no decision items from this call.

### I. Wenatchee Spring Chinook HGMP

Mike Schiewe introduced this topic and said that today's call is to discuss comments on the July 17 draft Wenatchee (Chiwawa) spring Chinook Hatchery Genetic Management Plan (HGMP). He reviewed the schedule, which is:

- July 15 Hatchery Committees meeting: Chelan PUD and WDFW will update the Hatchery Committees on progress addressing comments.
- July 24: Chelan PUD will provide a revised HGMP to the Hatchery Committees.
- August 11: Hatchery Committees comments due to Chelan PUD.
- August 19 Hatchery Committees meeting: review final draft, and approval.
- August 21: Chelan PUD submits a Hatchery Committees-approved plan to National Marine Fisheries Service (NMFS).

Julie Pyper opened the discussion, saying that Chelan PUD has not yet received any comments from the Hatchery Committees. Mike Schiewe asked whether Committees'

---

members had any comments. Jerry Marco, Keely Murdoch, and Bill Gale each indicated that they do not have any comments at this time. Kris Petersen indicated that she had a few initial comments. She said that a take table should be provided. She also said that the HGMP did not indicate when the program described in the HGMP would begin, but she assumes that the start point would be next year (2010).

Shaun Seaman asked whether the strategy of parental based tagging (PBT) was considered an experimental method or an agreed-to protocol. He explained that he was asking this because previously the Yakama Nation (YN) had agreed to reduce Chiwawa spring Chinook production if PBT were implemented as described in the Washington Department of Fish and Wildlife (WDFW)/YN Management Implementation Plan. Keely Murdoch said that if PBT was only implemented on an experimental basis, she would have to check with Steve Parker to verify the YN agreement on production changes. Bob Pfeifer said that he would need to talk to Jeff Korth as well to verify WDFW agreement. Seaman asked whether there was a biological relationship between the use of PBT and the reduced production, indicating that it was his understanding that the reduced production was more related to estimated carrying capacity. Petersen suggested that this was an issue the full Hatchery Committees should address.

Seaman also noted that a delay in receiving comments would make it difficult for Chelan to meet the schedule for delivering the next drafts to the Committee.

At the close of the discussion, Hatchery Committees members agreed that they would provide any outstanding comments by close of business on Tuesday, July 14. The HGMP will again be discussed at the Hatchery Committees meeting on July 15.

## **List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Shaun Seaman *	Chelan PUD
Alene Underwood	Chelan PUD
Tom Kahler *	Douglas PUD
Jerry Marco *	CCT
Kris Petersen *	NMFS
Bob Pfeifer *	WDFW
Kirk Truscott *	WDFW
Bill Gale *	USFWS
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**Date:** August 19, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Joe Miller

**Re:** Final Minutes of July 15, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, July 15, 2009, from 9:30 am to 4:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- (From June meeting) Julie Pyper will talk to Washington State Department of Ecology (Ecology) staff about what additional support from the Hatchery Committees' members is needed for Ecology to approve minimum flows at the Chiwawa facility.
- (From June meeting) Keely Murdoch will provide recent Yakama Nation (YN) information on Floy tagging of coho salmon to Andrew Murdoch.
- Julie Pyper will provide the Hatchery Program Summary as soon as it is available (Item II-A). [completed July 15]
- Joe Miller will send a revised draft 2010 Monitoring and Evaluation (M&E) Work Plan to the Hatchery Committees this week. Following final review, the Committees will approve the document by email no later than July 31 (Item II-D).
- Chelan PUD, Douglas PUD, and Washington Department of Fish and Wildlife (WDFW) staff will meet next week to discuss and resolve their concerns on the steelhead spawning ground survey Statement of Agreement (SOA) and will report back to the Hatchery Committees (Item III-A).
- Joe Miller will request data from Andrew Murdoch on overwinter acclimation and juvenile survival at Twisp, Chiwawa, and Similkameen (Item IV-B).
- Kris Petersen will investigate the basis for the coefficients of variance (CVs) listed in Endangered Species Act (ESA) permits for hatchery programs (Item VI-A).

- Bill Gale will forward U.S. Fish and Wildlife Service (USFWS) comments on the Wenatchee spring Chinook Hatchery Genetic Management Plan (HGMP) to the Hatchery Committees (Item VI-A).
- Julie Pyper will check with the Okanagan Nation Alliance (ONA) and Kim Hyatt regarding availability to meet either September 16 or 17 for a meeting in SeaTac (Item VI-D).

## **DECISION SUMMARY**

- There were no decision items at this meeting.

## **I. Welcome, Agenda Review, Meeting Minutes**

The Hatchery Committees approved revisions to the June 17 meeting minutes, and the June 2, June 9, and June 23 conference call minutes. Jeff Korth updated the group that Kirk Truscott will be leaving WDFW at the end of the month; the vacated position will not be filled at this time.

## **II. Chelan PUD**

### *A. Hatchery Program Summary*

Julie Pyper will provide the Hatchery Program Summary as soon as it is available.

### *B. Sockeye enumeration study update*

Joe Miller reported that the Passive Integrated Transponder tag (PIT-tag) detection arrays for the study have been installed in the White and Little Wenatchee rivers, and the study will start as soon as sockeye arrive. Keely Murdoch reported that sockeye have already begun passing Tumwater Dam. Miller said that there is now an extra holding tank at Tumwater Dam to accommodate the fish.

### *C. Blackbird Pond 2010 use*

During the review of action items at today's meeting, it was discussed that there was an action item for Kirk Truscott to check with Art Viola as to whether there would be a creel census during the non-migratory steelhead fishery at Blackbird Pond. Today, Jeff Korth and Shaun Seaman agreed that they would follow up with Trout Unlimited to see if they could help with such a survey during the fishery.



At last month's meeting, the Hatchery Committees agreed to discuss whether Blackbird Pond would be used for acclimation in 2010 in the same manner that it was used in 2009.

Committees' members commented as follows. Shaun Seaman said that before a final decision is made, Chelan PUD would like to review information on detections of PIT-tagged steelhead at mainstem dams. Jeff Korth said that this information should be available by next month. Kris Petersen said that National Marine Fisheries Service (NMFS) is optimistic about the program, but said that issues include how non-migrants would be handled and counted, including how the fishery for the non-migrants would ultimately work out; she was hopeful that future operation of the pond would allow for a more successful volitional fish release. Keely Murdoch said that the YN sees this year as a trial effort, recognizing that some modification to the outlet may be needed. Jerry Marco agreed. Bill Gale suggested that a better PIT-tag detection system could also be designed for better census information, including perhaps incorporating arrays at the outlet of the pond. He said that this would also provide better travel time estimates to McNary Dam. Pat Phillips suggested several engineering solutions that could be considered, including a second set of dam boards extending from the surface to just above the bottom, and a tide gate at the outlet that would close when head pressure is higher in the Wenatchee River. Tom Scribner said that he would like the Hatchery Committees to have the opportunity to provide input to the changes that are ultimately selected; Seaman said that this would be the case. The Committees signaled that Chelan PUD can plan for another year of pond use. Chelan PUD will continue to involve the Committees in discussions regarding potential changes to the pond or detection system.

#### *D. 2010 Draft M&E Work Plan*

Kris Petersen and Joe Miller reviewed NMFS' comments that have been provided to Chelan PUD. There were no other Hatchery Committees comments. Key NMFS comments include the following:

- Add due dates for the annual report and a schedule for the HCP 5-year review. Tom Scribner said that he wants to be able to consider adjustments to the M&E program within the 5-year period and not wait until the end of the 5-year period, if the Hatchery Committee should agree that those adjustments would improve the program. Shaun Seaman agreed that this would be the case. Julie Pyper agreed, adding that any changes would need to be weighed against other program changes that would be occurring simultaneously. Chelan PUD will provide a draft schedule

---

for Hatchery Committees' review and approval of the 5-year report, which will include data from the 2010 M&E season. Seaman clarified that this schedule would not be part of the 2010 Draft M&E Work Plan.

- Add understanding of how the Conceptual Work Plan, the Analysis Framework, and the yearly implementation plan(s) all work together to meet the obligations in the HCPs. Chelan PUD will add this discussion.
- Add brief description and reference to the ESA permits that cover this work. Chelan PUD will add this.
- Clarify roles. Explain the role of the Hatchery Evaluation Technical Team (HETT), clarify that the M&E contractor meeting is not the HETT meeting, and consistently identify roles for the M&E work. Chelan PUD will add this.
- Add justification for prioritizing steelhead surveys above Tumwater Dam. Chelan PUD will add this.
- Add relevant work that results from new HGMPs. Kris Petersen said that there would likely be adjustments, and Chelan PUD may want to include this information. Chelan PUD will add text that acknowledges that new work may be included later to address issues resulting from the HGMPs.

Next steps are for Joe Miller to send a revised draft to the Hatchery Committees this week. Following Committees' review, the Committees will approve the document by email no later than July 31.

*E. Transfer of steelhead to the Chiwawa steelhead recirculation ponds*

Joe Miller said that 30,000 steelhead will be transferred to the Chiwawa Facility for the water re-use acclimation study this fall. The current marking scheme for Chiwawa steelhead is typically to mark fish that are at 20 to 30 fish per pound (fpp). If growth were not suppressed, the study fish could be at this size by early September. Chelan PUD proposes to not suppress the growth of these fish so that they meet the marking criteria at the appropriate time. The Hatchery Committees agreed to this approach.

*F. Report on fish anesthetic (Chelan PUD/JFP)*

At a previous meeting, Julie Pyper said that Chelan PUD would work with the Joint Fisheries Parties (JFP) to review fish anesthetic use at Tumwater Dam. Today, she said that a working group of entities that use the dam (YN, USFWS, WDFW, Grant PUD, and Chelan PUD) will

be convened to discuss needs and constraints, and develop a dam operational plan for review by the Hatchery Committees. Bill Gale said that a key issue to address is increasing the effectiveness of detecting coded wire tags (CWTs) at the dam. Tom Scribner requested that the working group consider alternatives to killing and disposing of excess hatchery fish. Keely Murdoch noted that a fish anesthetic working group had been formed after a fish anesthetic symposium that occurred earlier this year. Tom Scribner indicated that he will contact this group and will bring their information to the Tumwater working group meeting.

*G. Draft SOA regarding sockeye early rearing density*

Julie Pyper said that a draft SOA on sockeye early rearing densities was previously provided for discussion. Chelan PUD plans to ask for approval of this SOA at the August Hatchery Committees meeting. Sam Dilly provided a presentation on some recent research he has completed investigating rearing densities at regional hatcheries in order to inform Chelan PUD's design and capacity for sockeye rearing facilities. He surveyed 29 steelhead and 11 sockeye hatcheries in the Pacific Northwest for information on their early rearing programs. He found a high degree of variability in early rearing indices, and found that most hatcheries are rearing sockeye at higher densities than Chelan PUD. Chelan PUD typically rears at a density index of 0.13; these other hatcheries typically rear at a density index of 0.3 to 0.5. He described potential modifications that would need to be made to achieve these densities at the Eastbank facility. This would include replacing four existing shallow troughs with 12 deep troughs. Tom Scribner asked whether Dilly had investigated adult return data for these programs. Dilly said that there were no adult data available for these programs. Jerry Marco asked that WDFW consider the history of infectious hematopoietic necrosis (IHN) in these programs; Dilly indicated that if IHN were identified in the Lake Wenatchee program, these fish would be destroyed and the tanks would be emptied and cleaned.

### **III. WDFW**

*A. SOA for estimating spawn timing for HOR-NOR steelhead in the Upper Columbia River Basin*

Andrew Murdoch joined the meeting to discuss a recent WDFW SOA for a pilot proposal to investigate distribution and spawn timing of hatchery origin (HOR) and natural origin (NOR) steelhead in the Upper Columbia River Basin. He began by describing the study, saying that a similar study was recently conducted in the Twisp River and that the proposal requires Floy tagging and body-cavity PIT-tagging of returning female steelhead. The Hatchery Committees discussed this proposal. Tom Kahler said that he had previously met

with Murdoch about the Douglas PUD concern that the proposal did not consider radio telemetry as a method, and said that he and Murdoch had discussed how the radio telemetry technique might be cost-prohibitive in this case. Shaun Seaman asked how this study would work in conjunction with the upcoming steelhead reproductive success study and expressed concern that the study objectives and management implications are not clear at this time. Tom Scribner said that the YN supports the proposal as long as cost consideration does not compromise the study integrity. Kris Petersen said that NMFS supports the proposal, and Bill Gale said that USFWS supports the proposal. The Committees agreed that this study will provide a pilot study for this technology, and agreed that body-cavity and Floy tagging can be implemented at the tagging sites of Dryden, Priest Rapids Dam, Wells Dam, and Twisp Weir. The two PUDs and WDFW will meet next week to discuss and resolve any outstanding concern with the proposal and will report back to the Committees. On a last note, Bill Gale wondered whether WDFW could investigate tagging individual fish with both half-duplex and full-duplex tags. The group agreed that this would be something to investigate.

*B. Fish and Wildlife Commission vote on hatchery reform policy*

Jeff Korth said that a Fish and Wildlife Commission hatchery reform policy will be considered by the Commission in September 2009. Shaun Seaman said that Chelan PUD has provided comments to this policy.

## **IV. Yakama Nation**

*A. Multi-species acclimation proposal*

Tom Scribner gave a brief presentation on a YN multi-species acclimation proposal that is under review by the Independent Scientific Review Panel (ISRP). He said that he is asking for feedback on the concept and not full agreement with the program. The objectives are twofold: 1) to develop an expanded, multi-species acclimation program for Upper Columbia spring Chinook and steelhead in the Wenatchee and Methow basins, and 2) to develop natural or semi-natural acclimation ponds there. The Twisp River would be the first system for implementation. Scribner clarified that the YN is not looking for funding from the PUDs at this point; if, at the end of the Fish Accord funding (2017), it is clear that these programs directly support meeting PUD mitigation requirements, there may be discussions regarding the PUDs becoming co-funders.

The Hatchery Committees provided feedback. Bill Gale said that he would like this proposal to include how managing Proportion of Hatchery Origin Spawners (pHOS) is involved, given that USFWS must control pHOS on the spawning ground, and currently the only control over pHOS is through removal of hatchery volunteers. Pat Phillips commented in terms of fish health: he said that coho and steelhead would be less risky for rearing together due to coho resistance to infectious hematopoietic necrosis (IHN), whereas steelhead and spring Chinook together may not fare as well unless the steelhead were 100 percent IHN-free. Chelan PUD questions revolved around whether M&E associated with this proposal would be part of the plan for these ponds, and how many fish would be involved. Scribner said that M&E would be included and would be rather minimal, and that he is not certain of the number of fish that would be involved yet.

#### *B. Dryden Pond overwinter acclimation*

Tom Scribner indicated that the YN would like to explore implementing overwinter acclimation of yearling summer/fall Chinook at Dryden given that results from Twisp, Chiwawa, and Similkameen suggest that acclimating juveniles over-winter can lead to increased survival. He would like to discuss the possibility of overwinter rearing at Carlton Pond and/or Dryden Pond. Julie Pyper said that Chelan PUD is not opposed to this possibility, but would need to evaluate whether these recent M&E results would be applicable elsewhere, such as at Carlton and/or Dryden. She said that she and Todd Pearsons have been discussing moving Grant PUD's program to Dryden and how such a move would affect both Chelan and Grant PUD mitigation obligations. She also said that there are certain trapping and passage requirements that Chelan PUD must meet, and Chelan PUD is also obligated to manage the irrigation canal headworks at Dryden Dam. Mike Schiewe asked when the overwintering would potentially be implemented, given that it is found to be feasible within these constraints; Tom Scribner replied that it seems the implementation should align with the HCP 10-year check-in in 2013. Joe Miller will request the overwintering data from Andrew Murdoch that Scribner mentioned today.

### **V. Colville Confederated Tribes**

#### *A. Tagging of summer Chinook salmon derby fish*

Jerry Marco said that the Colville Confederated Tribes (CCT) proposes to tag up to ten summer Chinook at the west ladder at Wells Dam in order to support an upcoming salmon derby. The Hatchery Committees agreed to this tagging.

## VI. All Committees

### A. HGMP Update

- *Wenatchee programs*

#### Wenatchee Steelhead

Julie Pyper updated the group that Chelan PUD is currently addressing NMFS' comments on the steelhead HGMP and will provide a comment matrix to NMFS showing decisions on how these comments were incorporated.

Shaun Seaman mentioned that Chelan PUD has two competing directives from NMFS regarding meeting the CV criterion for steelhead size: one in the ESA permit, and one in the Federal Columbia River Power System (FCRPS) Supplemental Comprehensive Analysis (SCA). Kris Petersen said that the general basis of the permit condition regarding the size at release, and the CV is to release fish at a target size large enough that fish will migrate and survive well through the dams. Petersen suggested that Chelan PUD could add text to the HGMP that will say that fish will be raised to a size that allows them to rapidly migrate, and that text should be added to that to include monitoring that shows that the fish are rapidly migrating. She said that where NMFS guidance may conflict, Chelan PUD will want to adhere to their permit conditions. Kris Petersen will investigate the basis for the CVs listed in the SCA guidance.

#### Wenatchee Spring Chinook

Julie Pyper updated the group that a draft spring Chinook HGMP will be provided to the Hatchery Committees by July 24. At the last conference call on this topic, the Hatchery Committees agreed to resolve and bring any final comments to today's meeting. Jerry Marco commented that the CCT does not agree to use conservation fisheries as a tool to remove surplus fish until a trend toward recovery can be demonstrated. He said that implementing conservation fisheries before a recovery trend is demonstrated could lead to a third-party lawsuit, based on what the CCT has observed in similar discussions ongoing elsewhere. Kris Petersen commented that the fishery issue would be addressed outside of the HGMP by the JFP. Marco agreed, and suggested that language could be developed for the HGMP, saying that the conservation fishery would be just one tool that could be used for adult management, reiterating that this particular tool would only be used following a demonstrated recovery trend. Regarding this, Shaun Seaman noted that

Chelan PUD will need to coordinate with WDFW on level of effort for adult management if conservation fisheries were only used in this manner. Regarding the rest of the HGMP, Seaman pointed out that one issue not yet addressed in the HGMP is bacterial kidney disease (BKD) management. At the end of this discussion, Kris Petersen reviewed NMFS' comments. Bill Gale also brought comments and will forward those to the Committees.

- *Methow programs*

Tom Kahler reported that the HGMP programs are behind schedule due to workload issues within Douglas PUD and within the Hatchery Committees. The HGMP work team will set a meeting early next week to re-convene and discuss coordination with the Winthrop steelhead HGMP.

*B. NTTOC analysis*

Mike Schiewe brought up the topic of the Non-Target Taxa of Concern (NTTOC) analysis. The group will come back to the next meeting with the list of panel members to be involved in the analysis, scheduled for this fall.

*C. HETT update*

The HETT has developed a schedule to provide the control group analysis to the Hatchery Committees by the January Hatchery Committees meeting. This will include a document that describes the methods and results for the analysis.

*D. ONA Sockeye presentation*

Mike Schiewe is working to schedule the ONA sockeye presentation and the water management tool presentation for later this year. The group agreed to plan this meeting in SeaTac on September 16 or 17, 2009. Julie Pyper will check with the ONA and Kim Hyatt regarding availability for one these days.

## **VII. HCP Administration**

*A. Meeting agreements not requiring an SOA*

- The Hatchery Committees signaled that Chelan PUD can plan for another year of Blackbird Pond use for steelhead (Item II-C).

- The Hatchery Committees agreed that Chiwawa steelhead for use in the recirculation study will not be growth-suppressed to allow for marking at the appropriate time (Item II-E).
- The Hatchery Committees agreed that steelhead Floy and body-cavity tagging can be implemented at the tagging sites of Dryden, Priest Rapids Dam, Wells Dam, and Twisp Weir (Item III-A).
- The Hatchery Committees agreed that the CCT can tag up to ten summer Chinook at the west ladder at Wells Dam in order to support an upcoming salmon derby (Item V-A).

*B. Next meetings*

The next scheduled Hatchery Committees meetings are as follows: August 19, September 16, and October 21; all meetings will be at the Chelan PUD offices in Wenatchee, except the September meeting, which may be moved to SeaTac.

**List of Attachments**

Attachment A – List of Attendees



**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Shaun Seaman *	Chelan PUD
Jerry Marco *	Colville Tribes
Tom Kahler *	Douglas PUD
Todd Pearsons	Grant PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Andrew Murdoch (afternoon only)	WDFW
Pat Phillips	WDFW
Jeff Korth *	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Rocky Reach and Rock Island HCP Hatchery Committees  
**Date:** September 24, 2009

**From:** Michael Schiewe, Chair, HCP Hatchery Committees

**Cc:** Ali Wick, Alene Underwood, Joe Miller

**Re:** Final Minutes of August 17, 2009 Rock Island and Rocky Reach Hatchery Committees Conference Call

---

The Rocky Reach and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met via conference call on Monday, August 17, 2009, from 11:00 am to 1:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Chelan PUD will email the final draft version of the Wenatchee spring Chinook HGMP to the Hatchery Committees for final review by 10:00 am tomorrow, August 18 (Item II).
- Chelan PUD will email the final draft version of the Wenatchee steelhead HGMP before the end of the day tomorrow, August 18 (Item III).

### DECISION SUMMARY

- The Hatchery Committees concurred that the 2010 Chelan PUD M&E Implementation Plan was approved as of the July 31 approval deadline (Item I).

### I. 2010 Chelan PUD M&E Implementation Plan

Mike Schiewe asked for final agreement on the 2010 Chelan PUD M&E Implementation Plan, as there were no comments following the July 31 deadline for approval. The Committees concurred that this plan was approved as of the July 31 deadline.

---

## **II. Wenatchee Spring Chinook HGMP**

Mike Schiewe introduced this topic and said that a primary purpose of today's call is to discuss comments on the July 29 draft Chiwawa Hatchery Genetic Management Plan (HGMP).

Shaun Seaman said that Chelan PUD has received comments from WDFW on the Chiwawa spring Chinook HGMP and will incorporate recommended changes as agreed to by the Hatchery Committee during the call. Schiewe asked other Committees members for additional comments. Kris Petersen asked for a clarification of the term "conservation fisheries," and suggested that it be distinguished from a recreational fishery (at the subsequent Hatchery Committees meeting on August 19, Jeff Korth explained that this term defines the reason for the fishery as a reduction in hatchery influence). She also emphasized the importance of including as much information as possible regarding adult management. Kirk Truscott (now representing the Colville Tribes) raised a number questions regarding the balance between recovery and harvest, and reaffirmed the Colville Tribes' intent to work with the JFP to resolve any issues. He also raised questions regarding broodstock compositing, BKD management, and the need to double check estimated take numbers. All of these issues were resolved through Committee discussion, or agreement to resolve them before the end of the week and will be reflected in the draft HGMP. At the close of the discussion, Chelan PUD agreed to send out a final draft version of the Wenatchee spring Chinook HGMP that includes the changes from today's discussion, by 10:00 am tomorrow, August 18. The final draft version will be up for approval at this Wednesday's (August 19) Hatchery Committees meeting.

## **III. Wenatchee Steelhead HGMP**

Mike Schiewe verified with the Committees that all comments on the Wenatchee steelhead HGMP have been provided to Chelan PUD at this time. Committee members agreed that all comments have been submitted. There was a brief discussion on the differences between the safety net program and the conservation programs, and how the distinction could be clarified. Chelan PUD will incorporate these changes and email the final draft version of the Wenatchee steelhead HGMP before the end of the day tomorrow, August 18 (Item III). The final draft version will be up for approval at this Wednesday's (August 19) Hatchery Committees meeting.

For both HGMPs there was discussion by Committee members about providing additional comments at a later date. Seaman noted that the Committees would be asked to approve the plans at the Committee meeting on August 19 and the expectation would be that the HGMPs reflect the positions of all parties. Seaman emphasized that any comments contrary to the approved plans made after the approval date would be inconsistent with the process the Committees have established.

**List of Attachments**

Attachment A – List of Attendees

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Shaun Seaman *	Chelan PUD
Alene Underwood	Chelan PUD
Joe Miller	Chelan PUD
Kirk Truscott *	CCT
Kris Petersen *	NMFS
Bob Pfeifer *	WDFW
Jeff Korth *	WDFW
David Carie *	USFWS
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Joe Miller, Alene Underwood, Greg Mackey, Pat Phillips, Steve Hays  
**Re:** Final Minutes of August 19, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, August 19, 2009, from 9:30 am to 4:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Julie Pyper will provide a draft letter to the Hatchery Committees for their review that indicates their respective agencies' support for submittal of Chelan PUD's water right application to Washington State Department of Ecology (Ecology) for the Chiwawa facility (Item I).
- Hatchery Committees members will, as appropriate, provide the above-mentioned letter to Ecology prior to the next Hatchery Committees meeting (Item I).
- Chelan PUD will provide final draft Hatchery Genetic Management Plans (HGMPs) to the Hatchery Committees when they are available (Item II-B).
- Julie Pyper will provide the Hatchery Program Summary as soon as it is available (Item II-C).
- Joe Miller will confirm with National Marine Fisheries Service (NMFS) the reason for requesting Ringold hatchery-reared summer/fall Chinook for the separation-by-code (SBC) study (Item II-E).
- Douglas PUD will provide to the Hatchery Committees a new schedule for review of the Methow spring Chinook HGMP as soon as it is available (Item III-A).

---

## DECISION SUMMARY

- The Hatchery Committees approved the Statement of Agreement (SOA) for sockeye early rearing density criteria (Item II-A; Attachment B).
- The Hatchery Committees approved the SOA and the Final HCP Hatchery Committees Draft HGMP for Wenatchee River Spring Chinook (Item II-B; Attachment C).
- The Hatchery Committees approved the SOA and the Final HCP Hatchery Committees Draft HGMP for Wenatchee River Steelhead (Item II-B; Attachment D).

### I. Welcome, Agenda Review, Meeting Minutes

The Hatchery Committees approved revisions to the July 15 meeting minutes, and the July 9 conference call minutes. Ali Wick will provide the final minutes for the record. During review of action items, Julie Pyper noted that she had an action item to talk to Ecology on what additional support from the Hatchery Committees is needed for Ecology to approve minimum flows at Chiwawa facility. She said that Ecology had confirmed that they need letters of support from fishery managers; she has drafted a letter of support for the Hatchery Committees members to review and use in providing their agencies' endorsement of Chelan PUD's water right application to Ecology. Hatchery Committees members will provide, as appropriate, a letter from their respective agencies to Ecology prior to the next Hatchery Committees meeting.

### II. Chelan PUD

#### A. *DECISION ITEM: Sockeye Early Rearing Density SOA*

Shaun Seaman reminded the group that Sam Dilly (Chelan PUD) had compiled data on appropriate rearing density for the Lake Wenatchee sockeye program. Seaman distributed copies of a previously provided SOA for rearing these fish at up to 0.4 pounds per inch-cubic foot (lbs/in-cf) until fish reach 400 fish per pound (fpp), and in rare short-term conditions held at 0.6 lbs/in-cf if necessary to reduce handling and fish stress. Kirk Truscott (CCT) inquired whether or not WDFW Eastbank Hatchery staff and WDFW Fish Health had been involved in the discussion regarding the proposed rearing density for sockeye at Eastbank FH. Chelan PUD indicated that both John Penny (Eastbank FH Complex Manager) and Bob Rogers (WDFW Fish Health) were involved in the discussion and were in agreement with the proposed rearing density. The Hatchery Committees approved this SOA and the proposed rearing densities (Attachment B).

*B. Wenatchee Basin HGMPs*

Shaun Seaman began by thanking the entire group for their work on the HGMPs, especially Alene Underwood and Julie Pyper, who have contributed significant time to this effort. He invited final comments on the HGMPs.

*Wenatchee Spring Chinook HGMP*

Jeff Korth said that Washington Department of Fish and Wildlife (WDFW) would like as many decisions regarding hatchery management as possible to be reflected in the HGMP rather than being left open for future Hatchery Committees consideration (e.g., how to handle broodstock crosses for natural origin returns [NORs] from the segregated hatchery component in years when NOR run sizes are large). Mike Schiewe said that there is precedent for decisions like these in the Hatchery Committees, and he would expect that future decisions would occur similarly in a cooperative fashion as per the HCP. Korth also expressed concern that potential limitations associated with the Chiwawa Weir broodstock collection and identification were not described at the same level of detail as were limitations associated with the parental-based tagging (PBT) approach. Shaun Seaman noted that Chelan PUD felt that the experimental nature of PBT justified the need to gather additional information regarding key uncertainties prior to full scale implementation but PBT has been included in the HGMP as an option for NMFS to review. The use of PBT in the long term would be based on collection of data during preliminary trials and future consideration by the Hatchery Committees. Seaman also noted that by including both the weir and PBT for NMFS consideration, future options for broodstock collection remain open. Regarding these concerns, the Committees agreed that the agenda for the November Hatchery Committees meeting should include two items for discussion: 1) possible modifications to the operation of Chiwawa weir and any associated Monitoring and Evaluation (M&E) procedures, as well as 2) protocols for testing PBT.

Kirk Truscott provided some final Colville Confederated Tribes (CCT) comments and the text was modified to address these. Truscott reiterated that the Colville Tribes were concerned about increases in overall mortality of UCR spring Chinook and that a selective fishery would increase the mortality on natural origin spring Chinook where a substantial gap in recovery currently exists. Although the Colville Tribe has concerns with the proposed selective fishery detailed in the HGMP, they acknowledge the value of harvest opportunity,



and WDFW's concerns of removal of fish at Tumwater Dam without any level of harvest opportunity. Kirk provided and the Committee accepted language specific to the selective harvest adult management strategy in the HGMP acknowledging the potential harvest of adults from the safety-net production only, and JFP commitment to develop and agree upon "triggers" that would guide the decision to implement a selective fishery. Other comments were generally regarding marking strategy for the harvest component, modifications to the take tables, references to categorizations for bacterial kidney disease (BKD) levels, and other text corrections.

Bill Gale provided some final U.S. Fish and Wildlife Service (USFWS) comments regarding clarifying adult management roles and funding. The text was modified to address these comments, primarily noting that Chelan PUD does not believe that it has an obligation to fund adult management activities, while the Joint Fisheries Parties (JFP) disagree.

The Hatchery Committees approved the HGMP and the SOA (Attachment C).

#### *Wenatchee Steelhead HGMP*

Shaun Seaman noted that any applicable changes made in the spring Chinook HGMP would be made to the steelhead HGMP as well. Chelan PUD then addressed comments raised at today's meeting, including one on coefficient of variation (CV) criteria for hatchery programs that was carried over from the previous HGMP. Joe Miller said there was conflicting guidance from NMFS on this issue and that the relationship to residualism was uncertain. Kirk Truscott inquired, and Chelan PUD confirmed that the Wenatchee Steelhead HGMP being considered for approval was identical to the previous Committee approved HGMP submitted to NOAA Fisheries, notwithstanding Section 13. The Hatchery Committees approved the HGMP and the SOA (Attachment D).

Chelan PUD will provide final draft HGMPs to the Hatchery Committees when they are available.

#### *C. Hatchery Program Summary*

Julie Pyper will provide the Hatchery Program Summary as soon as it is available.

*D. Removal of Cobble at Right Bank near Dryden Weir*

Shaun Seaman noted that the right bank of the Wenatchee River just downstream of the confluence of Peshastin Creek has accumulated a bar of cobble that is impeding fish from exiting the fishway. Chelan PUD will be working with the appropriate parties and permitting agencies for a solution to this problem, which will likely involve removal or relocation of this material.

*E. NMFS Request for Hatchery Chinook from Ringold Hatchery*

Joe Miller informed the group that Chelan PUD has received a request for 150 summer/fall Chinook from Ringold Hatchery for a NMFS SBC study. Joe Miller will ask NMFS whether there is another stock that can work; if there is a reasonable case for another stock to be used, Miller will ask them to do so. Otherwise, the Hatchery Committees gave their approval for the use of these fish.

**III. Douglas PUD***A. HGMP Revised Schedule*

Tom Kahler said that the schedule for review of the Methow Spring Chinook HGMP will be earlier than indicated. Douglas PUD will inform the Hatchery Committees as soon as this schedule is revised. Bill Gale noted that NMFS consideration of the USFWS HGMP for Winthrop National Fish Hatchery (NFH) is being held up until the completion of the Douglas PUD HGMP.

**IV. WDFW***A. Wells Memo on Surplus Summer Chinook*

Pat Phillips notified the Hatchery Committees that WDFW will be collecting a surplus of summer Chinook broodstock at Wells Dam. The Hatchery Committees have reviewed this information via a memorandum that was previously provided, and agreed that these fish are in excess of HCP program broodstock needs.

**V. Yakama Nation***A. Update on Coho EIS Scoping Process*

Keely Murdoch said that a letter has been provided to the Hatchery Committees on the status of the Yakama Nation's (YN's) Environmental Impact Statement (EIS) scoping process for the coho reintroduction program master plan. Two public scoping meetings will be

occurring this week: one on Thursday, August 20, in Leavenworth, and one on Friday, August 21, in Twisp.

## **VI. All Committees**

### *A. NTTOC analysis*

Mike Schiewe opened the discussion on the selection of potential members of the panel that will conduct the Non-Target Taxa of Concern (NTTOC) risk analysis. Several Hatchery Committees members provided names of individuals whom they would like to be considered. The Hatchery Committees directed the Hatchery Evaluation Technical Team (HETT) to develop recommendations regarding next steps, including a list of panel members and their geographic distribution (local versus regional), strategy and logistics for conducting the workshops (phone, in person, or a combination of the two), and scheduling. HETT will report their recommendations back to the Hatchery Committees.

## **VII. USFWS**

### *A. Entiat Summer Chinook discussions with Production Advisory Committee*

Bill Gale said that the Production Advisory Committee (PAC) has approved broodstock collection for the USFWS' new Entiat summer Chinook program. The next step is for USFWS to present the proposal to the policy committee under U.S. v. Oregon.

## **VIII. HCP Administration**

### *A. Meeting agreements not requiring an SOA*

- The Hatchery Committees agreed that NMFS can take 150 hatchery Chinook from Ringold Hatchery for an SBC study (Item II-E).
- The Hatchery Committees agreed that there are returning summer/fall Chinook at Wells Hatchery that are in excess of broodstock needs and hence available for distribution by the JFP (Item IV-A).
- The Hatchery Committees agreed that the HETT will develop the next steps for the NTTOC process, including panel selection, strategy, and scheduling, and will report these back to the Hatchery Committees (Item VI-A).

### *B. Next meetings*

The next scheduled Hatchery Committees meeting will be on September 16 and 17 at Grant PUD offices in SeaTac. The usual Hatchery Committees meeting will be on September 16

from 9:30 am to 4:30 pm. On the next day, September 17, the Okanagan Nation Alliance (ONA) will provide an update on the Skaha sockeye program, and Kim Hyatt (Department of Fisheries and Oceans) will present the latest information from the Okanagan Basin Water Management Tool. The September 17 meeting time has not yet been decided, but will be provided soon.

The next meetings will occur on October 21 and November 18 at the Chelan PUD offices in Wenatchee.

### **List of Attachments**

Attachment A – List of Attendees

Attachment B – Final Statement of Agreement on Sockeye Early Rearing Density Criteria

Attachment C – Statement of Agreement – Approval of Final HCP Hatchery Committees  
Draft HGMP for Wenatchee River Spring Chinook

Attachment D – Statement of Agreement – Approval of Final HCP Hatchery Committees  
Draft HGMP for Wenatchee River Steelhead

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Julie Pyper *	Chelan PUD
Joe Miller	Chelan PUD
Shaun Seaman *	Chelan PUD
Alene Underwood	Chelan PUD
Steve Hays	Chelan PUD
Kirk Truscott *	Colville Confederated Tribes
Shane Bickford * (morning only)	Douglas PUD
Tom Kahler *	Douglas PUD
Greg Mackey	Douglas PUD
Todd Pearsons	Grant PUD
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Pat Phillips	WDFW
Jeff Korth *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**FINAL Statement of Agreement  
Sockeye Early Rearing Density Criteria**

**Rocky Reach HCP Hatchery Committee  
August 19, 2009**

**Statement of Agreement**

The Rock Island HCP Hatchery Committee (Committee) agrees that Chelan County Public Utility District No.1 (the District) may rear Lake Wenatchee sockeye at a density of up to 0.4 lbs/in-cf until fish reach 400 fish/lb (1.1 gram), within the District's hatchery facilities or other facilities approved by the Committee for rearing juvenile sockeye. In rare short term conditions sockeye may be held at 0.6 lbs/in-cf if necessary to reduce future fish handling and physiological stresses.

**Background**

The District intends to rear 280,000 sockeye for the Lake Wenatchee program as soon as practical. The Eastbank Hatchery incubation and early rearing building does not have adequate capacity to accommodate sockeye, steelhead and Chinook programs currently envisioned. A study was conducted to research and survey early rearing information and assist with design recommendations. The resulting study report cited the median sockeye density index of thirteen hatcheries is 0.59 lb/in-cf, the mean is 0.81 lb/in-cf. Most hatcheries rear fish at these densities between 900 and 300 fish/lb.

**Statement of Agreement - Approval of Final HCP Hatchery Committee Draft  
HGMP for  
Chiwawa River Spring Chinook**

**Rock Island HCP Hatchery Committee  
August 19, 2009**

**Statement of Agreement**

The Rock Island HCP Hatchery Committee (Committee) approves the Final HCP Hatchery Committee Draft Hatchery And Genetic Management Plans for Wenatchee Upper Columbia River Spring Chinook – Chiwawa Spring Chinook hatchery program dated August 19, 2009.

**Background**

In August 2008, National Marine Fisheries Service (NMFS) announced in a letter their intent to initiate a series of consultations to analyze the effects of hatchery programs and assure compliance with the Federal Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA). This process and other subsequent actions by NMFS lead to the development of revised HGMPs for the program noted above. The HC members worked collaboratively over the past 12 months to develop the final document.

**DRAFT Statement of Agreement - Approval of Final HCP Hatchery Committee  
Draft HGMP for Wenatchee River Summer Steelhead**

**Rocky Reach and Rock Island HCP Hatchery Committees  
August 19, 2009**

**Statement of Agreement**

The Rocky Reach and Rock Island HCP Hatchery Committees (Committees) approve the Final HCP Hatchery Committee Draft Hatchery And Genetic Management Plans for Wenatchee River Summer Steelhead dated August 19, 2009.

**Background**

In August 2008, National Marine Fisheries Service (NMFS) announced in a letter their intent to initiate a series of consultations to analyze the effects of hatchery programs and assure compliance with the Federal Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA). This process and other subsequent actions by NMFS lead to the development of revised HGMPs for the program noted above. The Committee members worked collaboratively over the past 12 months to develop the final document.



## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Joe Miller, Greg Mackey  
**Re:** Final Minutes of September 16 and 17, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Grant PUD offices in SeaTac, Washington, on Wednesday, September 16, 2009, from 9:30 am to 4:30 pm, and on September 17, from 8:30 am to 11:00 am. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Shaun Seaman will complete Julie Pyper's action item from the last Hatchery Committee meeting (August 19). The Action Item was to provide a draft letter to the Hatchery Committees for their review that indicates their respective agencies' support for submittal of Chelan PUD's water right application to Washington State Department of Ecology (Ecology) for the Chiwawa facility.
- Hatchery Committee members will submit comments on the Wells Methow Steelhead Reproductive Success study design to Douglas PUD by Sept 30 (Item II-C).
- Hatchery Committees will submit comments on the Wenatchee steelhead spawning success study proposal within 2 weeks to Andrew Murdoch, with copies of comments to all other Hatchery Committee members. The final study proposal is due to the Hatchery Committee prior to the October meeting (Item III-A).
- Shaun Seaman will revise the Wenatchee steelhead spawning success study Statement of Agreement (SOA) as discussed at the meeting (Item III-A).
- Shaun Seaman will draft a schedule for preparing a report on 2009 Blackbird Pond Acclimation and the path forward for a decision next year as to whether to acclimate fish again in Blackbird Pond (Item III-B).
- Bob Pfeifer will locate the memo from Heather Bartlett (Washington Department of Fish and Wildlife [WDFW]) regarding the status of space at Ringold Hatchery for *U.S. v Oregon* production goals (Item III-D).

- 
- Kirk Truscott will check with Chris Fisher (Colville Confederated Tribes [CCT]) about temperature concerns regarding a potential mid-December transfer of juveniles to Bonaparte Pond (Item III-D).
  - Shaun Seaman will verify that a seine net will be stored on the Dryden Dam site for use in potential fish salvage operations (Item III-G).
  - Keely Murdoch will email a copy of the draft agenda from Shawn Quigley (Pacific Northwest Aquatic Monitoring Partnership [PNAMP]) on the data portal workshop to Ali Wick for distribution to the Hatchery Committee. The distribution email will indicate that the draft agenda is a very rough draft (Item IV-D).
  - Shaun Seaman will send a letter to Mike Schiewe designating Joe Miller as Chelan PUD's Hatchery Committee Alternate (Item VIII-A).

## **DECISION SUMMARY**

- The Hatchery Committee approved Grant PUD's request for Wells and Methow hatchery production in principal, subject to modification of the steelhead production number to up to 80,000 (Item II-A).

## **I. Welcome, Agenda Review, Meeting Minutes**

The Hatchery Committee approved the August 17 Rock Island and Rocky Reach Hatchery Committees conference call meeting minutes and the August 19 Hatchery Committees meeting minutes as revised.

Kris Peterson stated a concern that the Wenatchee steelhead Hatchery Genetic Management Plan (HGMP) has not yet been submitted as agreed to on the timeline submitted by the Hatchery Committees. Shaun Seaman stated that Chelan PUD is on hold pending a discussion with WDFW regarding submittal of letters asking for certain structures of permits. Bob Pfeifer will speak with Jeff Korth about resolution of this matter. Shaun Seaman also informed the Committee that he had informed Rob Jones of the status of the HGMPs and the process Chelan and WDFW were completing and there was no discussion of the timeline submitted by the Hatchery Committees.

---

## **II. Douglas PUD**

### *A. Approval of Grant PUD Request for Hatchery Production from Wells and Methow Hatcheries*

Tom Kahler said Douglas PUD received Grant PUD's annual request for space at Wells and Methow hatchery facilities for hatchery production. In the past, the committee has approved the request for Grant PUD to take to the Priest Rapids Coordinating Committee (PRCC) Hatchery Subcommittee. Concerns in the past have been with the potential impact of the request on HCP production. Tom Kahler stated that this year's request is the same as last year's request. No one saw any potential impact of this year's request on HCP production. Kirk Truscott noted that the CCT is in the process of revamping the Okanogan steelhead program. The new program will use locally adapted broodstock to fully meet Grant PUD's mitigation obligation by ramping production up to 100,000 fish, with a commensurate reduction in production for Grant PUD at Wells Hatchery. Tom Kahler said that Douglas PUD will need to know by the commencement of broodstock collection in July 2010 how many BY 2011 steelhead will be needed by Grant from Wells. The Hatchery Committee agreed to add the words, "up to" 80,000 steelhead with the final number being determined based on consideration of CCT's Cassimer Bar production. The Hatchery Committee approved the request subject to this modification.

### *B. HGMP Update*

Tom Kahler said that after the last HGMP meeting, Douglas PUD is behind on the schedule previously circulated to the Hatchery Committees. Mike Schiewe stated there is an October 31 due date for both the spring Chinook and steelhead HGMPs. Douglas PUD and WDFW are currently working to resolve remaining issues, and then the HGMP workgroup will review the draft. At this point, the spring Chinook HGMP is relatively complete. Schiewe noted that the steelhead HGMP will include many changes from the current program to accommodate Hatchery Scientific Review Group (HSRG) recommendations.

### *C. Douglas PUD Steelhead Reproductive Success Study Design*

Greg Mackey presented a draft study design for a Methow steelhead reproductive success study. Objectives include addressing the role of genetics vs environmental effects on the relative reproductive success of hatchery and wild fish. Mackey stated that the proposed study would involve a small stream that can be controlled to set up contrasts and assess reproduction to the emergent-fry stage. The study will investigate the mechanisms that affect reproductive success from the spawner to emergent fry stage, providing insight that

managers may be able to use to improve the use of hatchery fish, fulfilling the requirements for a spawning (reproductive) success study as specified in the HCP. The study will complement Chelan PUD's basin-wide spawning success study or an anticipated FCRPS BiOp Action Agencies' study in the Methow by providing more detailed and mechanistic information that cannot be gained in a broader study, making both studies more valuable.

The Committees provided Mackey with some preliminary comments. Keely Murdoch mentioned that stream selection or the way in which hatchery fish are stocked and released may play a role on spawning success. She said that it would be preferable not to select a stream where spawning already occurs. Greg replied that those points are correct, but to investigate them would require a different type of study than the one Douglas PUD is proposing. Kirk Truscott stated his concern that not observing a significant difference might be interpreted to mean that there is no difference in survival between hatchery and wild fish. Mackey responded that while knowledge of reproductive success through the adult stage is desirable, there is a trade-off in gaining more detailed, mechanistic knowledge versus broader lifetime fitness estimates. An equally undesirable outcome would be a study that identifies a difference in reproductive success to the returning adult stage, but fails to identify the lifestage or mechanism(s) where the difference occurred or whether it was a consequence of the environment or genetics, or a combination of both. The DPUD study is seeking to understand why relative reproductive success may differ among hatchery and wild fish to inform management decisions that may improve the use of hatchery fish. Next steps will be to convene a subgroup to develop the proposal. The subgroup will include Bill Gale and Kirk Truscott, as well as potentially Mike Ford and Barry Berejikian (both of NMFS). Anyone else wishing to serve on the subcommittee should contact Greg Mackey. Hatchery Committee members agreed to submit comments on the Wells Methow Steelhead Reproductive Success study design to Douglas PUD by Sept 30.

### **III. Chelan PUD**

#### ***A. Steelhead Reproductive (Spawning) Success Study***

Joe Miller summarized a Chelan PUD proposal for a steelhead spawning success study in the Wenatchee Basin. The proposal focuses on adult-to-smolt success rather than adult to adult, which is the only difference between this proposal and a previous version reviewed by the Committees last year. It is Chelan PUD's intent that this proposal will meet the PUD's HCP

---

obligation to conduct a spawning success study, and to fulfill its required monitoring as per Objectives 2 and 3 of the Chelan PUD Monitoring and Evaluation Plan (M&E Plan).

Andrew Murdoch, who worked with Chelan PUD to develop the proposal, provided a brief summary of study objectives and design. He noted that the spawning distribution and timing element of the proposed study will address Objective 2 of the Hatchery M&E Program, as well as an observer efficiency study being conducted for the Integrated Status Monitoring and Effectiveness Program (ISEMP). It will also include an element to test the hypotheses for Objective 3 in the M&E plan. Most importantly, however, the study will compare relative productivity of hatchery and naturally produced steelhead upstream of Tumwater Dam, looking at four broodyears (2008 to 2011), age-1 parr, and smolt for both WxW and HxH crosses. Currently, collection of the first age-1 parr group has begun. Observer efficiency from an ongoing ISEMP study will be used to calculate observer efficiency for this study.

The Committees agreed to provide comments on the study proposal to Andrew Murdoch within 2 weeks. Chelan PUD would like to have a decision on the SOA at the October meeting. Shaun Seaman will modify the SOA text to address concerns discussed at today's meeting.

#### *B. Update on Blackbird Pond*

Shaun Seaman summarized that there are at least two issues affecting the continued operation of Blackbird Pond for acclimation that the Hatchery Committees should consider: 1) intake system configuration to allow continual flow; and 2) exit conditions at the pond. Shaun Seaman stated that Chelan PUD is willing to make minor changes to the pond; however, if there is an issue related to changing conditions for fish egress, it would be difficult to address at this time. Bill Gale stated that the U.S. Fish and Wildlife Service (USFWS) is working to adjust the Passive Integrated Transponder tag (PIT-tag) detector at the outlet to improve detection by adding a second antennae. Shaun Seaman agreed to compile information on Blackbird Pond in 2009 from WDFW, Trout Unlimited, and University of Washington to inform a decision on whether to use Blackbird Pond in 2010. He will draft a schedule for preparing a report and for making a 2010 decision.

*C. M&E Plan for Upper Columbia River Salmon Recovery Plan*

Shaun Seaman updated the group on a meeting last month on the Upper Columbia Salmon Recovery Board's (UCSRB's) M&E Plan convened by the Columbia Basin Fish and Wildlife Authority (CBFWA). Seaman suggested that the Hatchery Committees consider reviewing the document and commenting on data gaps identified in Upper Columbia salmon recovery efforts. This will be on the agenda for discussion at the next meeting.

*D. Update on 2010 Pilot Reuse Study at Eastbank*

Joe Miller distributed a flow chart outlining potential paths forward for rearing of yearling summer/fall Chinook to meet Chelan PUD's HCP production obligations. These options included rearing at Ringold Hatchery, use of Chelan Falls, and use of the water re-use systems currently being tested at Eastbank Hatchery. Chelan PUD prepared a draft SOA requesting Committees' approval of the flow chart. Kirk Truscott noted that whether or not to cull high enzyme-linked immunosorbent assay (ELISA) bacterial kidney disease (BKD) fish reared in water re-use systems still need to be resolved. Other issues to be addressed included verifying that Ringold will be available in the future and that such use will not interfere with *U.S. v Oregon* plans to use Ringold for John Day mitigation production, and overwintering strategies. To resolve the Ringold availability issue, Bob Pfeifer will locate the memo from Heather Bartlett regarding the status of space at Ringold Hatchery. In addition, Kirk Truscott will check with Chris Fisher, CCT, about mid-December transfers to Bonaparte Pond for overwinter acclimation. Truscott expressed concern that December transfers would increase the risk of temperature stress to transferred fish.

*E. Hatchery Program Report*

Shaun Seaman advised the Hatchery Committee that the Chelan PUD Hatchery Program Summary has been provided and he is available to address any questions. There were no questions.

*F. Sockeye Enumeration Study*

Joe Miller reported that White River and Little Wenatchee sockeye data have been uploaded to the Passive Integrated Transponder Information System (PTAGIS). There have been 149 detections at the White River and 29 at the Little Wenatchee River. The sockeye monitoring effort is going well and there will be frequent and regular updates at upcoming Hatchery Committee meetings.

*G. Dryden Weir Passage Contingency Planning*

The Hatchery Committees considered the letter received from Chelan PUD which requests that the Committees agree on a plan of action for the Dryden Weir passage issue. Shaun Seaman explained that high winter flows had washed out portions of Highway 97, bedload from which has accumulated at the right bank of the Wenatchee River just downstream of the confluence of Peshastin Creek. During low flows this fall, fish that successfully pass upstream of Dryden weir may be unable to migrate over the gravel bar that has accumulated. Chelan PUD has met with Washington State Department of Transportation (WDOT) to determine how WDOT intends to proceed to address issues raised by the gravel bar. WDOT has indicated that it will not be able to address the gravel bar in the near term, but Chelan PUD anticipates that WDOT will address this issue over the coming year.

In the interim, the Committees approved Chelan PUD's voluntary use of the weir's bladder to raise water levels when flows fall below 1,000 cubic feet per second (cfs), with a goal of helping fish pass the gravel bar successfully. Hatchery Committees members agreed, should flows fall below 450 cfs, to help with salvaging any fish stranded below the gravel bar and move them to above the gravel bar. Should flows fall below 350 cfs, or should Hatchery Committees member staffs at the weir identify that flows are insufficient to pass fish over the gravel bar, the Hatchery Committees approved that, when trapping is occurring, all trapped salmon, steelhead, and bull trout will be moved to above the gravel bar rather than being released immediately above the weir. When trapping is not occurring, the Hatchery Committees approve Chelan PUD's closure of the fishway entrance to prevent fish from successfully passing through the fishway, only to be unable to migrate further upstream due to the presence of the gravel bar. The Hatchery Committees anticipate that those fish will remain below the weir until the fishway entrance is opened and such fish are trapped and moved to above the gravel bar, or will migrate back downstream to use the left bank of the Wenatchee River. Chelan also agreed to provide a seine net at the site to facilitate any necessary fish salvaging activities and that the PUD, its contractors (WDFW and the Yakama Nation [YN]), and/or the users of the Dryden facilities will act accordingly to notify the appropriate agencies and parties if it appears there may be, or are, fish being stranded above the weir. Shaun Seaman will verify that a seine net will be stored onsite for potential use.

#### **IV. Yakama Nation**

##### *A. Update on Expanded Acclimation Proposal – Tom Scribner*

Tom Scribner updated the Hatchery Committee on the status of the YN proposal to implement multi-species acclimation in the Wenatchee and Methow subbasins. He will have an updated proposal to the Hatchery Committee on October 7, distributed by email, for consideration at the next Hatchery Committee meeting. The plan is to acclimate at two sites, one at Rohlfing Pond on Nason Creek and one at Lincoln Ponds on the Twisp River. Coho and steelhead will be acclimated together at the Rohlfing site on upper Nason Creek, which is already being used for coho acclimation. The YN proposal identifies the use of Chelan PUD mitigation fish. Fish numbers will depend on what is required for a statistically valid study. It is currently estimated that 50,000 to 75,000 fish of each species will be needed. All fish will be PIT tagged. Objectives will include estimating in-pond survival, survival to McNary, and in-pond growth and smolt condition. Adult returns will be monitored at all available PIT tag detectors.

The Lincoln site on the upper Twisp River will be used to acclimate spring Chinook and steelhead, and juveniles will be monitored for disease during acclimation. Tom Kahler noted that there were fewer than 50,000 total Twisp spring Chinook available for acclimation in 2010, and that the HGMP being developed for steelhead contemplated fewer than 50,000 WxW locally adapted Twisp steelhead be planted in the Twisp River annually. In general Douglas PUD would not support the release of their entire Twisp production in a given year to an untested acclimation facility or rearing combination.

Kirk Truscott suggested that only WxW spring Chinook crosses be used in the Nason Creek acclimation trial since such crosses were the only crosses used previously. Bill Gale expressed concern about placing such large numbers of spring Chinook in an untested multispecies acclimation site. Keely Murdoch stated that the Rohlfing site has a back-up well in case of emergency. The Hatchery Committee discussed other examples of multi-species acclimation. In the 1970s, the Sol Duc Hatchery mixed spring Chinook and coho successfully. No results were ever published and the source of this information is Harry Senn, who has long since retired. Tom Scribner said he will call the hatchery to verify whether there are any records.



### *B. Coho Returns*

Tom Scribner said the YN has approached WDFW on opening a non-tribal and tribal fishery on coho. The YN is currently waiting for a response.

### *C. Coho EIS Public Meeting*

Tom Scribner said the public meeting in the Wenatchee and the Methow on the YN's coho Environmental Impact Statement (EIS) went well and the proposal was well received.

### *D. Web-Based Data Sharing Portal*

Keely Murdoch said she received an email on Monday from Shawn Quigley of PNAMP asking if the YN would be interested in participating on a workshop to discuss a web-based data-sharing portal. Keely Murdoch said the email included a draft agenda for an upcoming workshop. Murdoch asked that Mike Schiewe and/or Ali Wick request they be added to the email group list so they would receive future notices to forward to Hatchery Committee members. Murdoch will email the draft agenda to Wick.

## **V. HETT Update**

Keely Murdoch updated the Hatchery Committees on the Hatchery Evaluation Technical Team's (HETT's) assignment to conduct the Non-Target Taxa of Concern (NTTOC) assessment. Recommendations were to use a panel that included both ecological experts across regions and biologists with local knowledge. The initial list is long and it will be used as a pre-outreach list. All individuals on the list will be sent a letter of interest asking them to provide information on species they are interested in and time they could commit to the process. The scientists selected for the Final Panel would be sent descriptions of the hatchery programs and matrix tables to fill out and record their estimate of risk. Risk templates would be submitted to the HETT and the HETT would compile the information and produce a report on the results. The results would not be analyzed, just compiled. To keep with the timeline, the HETT would like to send the outreach letters out after the next HETT meeting. It was decided that the HETT will discuss the intended letter on September 23 and will soon thereafter submit it and the list of potential panel members to the Hatchery Committees for approval.

## **VI. Presentation: Reintroduction of Sockeye into Okanagan Basin (Held on September 17th)**

Howie Wright from the Okanagan Nation Alliance (ONA) provided an update of the program for the 2008 broodyear; 2008 was the sixth year of the program. He gave an overview of the egg take, collection, and fry release activities. Six hundred eighty females and 730 males were taken for spawning, and 1,614,300 fry were released. In 2008, fry-release strategy timing included both midnight and early evening releases. Fry survival results in 2008 and over past years indicated that midnight releases in early June produced the highest survival.

Outmigrating smolts were counted in Skaha and Osoyoos Lakes, but there was some error due to low efficiency of some sampling gears (fyke net). Smolt-to-adult ratios (SAR) were calculated using pre-smolt winter estimates. The SAR calculated for Skaha sockeye was 8 percent and the SAR for Osoyoos fish was 6 percent.

The ONA is currently completing the program report for the 2006 and 2007 BYs and is working on a 4-year synthesis report. Plans for 2009 include collecting approximately 400 to 450 females, which is a reduction from past years due to a hatchery limitation of 1,000,000 eggs. Construction drawings are nearing the final design stage, which includes design for a 5,000,000 egg capacity with provisions for expansion to 8,000,000. The timeline for commencing construction is spring 2010 with an initial egg take in 2011. Final negotiations are ongoing between the ONA and the PUDs on a revised agreement to end the experimental period for the program.

Tom Scribner asked about the apparently high SARs for the program compared to other salmonid mitigation programs on the Columbia River. Kim Hyatt said that these SAR estimates are typical for some Canadian rivers and are within the range of expectation for these stocks. He also said that these SARs are the result of peak survival years for the area.

## **VII. Presentation: Okanagan Fish-Water Management Tool**

Kim Hyatt from Department of Fisheries and Oceans – Canada (DFO Canada) provided a presentation on the Okanagan Fish-Water Management Tool (FWMT), a decision-support system that displays various water scenarios real-time within the Okanagan system. Release

---

patterns for the Okanagan Basin are typically managed by a Water Management Agreement and the tool assists water managers in meeting criteria in the Agreement.

Hyatt said that 2009 has been a high drought year and water managers have essentially been asked to retain as much water as possible in Lake Okanagan. This action is intended to protect the large fry population rearing in the lake this year from the record spawning year of 2008. He also said that use of the FWMT has stabilized the production value of egg survival per female over the last several years.

Hyatt noted that decision timing using the tool can be as little as 24 hours, plus a 6-hour timeframe after which change in lake conditions can be observed. He said that the FWMT now has the capability to model the date of onset of an autumn “temperature squeeze” in Osoyoos Lake and the duration of the squeeze based on systematic measurements of temperature and dissolved oxygen at certain lake depths. There is currently no mechanism to link the model to ocean conditions, but even if this existed, it would likely be difficult to observe any changes other than large effects. Hyatt also said that, approximately 4 years ago, DFO Canada processed some scenarios to model climate change and will be doing so again in the future. The 50-year scenario from this effort showed precipitous drops in water flow between Skaha and Okanagan Lakes, potentially leading to dry channels.

## **VIII. HCP Administration**

### *A. Committee Representation*

Shaun Seaman will send a letter to Mike Schiewe designating Joe Miller as the Hatchery Committee Alternate.

### *B. Meeting Agreements not Requiring an SOA*

- The Hatchery Committee agreed to continually operating the bladder at the adult weir at the Dryden Dam adult fish trap until flow conditions improve (Item III-G).
- The Hatchery Committees agreed with the hybrid option of salvaging fish, if necessary, as a coordinated effort, and considering the option of closing the right bank adult fish ladder (depending on timing) or implementing a trap-and-haul operation, given availability of trucks for hauling and efficiency of trapping (Item III-G).
- The Hatchery Committee agreed to review the NTTOC pre-outreach list and the letter of interest when both are received (Item V).

*C. Next Meetings*

The next scheduled Hatchery Committees meetings will occur as follows: October 21, November 18, and December 16, all at the Chelan PUD offices in Wenatchee.

**List of Attachments**

Attachment A – Lists of Attendees

**Attachment A**  
**Lists of Attendees**

---

**Attendees for September 16 Meeting**

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Carmen Andonaegui	Anchor QEA, LLC
Joe Miller*	Chelan PUD
Shaun Seaman *	Chelan PUD
Sam Dilly (by conference call)	Chelan PUD
Kirk Truscott *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Greg Mackey	Douglas PUD
Todd Pearsons	Grant PUD
Kris Petersen *	NMFS
Mike Ford	NMFS
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Andrew Murdoch	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**Attachment A**  
**Lists of Attendees**

---

**Attendees for September 17 Meeting**

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Carmen Andonaegui	Anchor QEA, LLC
Joe Miller	Chelan PUD
Kirk Truscott *	Colville Tribes
Kim Hyatt	DFO Canada
Tom Kahler *	Douglas PUD
Greg Mackey	Douglas PUD
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
David Duvall	Grant PUD
Kris Petersen *	NMFS
Howie Wright	Okanagan Nation Alliance
Elizabeth McManus	Ross and Associates
Patrick Donovan	Ross and Associates
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Jeff Korth *	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Joe Miller, Greg Mackey  
**Re:** Final Minutes of October 21, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, October 21, 2009, from 9:30 am to 4:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Kris Petersen and Mike Schiewe will consult with Mike Ford about the statistical power/value of extending the duration of the proposed Wenatchee steelhead reproductive success study, and report back to the Hatchery Committees by November 4 (Item II-A).
- Any Hatchery Committees members that have remaining questions on the Chiwawa River water right will send these questions to Joe Miller by October 28 (Item II-B).
- Joe Miller and Bill Gale will coordinate potential changes to the passive integrated transponder tag (PIT-tag) array at Blackbird Pond (Item II-D).
- The Hatchery Committees will provide a 30-day review for the Douglas PUD 2010 Monitoring and Evaluation (M&E) Implementation plan. Tom Kahler will send out an email that outlines any differences between last year's plan and this year's plan (Item IV-C).

### DECISION SUMMARY

- The Hatchery Committees approved the Statement of Agreement (SOA) Regarding Summer Chinook Rearing at Ringold Hatchery and Eastbank Re-use Facility (Attachment B; Item II-E).

---

## **I. Welcome, Agenda Review, Meeting Minutes**

The Hatchery Committee approved the October 21 Rock Island and Rocky Reach Hatchery Committees conference call meeting minutes and the September 16-17 Hatchery Committees meeting minutes as revised.

## **II. Chelan PUD**

### *A. WDFW/NWFSC Steelhead Spawning Success Study*

Joe Miller said that at the last Hatchery Committees meeting, an SOA for a proposed Wenatchee steelhead spawning success study was presented and the Committees heard a presentation on the proposed study from Mike Ford. Miller distributed copies of comments that arrived by email today from National Marine Fisheries Service (NMFS) on the study. Mike Schiewe asked if anyone had comments on the SOA. There was a discussion about the potential to extend the study duration to include adult returns if there was no detectable difference in reproductive success between hatchery and natural origin spawners based on juvenile life stages. Miller said that Chelan PUD was willing to modify the SOA language to indicate that Chelan PUD “will,” instead of “may,” fund additional genetic analyses of adults. He indicated that Chelan PUD would like the Committees to develop an Implementation Plan outlining how the steelhead hatchery program would change if this study demonstrated reduced reproduction success of hatchery steelhead spawning naturally. Kris Petersen said that NMFS would still have concerns that the 4 smolt production years and the follow-on adult production of 4 years of the proposed study will not be long enough to take annual variability into account. Bill Gale stated concerns that the current proposal does not adequately address how changes in management detailed in the current HGMP and Steelhead Management Plan may impact reproductive spawning success of H x W (hatchery X wild) adults.

Joe Miller said that Chelan PUD received the proposed study from Washington Department of Fish and Wildlife (WDFW) and Northwest Fisheries Science Center (NWFSC) staff with the understanding that it was consistent with the recommendations of the Ad-Hoc Steelhead Supplementation Workgroup, and he was under the impression that this was the right study to meet the study goals. There was some discussion about this, culminating in a vote to define each signatory’s position. Chelan PUD voted yes. Yakama Nation (YN) voted to abstain. Tom Scribner said that his main concern was that he would like Mike Ford (co-author of the proposal) to weigh in on the importance of the study duration. U.S. Fish and



Wildlife Service (USFWS) voted no based on this same concern and would like to add language to the SOA for a path forward based on power analysis. WDFW voted yes. Colville Confederated Tribes (CCT) voted no based on needing a better understanding of where Mike Ford stands on the current study proposal. NMFS voted no based on discussions with Mike Ford that additional study years would better address the management questions for which the study is being proposed. Kris Petersen said that she would approve the proposal if there were 2 additional years of adult study. The Hatchery Committees ultimately agreed that Kris Petersen and Mike Schiewe will work with Mike Ford to assist the Committees in better understanding the proposed study. In particular, the Committees are seeking assurance that it is the right study to address management questions about the future direction of the steelhead supplementation program. The Committees also would like additional information on what the incremental value would be of extending the duration of the proposed study to include evaluation of additional years of adult returns. Petersen and Schiewe will report back to the Committees on these issues by November 4.

*B. Chiwawa Water Right*

Shaun Seaman said that he had sent out a draft letter to the Hatchery Committees for their use in drafting their own letters to the Washington State Department of Ecology (Ecology) regarding Chelan PUD's application for a Chiwawa River water right. Bill Gale said that USFWS' letter will say that USFWS' support for the water right will be contingent on the consultation between Chelan PUD and USFWS. Shaun Seaman then said that this may cause an endless loop as Ecology cannot issue the 401 until the water right support letters are received. Based on today's discussion, there are some questions that will need to be answered between USFWS and Chelan PUD, and between NMFS and Chelan PUD. YN and WDFW said that they did not have any questions. Any other Committees members who have questions will send them to Joe Miller by October 28.

*C. Beckman/Larsen/Harstad Presentation of Precocity Study Findings on Steelhead and Summer Chinook*

Chris Good provided a presentation on results of fish health monitoring of the summer Chinook that were raised in the pilot study of the partial water reuse system at Eastbank Hatchery. Sampling occurred at 0, 13, and 21 weeks post-ponding for virology, histology, and fin condition. There were no major effects in terms of fish length (although some differences were found to be statistically significant). Raceway fish were slightly heavier

---

than fish reared in reuse ponds (reuse fish). Condition factors were lower for reuse fish, though there was no gross fin erosion in either group. Survival of both groups was more than 99 percent. Gill filaments in reuse fish exhibited clubbing. However, this gill condition is considered by Good to be a result of chronic low-level irritation and not major in comparison to the range in gill cell sizes often seen in gill pathology in cultured fish. Good said that the level of condition of these fish does not indicate hypoxia. No viruses or pathogenic bacteria were a problem in either fish group. Blood chemistry was within normal range for salmonids. A higher blood carbon dioxide and higher oxygen level was observed in reuse fish. Good's opinion was the performance between the two fish groups was excellent; Good said that these results present evidence of the viability of reuse for raising fish.

Bill Gale asked Good's opinion about saltwater performance, suggesting that the gill effects might affect transition to seawater. Good said that it is likely that the gills would be normal by the time the fish reach saltwater. Sam Dilly said that a higher density of the fish in the reuse pond has a positive effect on the cleaning action in the pond and that he expects that this year's fish, which were raised at a higher density than last year, should have little to no gill condition problems. Results are forthcoming.

Brian Beckman provided a presentation on the physiology of reuse summer Chinook. Both control and reuse fish lengths were bi-modal through the course of the study, with the modes essentially the same and in the same proportion for both groups. Thus, the rearing regime does not affect bi-modality. The study then considered four groups of fish from these four separate modes. There were no significant differences between treatments within size modes for various clinical indices of growth. Fish in the small size mode have more dynamic patterns of growth and smolting in the spring.

Don Larsen presented results on precocial (age 2 "mini jacks") male maturation in summer Chinook in the reuse and control groups. The size distribution for reuse fish was less broad than other fish of similar genetics studied in the Mid-Columbia (Carlton, Similkameen, Dryden fish). Overall, precocious maturation was very low in the reuse fish versus the control fish, and was substantially lower than in other fish studied in the basin. Larsen discussed plans for next year's studies, which include more sampling and more investigation on the role of size modes. There was some discussion about whether it is appropriate to have criteria for coefficient of variation (CV) for various hatchery juveniles, and the opinion of the

presenters was that CVs are appropriate to have fish in similarly-sized, controllable groups. They also indicated that it may make sense to separate size modes and apply separate CVs. Mike Schiewe asked whether adult return data were consistent with their results of screening juveniles for precocity prior to release. Larsen said that mini-jack abundance from most years does typically correlate with abundance of mini-jacks climbing the fish ladders the next year.

#### *D. Update on Blackbird Pond*

Shaun Seaman said that Steve Hays has been compiling information on last year's experience acclimating and releasing steelhead from Blackbird Pond. Hays will provide this information soon. Seaman did say that, currently, Chelan PUD plans to make some changes that will keep the water moving safely and freely, but does not expect to make any changes to the outfall. Bill Gale added that he and USFWS PIT-tag specialist had looked at the pond configuration and would propose installing two antennas at the site. Deep-cycle batteries would be used for this year and if data are good this year, hard power could be provided in future years. Seaman asked Gale to coordinate with Joe Miller on facility modifications.

#### *E. DECISION ITEM: SOA Regarding Summer Chinook Rearing at Ringold Hatchery and Eastbank Reuse Facility*

Joe Miller brought up the SOA for summer Chinook rearing at Ringold Hatchery and the Eastbank Reuse Facility (Attachment B). The Hatchery Committees agreed to the rearing of up to 400,000 yearling summer Chinook for acclimation and release at Chelan Falls and Turtle Rock (starting with 2009 brood year). Tom Scribner said that he was in favor of the SOA, but wanted to verify that Chelan PUD would make other arrangements to rear these fish if Ringold Hatchery were needed by the *U.S. v. Oregon* parties. Shaun Seaman verified that this would be the case. This SOA was approved.

#### *F. Review of Monthly M&E Reports*

Joe Miller said that Chelan PUD will now regularly ask for member comments on the monthly M&E reports at Hatchery Committees meetings.

#### *G. Chiwawa Spring Chinook "Flag-Tail" Outbreak*

Sam Dilly said that Chiwawa spring Chinook are currently experiencing a *Saprolegnia* ("flag-tail") outbreak with approximately 1 percent of the fish affected. These outbreaks are

typically stress-related, and the phenomenon has been cyclical approximately every 3 to 5 years at this facility. Dilly is working with Bob Rogers, WDFW fish health specialist, to treat these fish.

#### *H. Update on Chiwawa Steelhead Pilot Progress*

Sam Dilly said that construction is almost complete on the Chiwawa steelhead reuse facilities. Start-up and testing occurred about 2 weeks ago. There is an automatic oxygen sensing system with automatic backup. Dilly said that this year the steelhead were not large enough to transfer on the original timeline, and will now be transferred to the reuse facility in December. The water temperature differential between Eastbank hatchery and the Chiwawa reuse tanks will be approximately 20 degrees Fahrenheit, so water heaters will be used to warm the cold Chiwawa River water in the reuse tanks to make it closer to the temperature that the fish have been experiencing at Eastbank Hatchery, and then the temperature will be slowly reduced to the colder Chiwawa River temperature level that will be maintained at the reuse ponds.

#### *I. Draft SOA for Reduction of Spring Chinook Production Levels and Implementation of Early PBT Rearing*

Joe Miller distributed a draft SOA for reduction of spring Chinook production levels and the implementation of testing early parental-based tagging (PBT) rearing. Joe indicated that these actions are described in the Spring Chinook HGMP and are scheduled for 2010 as written and approved by the Committee. Tom Scribner said that he needed to talk with Steve Parker about the proposed timelines. Jeff Korth mentioned that WDFW is developing a PBT study design. Joe Miller suggested that the discussion of the SOA and ultimate decision is needed prior to brood stock collection this spring.

#### *J. Priest Rapids Hatchery Sub-committee SOA for Dryden Pond*

Shaun Seaman brought to the Hatchery Committees' attention that the Priest Rapids Hatchery Sub-committee has recently approved an SOA for Dryden Pond, dated September 14, 2009, titled *Priest Rapids Coordinating Committee (PRCC) Hatchery Subcommittee Statement of Agreement on Assessing the Feasibility of Modification of Chelan PUD's Dryden Pond to Provide Overwinter Acclimation Facilities and/or Expanded Capacity for Grant's Fish*. The Hatchery Committees said that they concur with the action proposed in

the PRCC SOA. Any direct obligation to the HCP Committees, however, would need to be memorialized by a SOA in the minutes of the HCP meetings.

*K. Draft M&E Plan for Upper Columbia River Salmon Recovery Plan*

Shaun Seaman brought up the Draft M&E Plan for the Upper Columbia River Salmon Recovery Plan. Keely Murdoch was an author on this draft document and said that this document is still under review and comments by individual entities should be provided soon if possible.

*L. Hatchery Committees Representation*

Shaun Seaman said that Joe Miller will now be the Hatchery Committees representative and Steve Hays will be the alternate. Mike Schiewe and the Committees thanked Seaman for his service on the Committees over the years.

### **III. Colville Confederated Tribes**

Kirk Truscott updated the Hatchery Committees that 200,000 Met-Comp fish currently at Winthrop Hatchery would be transferred to Tonasket Pond and Omak Creek Acclimation Facility (in the Okanogan basin) in early November; 50,000 to Omak and 150,000 to Tonasket. The Committees approved this transfer.

### **IV. Douglas PUD**

*A. HGMP Update*

Greg Mackey updated the group that the Methow spring Chinook and steelhead Hatchery Genetic Management Plans (HGMPs) are still in progress, with most of the changes being made based on the recommendations of the Hatchery Scientific Review Group's (HSRG). Douglas PUD will continue to work toward the October 31 deadline but informed Kris Petersen that it may not be met because the HGMP sub-group has not reached consensus on a few outstanding details of each program. Petersen said that meeting the October 31 deadline was important, and encouraged the HGMP sub-group to keep the pressure on to complete the documents.

*B. Plans for Modifications to Fish Holding at Wells Dam*

Greg Mackey said that Douglas PUD is planning some modifications to the configuration for new fish holding and sorting at Wells Hatchery; preliminary plans were emailed to the

Hatchery Committees prior to today's meeting. The modifications will reduce stress on fish and improve handling by providing a larger holding area for fish shunted to the hatchery from the west ladder at Wells Dam, eliminating the need for water level changes in the holding pond to handle fish, providing water-to-water transfer of fish, and increasing the efficiency of fish handlers. These improvements involve no changes to the structure or operation of the west fish ladder.

#### *C. 2010 Wells M&E Implementation Plan*

Tom Kahler said that the 2010 Wells M&E Implementation Plan has been distributed to the group and asked for a 30-day review (comments then due Friday, November 20). The Hatchery Committees agreed to this review schedule. Bill Gale asked whether any changes to the HGMPs would need to be considered in the plan. Kahler and Mackey said that they do not believe that there are any proposed HGMP alterations that would create major changes in monitoring. When asked whether there were any differences between the draft 2010 plan and the plan approved in 2009, Tom Kahler stated that the plans were essentially similar with only minor differences; he will send out an email that outlines the differences between the two plans.

### **V. Yakama Nation**

#### *A. Presentation and Discussion on Draft Expanded Multi-Species Acclimation Proposal*

Tom Scribner updated the Hatchery Committees on the status of the YN proposal to implement multi-species acclimation in the Wenatchee and Methow subbasins. The proposal has been sent out to the Committees as a working draft. More work is being done on the proposal and a revised proposal will be sent out to the Committees soon. The YN is hoping to implement the proposal in 2010 in the Wenatchee and in 2011 in the Methow. Scribner reviewed some of the key points of the proposal and asked for initial comments on it from the Committees. Kris Petersen asked whether this proposal was mentioned in the HGMPs; Scribner said that a placeholder was included, but the placeholder does not mention the multi-species aspect of the proposal. In response to some questions about whether the ponds would be used as a reference against traditional acclimation pond rearing, Keely Murdoch confirmed that they would not; data from this study would be used comparatively to verify that the program was producing similar results to traditional pond rearing. Scribner then reviewed actions for the Methow basin. There was discussion and feedback to Scribner about various points of the proposal. One of the suggestions was that upper Methow

acclimation be tested with Methow Hatchery Met-Comp spring Chinook rather than Winthrop spring Chinook. He said that those comments would be taken into account as the proposal evolves. The Committees indicated that they were basically favorable to the schedule, contents, and elements of the proposal as presented today.

## **VI. NMFS**

### *A. NMFS' HGMP Review*

Kris Petersen updated the group that NMFS is reviewing the HGMPs and will provide comments to the parties submitting the HGMPs in the near future. NMFS is developing a letter format for their comments, which will reiterate NMFS' understanding of the program, and highlight where concepts (if any) are unclear. These letters can be expected in the next 2 to 3 weeks. Petersen said that NMFS will be processing the Wenatchee HGMPs first. She said that NMFS will not post the HGMPs in the Federal Register until after NMFS has received a letter from the applicants (or lack thereof after a certain period of time) acknowledging NMFS' preliminary comments.

### *B. FCRPS Adaptive Management Implementation Plan*

Kris said that the Federal Columbia River Power System (FCRPS) Adaptive Management Implementation Plan identifies Evolutionarily Significant Unit (ESU)- or Distinct Population Segment (DPS)-level triggers that would lead NMFS to an implementable action. These triggers are based on 20 percent of the most recent average returns to the ESU or DPS.

## **VII. HETT Update**

Keely Murdoch updated the group that the Hatchery Evaluation Technical Team (HETT) has completed the draft letter of interest and the panel member list for the Non-Target Taxa of Concern (NTTOC) analysis. The Hatchery Committees have reviewed both the letter and the list. The HETT is currently working on the risk template. For control groups, the HETT is completing the analysis and will have that to present to the Hatchery Committees by February or March 2010.

## **VIII. HCP Administration**

### *A. Committee Representation*

Shaun Seaman will send a letter to Mike Schiewe designating Joe Miller as the Hatchery Committee representative and Steve Hays as the alternate.

*B. Meeting Agreements not requiring an SOA*

- The Hatchery Committees concurred with the CCT transfer of Met-Comp fish currently at Winthrop Hatchery to Tonasket Pond and Omak Creek Acclimation Facility (in the Okanogan basin) in early November. The total transfer will be 200,000 fish: 50,000 to Omak and 150,000 to Tonasket.
- The Hatchery Committees agreed to a 30-day review period for the Douglas PUD 2010 M&E Implementation Plan.
- The Hatchery Committees agreed via email responses to Kahler on September 28-30, to obtaining gametes from excess summer/fall Chinook broodstock at Wells Hatchery to provide study fish for a 2011 survival study.

*C. Next Meetings*

The next scheduled Hatchery Committees meetings will occur as follows: November 18, December 16, and January 20, all at the Chelan PUD offices in Wenatchee.

**List of Attachments**

Attachment A – List of Attendees

Attachment B – SOA Regarding Summer Chinook Rearing at Ringold Hatchery and Eastbank Reuse Facility



**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Joe Miller *	Chelan PUD
Shaun Seaman *	Chelan PUD
Ian Adams	Chelan PUD
Sam Dilly	Chelan PUD
Kirk Truscott *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Greg Mackey	Douglas PUD
Chris Good	Freshwater Institute
Todd Pearsons	Grant PUD
Russell Langshaw	Grant PUD
Kris Petersen * (by conference call)	NMFS
Don Larsen	NMFS
Deb Harstad	NMFS
Brian Beckman	NMFS
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Jeff Korth *	WDFW
Tom Scribner *	Yakama Nation
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**FINAL Statement of Agreement  
Regarding Summer Chinook Rearing at Ringold Hatchery and  
Eastbank Re-use Facility**

**Rocky Reach and Rock Island HCP Hatchery Committees  
October 21, 2009**

**Statement of Agreement**

The Rocky Reach and Rock Island HCP Hatchery Committees (Committees) agree that WDFW may produce up to 400,000 yearling Columbia River summer Chinook for acclimation and release at Chelan Falls and Turtle Rock (2009 brood year).

Secondly, the Committees agree that Chelan County Public Utility District No.1 (District) may proceed with rearing yearling summer Chinook using (1) the Re-use facility currently located at Eastbank Hatchery and (2) Ringold Hatchery according to the proposed path described in Attachment 1.

**Background**

This request represents a continuation of Turtle Rock/Chelan Falls yearling production from brood year 2008 (i.e., 400,000). The purpose of this effort is continue evaluation of rearing options to achieve the desired target of 600,000 yearling summer Chinook ultimately destined for acclimation at the proposed Chelan Falls acclimation facility. This decision is needed now because mating will be completed in the coming weeks and opportunity to create yearling fish (above the current 200,000 production plan target) will be eliminated. Broodstock have already been collected for 2009, but the fate of the eggs is in question (i.e., subyearling or yearling).

Secondly, The District has been testing the efficacy of (1) water Re-use at Eastbank Hatchery and (2) Ringold hatchery to rear summer Chinook for HCP production. The purpose of these alternative rearing methods is to reduce the demand for water at Eastbank and create additional space necessary for reaching the Districts' HCP production targets (including sockeye, spring Chinook and steelhead) in an expedient, efficient manner.

Previous SOAs have provided opportunities to evaluate both Re-use and Ringold approaches.

From the October 27, 2008, SOA: *Regarding Pilot Study For Partial Reuse*, the Committee agreed to evaluate rearing fish at higher densities in the Re-use system:

“The Rocky Reach and Rock Island HCP Hatchery Committees (hereafter “Committees”) agree that Chelan County PUD (hereafter “District”) can perform the second year of the partial water reuse pilot study. Approximately 200,000 Wells Summer Chinook from the District’s Turtle Rock Island program will be converted from the subyearling program

(reducing the subyearling program by 200,000 fish) and will be reared on partial water reuse utilizing circular ponds. This effectively doubles the density from the 2008 pilot study. The Committees agree to allow the District to perform the study as outlined in the attached Pilot Water Reuse Fish Rearing Criteria (2009) and the Partial Water Reuse Pilot Study Monitoring and Evaluation (2009).”

From the June 17, 2009, SOA: *Use of Ringold Springs Hatchery*, the Committee agreed to evaluate Ringold springs and alternative rearing densities to rear yearling summer Chinook:

“The Rocky Reach HCP Hatchery Committee (Committee) agrees that Chelan County Public Utility District No.1 (the District) can rear up to 200,000 summer Chinook (2008 brood) at the Ringold Springs Hatchery (Ringold) during the summer of 2009. The fish to be reared at Ringold in 2009 will be from the portion of the District’s Similkameen River summer Chinook obligation that are reared during the winter and released at the Bonaparte Rearing Pond. Approximately one half of the fish will be reared at density index (DI) of 0.125 and the other half at 0.20. Each group of fish reared at the different density will be differentially coded wire tagged. After fish are transferred from Ringold to Bonaparte Pond, the Committee will review the fish rearing data and determine the District’s ability to use Ringold in the future.”

The Ringold SOA also identified several key opportunities provided by the additional space at Ringold, and subsequent reduced demand at Eastbank:

“If ultimately successful, this proposed program change may provide the following benefits (particularly if the 600,000 Turtle Rock Island yearling program is reared at Ringold):

- Freeing capacity at Eastbank Hatchery which could then be used for Lake Wenatchee Sockeye alleviating the need to provide biosecurity measures at Chelan Hatchery.
- Converting the Turtle Rock Island sub-yearling program to a yearling program more rapidly. Though the Chelan Falls rearing facility is not scheduled to be substantially complete until 2012, this would allow yearlings to be released from Turtle Rock Island and probably provide a higher smolt survival and adult return.”

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Joe Miller, Greg Mackey  
**Re:** Final Minutes of November 18, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at the Chelan PUD offices in Wenatchee, Washington, on Wednesday, November 18, 2009, from 9:30 am to 1:30 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- The Hatchery Committees members will provide comments on the parental based tagging (PBT) study plan and Statement of Agreement (SOA) by Monday, December 7 to Joe Miller; he will then send these items back out to the Committees members for final review and consideration prior to the December Hatchery Committees meeting (Item IV-B).
- Kris Petersen will evaluate options for Endangered Species Act (ESA) consultation on the construction and operation of the Chelan Falls Chinook Acclimation Facility that would allow the project to proceed without a revised Hatchery Genetic Management Plan (HGMP) (Item IV-F).
- Joe Miller will talk to Court Hill about facility modifications at Tumwater Dam to improve efficiency of handling of returning adult salmonids; Miller will include this information in the monthly hatchery program reports (Item VI-A).

### DECISION SUMMARY

- The Hatchery Committees approved the SOA Regarding Steelhead Spawning Success and Objectives 2 & 3 of the Monitoring and Evaluation Plan as they Pertain to Steelhead (Item Attachment B).

---

## I. Welcome, Agenda Review, Meeting Minutes

The Hatchery Committee approved the October 21 Hatchery Committees meeting minutes as revised.

## II. WDFW

### A. *Chiwawa spring Chinook ELISA results and path forward*

John Kerwin of Washington Department of Fish and Wildlife (WDFW) attended today's meeting on behalf of the WDFW fish health department. He stated that enzyme-linked immunosorbent assay (ELISA) results for bacterial kidney disease (BKD) antigen from seven Chiwawa spring Chinook females were in the moderate or high categories, and WDFW is evaluating options for managing their eggs—including culling (WDFW does not plan to make any management changes for “low” ELISA eggs). Kerwin asked for recommendations from the Hatchery Committees. Keely Murdoch asked whether there were any opportunities to save the moderate-ELISA eggs by rearing them separately; Kerwin said that this was not an option at this time because of space limitation and concern over the release of *Renibacterium salmoninarum* into the river. Joe Miller reminded the group that culling eggs from high ELISA females was agreed to in Chelan PUD's Wenatchee spring Chinook Hatchery Genetic Management Plan (HGMP). Kerwin confirmed that there is currently not a cost-effective technology for treating hatchery effluent water. The Committees concurred with WDFW's recommendation to cull these high and moderate ELISA eggs; this culling would reduce production by 26,000 eggs.

### B. *Extra Methow Composite spring Chinook eggs at Methow Hatchery*

Jeff Korth said that there are 57,000 spring Chinook eggs above program needs currently at Methow Hatchery; these eggs are the result of intentional overcollection of broodstock to compensate for culling potential high ELISA fish. He reminded the group that the overcollection protocol was reviewed by the Hatchery Committees during their review of the broodstock collection protocols for this year. The 57,000 eggs are all “low or below low” ELISA eggs. Korth asked for the Committees' recommendations on disposition of these eggs. Kirk Truscott indicated that the Colville Tribes would not be able to accept the eggs for their hatchery needs. Bill Gale suggested that the fish could potentially be reared to fry and then released into the Methow. Keely Murdoch suggested that these fish might be useful for research. The Committees wanted some extra time to try to identify an alternative use. For

the path forward, they concurred with a WDFW recommendation to cull these eggs *unless* another HCP use can be identified before close of business Tuesday, December 1.

### **III. Douglas PUD**

#### *A. HGMP Update*

Tom Kahler said that Douglas PUD is continuing to work with WDFW to complete Methow steelhead and spring Chinook HGMPs. He anticipates finishing work on the steelhead HGMP in another day, which would translate to Hatchery Committees review commencing at the end of the week of December 4 at earliest. For the spring Chinook HGMP, Douglas PUD is close to finishing discussions with WDFW on the last few questions. The Committees agreed that the next step following Douglas PUD completion of the HGMPs will be review by the Committees (as opposed to review by the HGMP workgroup). This change was made in order to expedite the review process.

### **IV. Chelan PUD**

#### *A. DECISION ITEM: WDFW/NWFSC Steelhead Spawning Success Study Statement of Agreement*

Joe Miller distributed hard copies of the revised Statement of Agreement (SOA) for the WDFW/Northwest Fisheries Science Center (NWFSC) Steelhead Spawning Success Study. Bill Gale said that he has concerns that the study will not adequately span the present and upcoming management strategies (current management and the reduced escapement of hatchery-origin steelhead above Tumwater Dam as described in the new HGMP), and that the value of the study results for assessing the effectiveness of changes envisioned in the HGMP will be diminished. Bill Gale suggested that a longer term of study or interrupted time frame (several years at previous/present conditions and several years post HGMP) may provide more useful information for future management. Joe Miller replied that this is true, but that the study was not intended to test management strategies, acknowledging that management would always be changing. Miller also indicated that Chelan PUD had raised this issue previously, when the proposal was originally brought before the Hatchery Committees, and there was clear direction from the Committee to implement now as opposed to waiting for a stable management scenario. Gale said that he understood, but still had doubts as to the value of the current study for assessing the effectiveness of planned management changes envisioned in the current HGMPs. The Hatchery Committees discussed and ultimately agreed that having two different strategies ongoing during the study was an acceptable condition. In the SOA, a change was made to capture that the study will

---

contribute to Objectives 2 and 3 of the Chelan PUD Monitoring and Evaluation Plan (M&E Plan) . The Committees approved the study and the SOA as revised today (Attachment B).

*B. Chiwawa Spring Chinook Program Reduction and PBT SOA*

Joe Miller submitted a draft SOA regarding the reduction of the Chiwawa spring Chinook program concomitant with testing of PBT in 2010. The first step in moving toward this change would be a test of PBT. The test would include trapping, tagging, and taking a tissue sample of spring Chinook at the Priest Rapids off-ladder adult fish trap (OLAFT) followed by analysis of trapping and handling effects, evaluating the logistical feasibility of PBT, and assessing the accuracy of parental-based assignments. Miller provided a brief synopsis of the study for the Hatchery Committees to review, and asked for feedback. Keely Murdoch commented that 1 year of study may not be enough to decide whether PBT is viable for full implementation and would like language in the SOA to clarify that additional study years may be necessary. Miller agreed. Murdoch also suggested that there be a comparison of multiple-handling events. Kirk Truscott said that parameters identifying success of the study should be defined. Committees members will provide any additional comments by Monday, December 7, to Miller; he will then send this back out for consideration prior to the December Hatchery Committees meeting. The Committees will consider the SOA at the December meeting.

The *U.S. v. Oregon* parties present at today's meeting recognized that there will need to be internal agency coordination to ensure that changes to production are consistent with their *U.S. v. Oregon* obligations.

*C. Chiwawa Acclimation Water Right Application*

Joe Miller updated the group that Chelan PUD is re-evaluating whether a new 22 cubic feet per second (cfs) water right is needed for acclimation of steelhead, given that there is an existing 11 cfs water right for spring Chinook. Miller will update the Hatchery Committees with more information as it is available.

*D. Review of Monthly M&E Reports*

There were no questions on the monthly Monitoring and Evaluation (M&E) Reports at this month's meeting. Ali Wick will add John Penny to the distribution list for Chelan PUD M&E monthly reports.

*E. Hatchery Program Report*

There were no questions on Chelan PUD's Hatchery Program Report at this month's meeting.

*F. Chelan Falls*

Joe Miller said that Chelan PUD is ready to move forward with final design and construction of the Chelan Falls yearling Chinook rearing facility, but they would like some assurance that NMFS will not require modifications based on a revised HGMP scheduled for completion in 2010. Chelan cannot move forward with engineering and construction without an understanding of how the HGMP or subsequent consultation would affect the design of the facility. Kris Petersen said that she understands Chelan PUD's concern, but does not have this assurance at this time. She agreed to explore permitting options to see whether there is a non-HGMP solution that would expedite the process.

**V. USFWS***A. Tumwater Dam Transfer of Leavenworth Fish*

Bill Gale said that 62 fish arrived at Tumwater Dam that were ad-clipped but not coded-wire tagged, indicating that they were potentially Leavenworth Hatchery fish. These fish were removed and sacrificed. Carcass outplanting did not occur due to fish health issues. Of the 62 fish, five were subsequently found to be coded-wire tagged; three were of Chiwawa Hatchery origin, and two were of Leavenworth Hatchery origin.

*B. Transfer of Met-Comp Spring Chinook at Winthrop Hatchery*

Bill Gale updated the group that the 200,000 spring Chinook that were slated for transfer from Winthrop National Fish Hatchery to the Colvilles (as discussed at the last Hatchery Committees meeting) would not be transferred, due to Endangered Species Act (ESA) issues.

**VI. Yakama Nation***A. Tumwater Dam 2010 Leavenworth Spring Chinook*

Keely Murdoch said that the Yakama Nation (YN) is investigating protocols for handling surplus hatchery-origin adult spring Chinook at Tumwater Dam in 2010. Bill Gale said that his preferred alternative would be not to anesthetize these fish so that they could be used for consumption without the additional 21-day holding time (this holding time is required for



fish exposed to MS-222 before consumption). He stated that it was unlikely that sufficient space/ resources/ staff were available to track and hold individual fish for the 21 day period at Leavenworth NFH. He also said that U.S. Fish and Wildlife Service (USFWS) would be willing to discuss the option of heat-treating carcasses so that surplus fish could be used for carcass outplants. Keely Murdoch reported that there has been a workgroup discussing the situation at Tumwater and her understanding was that a conceptual design for facilities modifications is being prepared by engineers at Chelan PUD. Joe Miller will follow up with Court Hill (engineer) on the status of this design and will include this information in the monthly hatchery program reports.

## **VII. HETT Update**

Keely Murdoch updated the group that the Hatchery Evaluation Technical Team (HETT) is currently working on the Non-Target Taxa of Concern (NTTOC) risk template and this template will be available in January or February for Hatchery Committees' review. For control groups, the HETT is completing the analysis and will have that to present to the Hatchery Committees by approximately March 2010.

## **VIII. HCP Administration**

### *A. Meeting Agreements not requiring an SOA*

- The Hatchery Committees concurred with WDFW recommendations to cull 26,000 Chiwawa spring Chinook eggs from seven high and moderate ELISA spring Chinook female broodstock (Item II-A).
- The Hatchery Committees concurred with WDFW recommendations to cull 57,000 Met-Comp spring Chinook eggs that are above program needs currently at Methow Hatchery unless another HCP use can be identified before close of business on Tuesday, December 1 (Item II-B).

### *B. Next Meetings*

The next scheduled Hatchery Committees meetings will occur as follows: December 16, January 20, and February 17, all at the Chelan PUD offices in Wenatchee.

## **List of Attachments**

Attachment A – List of Attendees

Attachment B – SOA Regarding Steelhead Spawning Success and Objectives 2 &3 of the  
Monitoring and Evaluation Plan as they Pertain to Steelhead

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Joe Miller *	Chelan PUD
Steve Hays	Chelan PUD
Kirk Truscott *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Shane Bickford *	Douglas PUD
Todd Pearsons	Grant PUD
Kris Petersen *	NMFS
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
John Kerwin	WDFW
Jeff Korth *	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**FINAL Statement of Agreement  
Regarding Steelhead Spawning Success and Objectives 2 &3 of the Monitoring and  
Evaluation Plan as they Pertain to Steelhead**

**Rocky Reach and Rock island HCP Hatchery Committees**  
November 18, 2009.

**Statement of Agreement**

*\*\*Note: The underlined passage is an addition to the original September, 2009 Draft.*

The Rocky Reach (RR) and Rock Island (RI) HCP Hatchery Committees (HC) agree that Chelan County Public Utility District No.1 (the District) has met its obligations to conduct a study to investigate the natural spawning success of hatchery reared steelhead relative to wild steelhead [as described in Section 8.5.3 of the RR & RI HCPs] through the funding and complete implementation of the attached study proposal submitted by WDFW and NOAA Fisheries (Attachment 1).

In the event that no significant difference is detected between the reproductive success of Hatchery and Natural-origin spawners, based on comparisons of their offspring at the juvenile life-history stages, the District will fund the genetic analyses of additional samples collected from returning adults.

As a component of this study, the Committees agree to develop a plan to interpret the potential results of the reproductive success study as they pertain to future hatchery actions/operations.

This study will be included as part of the Wenatchee Summer Steelhead Hatchery and Genetic Management Plan (HGMP) submitted by Chelan PUD.

**Background**

The District is obligated to conduct a study to investigate the natural spawning success of hatchery reared steelhead relative to wild steelhead in Section 8.5.3 of the RR & RI HCPs. In developing this study, the HCP HC considered study guidance from NMFS, the ad hoc supplementation monitoring and evaluation work group, and critical uncertainties identified during the Federal Columbia River Power System ESA consultation process.

As proposed, the WDFW/NOAA reproductive success study also contributes to two objectives of the District's hatchery monitoring and evaluation plan (Murdoch and Pevan 2005): Objective 2-*Determine if the run timing, spawn timing, and spawning distribution of both natural and hatchery components of the target population are similar*; Objective 3-*Determine if the genetic diversity, population structure, and effective population size have changed in natural spawning populations as a result of the hatchery program.*

*Additionally determine if hatchery programs have caused changes in phenotypic characteristics of natural population.*

As proposed, this study will commence in 2009 and sampling is expected to continue through 2014 for juvenile steelhead (evaluating reproductive success to juvenile life histories) and 2017 for adult steelhead (in the event there is no significant difference between Hatchery and Natural-origin steelhead at the juvenile life history stage).

The proposed study relies on work previously performed by WDFW and NOAA and funded by NOAA and the District.

## FINAL MEMORANDUM

---

**To:** Wells, Rocky Reach, and Rock Island HCP Hatchery Committees  
**From:** Michael Schiewe, Chair, HCP Hatchery Committees  
**Cc:** Ali Wick, Greg Mackey  
**Re:** Final Minutes of December 16, 2009 HCP Hatchery Committees Meeting

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees met at Chelan PUD in Wenatchee, Washington, on Wednesday, December 16, 2009, from 9:30 am to 3:00 pm. Attendees are listed in Attachment A to these Meeting Minutes.

### ACTION ITEM SUMMARY

- Greg Mackey will provide a copy of the Douglas PUD PowerPoint presentation provided at the December Hatchery Committee Meeting that summarized the key points of the Wells Steelhead Hatchery Genetic Management Plan (HGMP) (Item II-A).
- The Hatchery Committees will provide comments to Douglas PUD on the spring Chinook and steelhead HGMPs by January 15 (note that the steelhead Reproductive Spawning Success (RSS) study plan included in the steelhead HGMP has been updated and re-submitted on 12-23-09 per discussion at the December meeting) (Items II-A and II-B).
- The Hatchery Committee will provide comments on the proposed adult RSS study plan in time for the January 15 conference call to discuss this and the Committees' HGMP edits (Item II-C).
- Greg Mackey will investigate and report back to the Hatchery Committees on proposed modifications to the west ladder fish return pipe (Item II-D).
- Keely Murdoch will check with Kris Petersen to verify Endangered Species Act (ESA) coverage to test multi-species acclimation of steelhead and coho salmon in Rohlfings Pond, Nason Creek (Item III-A).

- Keely Murdoch will obtain additional information from Columbia River Inter-Tribal Fish Commission (CRITFC) staff on the configuration of the new Zosel Dam passive integrated transponder tag (PIT-tag) array and will send it to Joe Miller (Item III-D).
- Mike Schiewe will check with Kris Petersen regarding ESA coverage for Chelan Falls yearling summer/fall Chinook program (Item III-F).

## **DECISION SUMMARY**

- The Rock Island HCP Hatchery Committee approved the Statement of Agreement (SOA) “Reduction of Chiwawa Spring Chinook Production Levels to 298,000 Smolts” (Item V-A; Attachment B).

## **I. Welcome, Agenda Review, Meeting Minutes**

The Hatchery Committees approved the November 18 Hatchery Committees meeting minutes as revised. Ali Wick will send the final minutes to the Committees.

## **II. Douglas PUD**

### *A. Wells Steelhead HGMP*

Greg Mackey provided the committee with an overview of the draft Wells steelhead Hatchery Genetic Management Plan (HGMP) that was sent to the Hatchery Committees on December 15. He provided a short PowerPoint presentation summarizing the key features of the HGMP. The Committee discussed several proposed changes to the program, including alternative release locations. The Committee discussed the potential for straying of mainstem releases of steelhead into the Methow or Okanogan rivers. Shane Bickford said that Douglas PUD is aware of this potential and mentioned several measures that could be put into place to remedy this, should the monitoring and evaluation (M&E) program detected unacceptable rates of straying. Greg Mackey will provide today’s PowerPoint presentation to the Committees, and the Committees agreed to provide comments on the draft HGMP prior to the January 15 conference call, with a goal of final approval at the January 20 meeting. There will be a conference call on January 15 from 9:00 to 11:00 am to discuss Committees’ comments.

### *B. Methow Spring Chinook HGMP*

Tom Kahler presented a table summarizing key features of the draft Methow River spring Chinook HGMP. He described the two components of the program—Twisp and

Methow/Chewuch—that would be managed separately because of their distinguishing genetic differences, and the higher proportion of NORs and the capacity to control percent hatchery-origin spawners (PHOS) in the Twisp River. Kahler briefly outlined the management objectives for the Twisp component, which are focused on the achievement of the HSRG genetic objectives. He then pointed out that for the Methow/Chewuch component it is not possible to meet Proportion Natural Influence (PNI) goals with the current numbers of natural origin returns (NORs). Shane Bickford added that, using NORs only, it is also not possible to meet No Net Impact (NNI) mitigation for the five Mid-Columbia dams, as required by the current licenses for those projects. As a result, in most years hatchery fish will have to be used to meet the NNI requirements for the five PUD dams. He said that National Marine Fisheries Service (NMFS) guidance to Douglas PUD has been to first ensure adequate seeding of the available habitat with returning natural origin fish. Douglas PUD's proposed HGMP focuses on maintaining a minimum number of NORs in the river; however, because of the low numbers of NORs in most years, there is a low probability of meeting the NOR escapement objectives while also meeting mitigation goals for the hatchery program and achieving PNI objectives. Bickford said that Douglas PUD's plans are to develop the HGMP for Committees' review with a program that meets the mitigation requirements for all three PUDs while still maintaining adequate NOR escapement. Douglas PUD anticipates working through as many remaining issues as possible in Committee prior to submission to NMFS. The Committees agreed with this path forward. Douglas PUD will send this HGMP to the Committees by the end of this week, and the Committees will provide comments prior to the next meeting, and will discuss these on the January 15 conference call.

### *C. Steelhead Reproductive Success Study*

Greg Mackey provided a short presentation summarizing Douglas PUD's recent work on a steelhead reproductive success study (RSS) plan. Mackey noted that Douglas PUD's previously discussed study plan required more wild fish than were likely available in order to produce a statistically valid study, and therefore a new study plan has been developed. The plan identifies a 10-year study beginning in 2010 focusing on adult-to-adult RSS, hatchery versus wild comparisons, and covariates of fitness. Also, the study will provide data that may be used to assess genetic influences. The results of the study will relate findings to management. Hypotheses include those looking at overall RSS, sex-specific RSS, and PHOS to proportion of offspring. This proposed study is Appendix B of the steelhead HGMP that



the Hatchery Committees will review in coming weeks. Tom Kahler noted that he recently learned that Washington Department of Fish and Wildlife (WDFW) will be conducting a study on steelhead reproductive success on the Twisp River. Greg Mackey will meet with Andrew Murdoch to discuss coordination of the two studies. Following these discussions, Douglas PUD will submit a revised RSS study plan to the HCP HC (Note that the revised RSS study plan was sent to the Hatchery Committees for review on December 23, 2009). The Committees will discuss this item on the January 15 call as well.

*D. Discussion of Design for Modification of West Ladder Fish Return Pipe*

Tom Kahler distributed design drawings for modification of the west ladder fish return pipe. The Hatchery Committees expressed interest in additional information on how the system will be operated, and in particular, desired a clearer understanding of the number of fish to be released per truck, the number of fish to be released per day, and any procedures to minimize stress in the truck. Greg Mackey will find this information and report back to the Committees.

### **III. Yakama Nation**

*A. Update on Steelhead Acclimation at Rohlfings Pond*

Keely Murdoch said that the Yakama Nation (YN) and WDFW met to discuss steelhead acclimation at Rohlfings Pond. Initially, the YN was planning to PIT-tag steelhead at the pond, but has since learned that the segregation needed to do this tagging would not be feasible. Hence, it may not be possible to estimate steelhead survival from release to McNary Dam or to estimate smolt-to-adult returns (SARs) from PIT-tag returns. Accordingly, the YN proposes to focus on testing in-pond performance this first year, acclimating 10,000 wild-by-wild (WxW) steelhead in the pond, of which approximately 700 would be PIT-tagged.

Performance metrics would include in-pond survival, growth and condition, immigration from the pond, and any residualism in the pond. This test of in-pond performance would be used to decide whether to tag a greater proportion of steelhead in future years in order to estimate SARs and other longer-term metrics. Murdoch confirmed that the test would not appreciably affect the rearing density in the pond because the YN will be reducing coho numbers in the pond this year. She also said that she will check with Kris Petersen to confirm ESA coverage. The Hatchery Committees discussed this plan and agreed that it was consistent with the previously agreed-upon plan for YN acclimation sites.

*B. Steelhead at Wells and Kelt Reconditioning*

Keely Murdoch said that the YN has heard indirectly that Douglas PUD will not be supporting adult holding and live spawning of steelhead kelts at Wells Hatchery at this time. She asked Tom Kahler to comment on whether this was true. Kahler said that there were insufficient resources at Wells to accommodate the segregation of family groups necessitated by live spawning. Additionally, the proposed changes in Douglas' steelhead programs would substantially reduce the availability of wild steelhead for any kelt-reconditioning program. When asked about a rumor that Douglas PUD would not allow any new programs at Wells Hatchery, Kahler stated that higher level management at Douglas PUD is reviewing the use of Wells Hatchery, and is concerned about the widespread use of the hatchery for programs other than those required by the Wells HCP or authorized through formal agreements. Bill Gale suggested that the YN get in touch with U.S. Fish and Wildlife Service (USFWS) about potentially using Winthrop Hatchery for this program.

*C. Spring Chinook Forecast and Removal of Hatchery Fish at Tumwater Dam*

Keely Murdoch brought up the topic of removal of surplus fish at Tumwater Dam. She asked for an update from Joe Miller on his discussions with Court Hill (engineer at Chelan PUD) on some conceptual drawings that she said he agreed to create after the last Tumwater Working Group meeting. Murdoch said that the YN would not be against watershed distribution of carcasses as a use of these surplus fish, but before agreeing to that, they would want to explore possibilities for human consumption as opposed to carcass outplants. Miller responded that for 2010, the 1196 permittees do not have the "take" authority to implement adult management/remove excess hatchery fish as described in the HGMP. He then said that he would be meeting with Hill next week to examine possibilities discussed at the past Working Group meetings. Miller said that he planned to reconvene the Working Group in early 2010.

*D. PIT-Tag Detection at Zosel Dam*

Keely Murdoch updated the group that next spring, CRITFC will be installing a PIT-tag detection array at Zosel Dam. Joe Miller asked whether she knew about the configuration of this array. She said she would contact Jeff Fryer at CRITFC for additional details, and would send this information to Joe Miller.

#### **IV. WDFW**

##### *A. Impact of Tiered vs. Open Fisheries on pHOS Control*

Bob Pfeifer reviewed with the Hatchery Committees a series of spreadsheets and graphs that showed estimated changes in PNI that are possible under a variety of harvest assumptions and historic run sizes in the Wenatchee and Methow basins. He said that Jeff Korth wanted the Committees to be aware that it is theoretically achievable to meet PNI levels at or near the 0.67 goal when harvest and removal of hatchery fish at dams are implemented together. Pfeifer will send these files to the Committees for their information.

#### **V. Chelan PUD**

##### *A. DECISION ITEM: Rock Island HCP Hatchery Committees SOA on Reduction of Chiwawa Spring Chinook Production Level to 298,000 Smolts*

Joe Miller introduced the Rock Island Hatchery Committee SOA for reduction of Chiwawa spring Chinook production levels to 298,000 smolts. Keely Murdoch had provided some edits and the Hatchery Committees discussed these. The Committees approved the SOA with these edits and others suggested at today's meeting (Attachment B).

##### *B. Hatchery Program Summary*

Joe Miller updated the group that Chelan PUD will be providing a memo to the HCP Hatchery and Tributary Committees stating that the PUD anticipates removing the cobble accumulated immediately upstream of the Dryden Facility. Chelan PUD had previously informed the Committees that bedload from Highway 97 washouts has accumulated at the right bank of the Wenatchee River just downstream of the confluence of Peshastin Creek, causing potential passage issues at low flows.

##### *C. Review of Monthly Monitoring and Evaluation (M&E) Reports*

There were no issues to discuss at today's meeting.

##### *D. Discussion of Future Chiwawa Water Right*

Joe Miller updated the group on a future water right for the Chiwawa acclimation ponds and hatchery. He provided a summary memo describing the water right need as 16 cubic feet per second (cfs) during fall and early spring and 21 cfs for the remainder of the year. The current water right is 12 cfs in fall and early spring with intermittent increases. He said that the next steps are for him to check with NMFS habitat staff and then to ask for each HCP

signatory party to send a letter of support to Washington State Department of Ecology (Ecology) following the next Hatchery Committees meeting.

*E. Moving 200,000 WxW steelhead from Turtle Rock to Chiwawa Hatchery*

Joe Miller said that when space is available at Chiwawa Hatchery, Chelan PUD would like the Hatchery Committees to consider moving 200,000 WxW steelhead from Turtle Rock to the Chiwawa Hatchery for acclimation and release. This move would bring the total steelhead count at Chiwawa up to 240,000 (currently, 40,000 steelhead are being reared at the Chiwawa Facility in a pilot water re-use study). Kirk Truscott questioned whether or not rearing 200,000 steelhead at Chiwawa Facility would compromise the ability to address segregated rearing of higher ELISA spring Chinook and whether or not dividing one of the two existing ponds at Chiwawa to rear higher ELISA spring Chinook and steelhead was still a consideration by the PUD. Miller responded that it was still a option, but that the PUD did not have a formal PUD position in regards to the pond division. The Committees agreed to consider this when the space is available.

*F. Chelan Falls Facility and Yearling Chinook*

At the last meeting, Petersen agreed to evaluate options for ESA coverage for the construction and operation of the Chelan Falls yearling Chinook Acclimation project. (Petersen was unable to attend today's meeting.) Joe Miller indicated that Chelan PUD wanted to make sure the Hatchery Committees continued to support this program, and wanted to be able to use this support to encourage NMFS to expedite permitting. The Committees confirmed that they continue to support this program. Mike Schiewe agreed to check with Petersen to verify progress on this last meeting's action item.

## **VI. Colville Tribes**

*E. Update on Summer Chinook at Bonaparte Pond*

Kirk Truscott updated the group that summer Chinook currently on station at Bonaparte Pond have been treated for bacterial gill disease. Truscott said that fish densities and flow dynamics in the pond may have contributed to the mortality, even though the loading densities were within acceptable rearing criteria. The pond initially held 200,000 fish this year; that number is now 193,000. Last year, there were 100,000 fish in the pond.

## **VII. HCP Administration**

### *A. Next Meetings*

The next scheduled Hatchery Committees meetings will occur as follows: January 20, February 17, and March 17, all at the Chelan PUD offices in Wenatchee. There will be a conference call on January 15<sup>th</sup> to discuss the Twisp steelhead RSS, Wells steelhead HGMP and Methow spring Chinook HGMP.

### **List of Attachments**

Attachment A – List of Attendees

Attachment B – Rock Island HCP Hatchery Committees SOA on Reduction of Chiwawa Spring Chinook Production Level to 298,000 Smolts

**Attachment A**  
**List of Attendees**

---

<b>Name</b>	<b>Organization</b>
Mike Schiewe	Anchor QEA, LLC
Ali Wick	Anchor QEA, LLC
Joe Miller *	Chelan PUD
Kirk Truscott *	Colville Confederated Tribes
Tom Kahler *	Douglas PUD
Shane Bickford *	Douglas PUD
Greg Mackey	Douglas PUD
Todd Pearsons (by phone)	Grant PUD
Bill Gale *	USFWS
Bob Pfeifer *	WDFW
Mike Tonseth (morning only)	WDFW
John Penny	WDFW
Keely Murdoch *	Yakama Nation

\* Denotes Hatchery Committees member or alternate

**Rock Island HCP Hatchery Committee  
FINAL Statement of Agreement on  
Reduction of Chiwawa Spring Chinook Production Level to 298,000 smolts  
December 16, 2009 meeting**

**Statement**

The Rock Island HCP Hatchery Committee (HC) agrees that Chelan PUD's (District) production requirement for Chiwawa spring Chinook will be reduced from 672,000 to 298,000 from brood year 2010, subject to the condition described below, until subsequent modification by *Periodic Adjustment of District Hatchery Level* (RI HCP § 8.4.3). This change implements the 2009 HGMP production level agreed to by the HC.

As consideration for this reduction, beginning in 2010, the District agrees to fund a multiple-year pilot study that determines the efficacy of the Parental Based Tagging (PBT) methodology. The study may be terminated prior to 2013 if a definitive conclusion concerning the PBT approach is reached by the Hatchery Committee. The District will coordinate with interested Committee members and Grant PUD to develop a pilot study protocol.

**Background**

PBT offers the potential to identify returning adult spring Chinook to stream (or spawning aggregate) of origin in the Wenatchee Basin. If successful, this capability could enhance the management and cost-effectiveness of broodstock collection for the mitigation programs funded by Chelan PUD and Grant PUD. This SOA serves several purposes: (1) implement the HC approved HGMP production level for spring Chinook, (2) formalize brood stock collection plan before Chiwawa spring chinook brood stock are collected in 2010, (3) provide notification related to changes in production (e.g., HCP Coordinating Committee and the *US v. Oregon* Policy Committee), and (4) provide adequate time to develop a plan for piloting PBT in 2010.

The Chiwawa Spring Chinook HGMP specifies the program reduction in § 1.8.2:

*Currently, Chelan PUD operates a 672,000 smolt program. It is anticipated that the program will be reduced to 298,000 smolts, with HCP Hatchery Committee concurrence and consistent with the adaptive management principles outlined in the HCP, in 2010 (broodstock collection for 298,000 smolts would begin in 2010), as some program components are proposed to be tested in 2010 (see Section 7.2).*

As noted in the paragraph above, the HGMP anticipates implementing the program change and testing PBT concurrently in 2010. This document represents the instrument to accomplish both.

# APPENDIX C

## HABITAT CONSERVATION PLAN

### TRIBUTARY COMMITTEES MEETING

### MINUTES

---

Note: The Tributary Committees met only in February through May, July, August, and November.



# Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 12 February 2009

---

**Members Present:** Dale Bambrick (NOAA-Fisheries), Dennis Beich (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan<sup>1</sup> (USFWS), Lee Carlson (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Others Present:** Becky Gallaher (HCP Project Coordinator), Joe Miller (Chelan PUD), Ben Lenz (Grant PUD), Denny Rohr (PRCC Habitat Subcommittee facilitator), and Alyssa Buck (Wanapum Tribe). Julie Morgan (UCSRB Executive Director), Casey Baldwin (UCRTT Chair), and James White (UCSRB Data Steward) joined the last hour of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Wenatchee, Washington, on Thursday, 12 February 2009 from 9:00 am to 12:15 pm.

## **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda with the following additions/changes:

- Addition of three Information Update items.
- Addition of a Small Project Proposal.

## **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 19 December meeting notes with revisions suggested by Tom Kahler and Keith Truscott.

## **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- The Wildhorse Spring Creek Conservation Easement Project is complete and the Committees should receive a final report soon.
- Landowner agreements are being secured for the Entiat PUD Canal System Conservation Project. Only two landowner agreements need to be signed. NEPA Section 106 surveys and consultation have been completed for wells and piping connections. The PUD made several repairs to the leaking pipeline along the Entiat River Road in December. The sponsor intends to dig test wells in April and May.

---

<sup>1</sup> David joined the first part of the meeting via conference call.

- For the Roaring Creek Flow Enhancement and Barrier Removal Project, a map of the proposed transfer was submitted to the U.S. Fish and Wildlife Service Realty Group in November. The Service reviewed the land-transfer process with Cascadia Conservation District and the Entiat National Fish Hatchery. Cascadia is completing the necessary Project Summary for Service approval. Cascadia will be developing and soliciting a surveying contract for land transfer that will be completed in March to April. After the survey is complete, Cascadia will complete the Certificate of Exemption and Boundary Line Adjustment.
- Anchor Environmental and the Bureau of Reclamation have completed conceptual designs for the Below the Bridge Project. In addition, the Forest Service and Reclamation have completed the Biological Assessment and Cascadia Conservation District has completed NEPA Section 106 surveys and consultation for the project. Streamlined Fish Enhancement and JARPA will be submitted on 13 February. Cascadia is currently working with Washington Department of Fish and Wildlife to develop a Land Use Permit.
- During autumn 2008, Cascadia planted about 4,900 plants (about 4.9 acres) on seven properties under the WRIA 45/46 Riparian Restoration Project.
- Cascadia Conservation District will be meeting with the Natural Resources Conservation Service engineer to develop a new location and placement of the log boom for the Entiat Canal Log Boom Installation Project.
- Cascadia Conservation District will be using funds under the Entiat Instream Structures Engineering and Permitting Project to develop a new, single-wing diversion design. The original cross-vane design was not acceptable to one of the landowners.
- The Salmon Recovery Funding Board (SRFB) has not accepted the updated designs for instream structures under the Keystone Canyon Habitat Restoration Project. The Yakama Nation is currently redesigning the project and plans to begin construction in July to September. If the Board does not accept the design developed by the Yakama Nation, the contract will be turned back to the SRFB.

#### **IV. Installments to the Wells Plan Species Account**

Tracy Hillman noted that Douglas PUD will be making a contribution to the Wells Plan Species Account in January of 2010. According to Section 7.4.1 of the Wells Hydroelectric Project Anadromous Fish Agreement and Habitat Conservation Plan (HCP), “[f]ive years after the initial contribution to the Plan Species Account, the District shall do one of the following: 1) make annual payments of \$176,178 (2%) in 1998 dollars as long as the Agreement is in effect; or 2) provide an up front payment of \$1,761,780 (2% for 10 years) in 1998 dollars, but deducting the actual cost of bond issuance and interest.” The Wells HCP does not specify that the Tributary Committee shall choose between the funding options. Rather, Section 7.4.5 states only that the Fisheries Parties (FP) shall choose between the funding options.

At the January meeting of the Wells Coordinating Committee, Tom Kahler notified the FP representatives that, within the next few months, the FP must choose between contribution options so that Douglas PUD has the necessary time to make the funds available by the end of January 2010. The FP representatives to the Coordinating Committee indicated that they would consult within their respective entities regarding the contribution options, but all agreed that they wished to have the input of their Tributary Committee representative on this matter.

Tom Kahler discussed the pros and cons of the two options (see Attachment A). In short, the annual contributions over ten years surpass the value of the lump-sum payment (\$1,442,420 vs. \$2,655,193; see calculations in Attachment A). ***Therefore, the Wells Tributary Committee unanimously agreed that Douglas PUD should make annual payments to the Wells Plan Species Account over the ten year period beginning in 2010.*** Tom will convey this decision to the Coordinating Committee for their consideration at their February 24 meeting.

## **V. Updates to Policies and Procedures for Funding Projects and Operating Procedures**

Tracy Hillman reported that every year the Committees are to review the Tributary Fund Policies and Procedures for Funding Projects and the Tributary Committee Operating Procedures. The intent is to edit and update the documents. For example, under the Tributary Committee Operating Procedures, the document still identifies Chris Parsons as the WDFW representative on the Committees.

Tom Kahler pointed out that under Section 6.8 of the Policies and Procedures for Funding Projects, the Committees are to request an external audit of all financial transactions made by the Committees. Unless agreed to otherwise, the audit will be conducted annually. This has not happened in the past. The Committees proposed that an audit be conducted in 2009 and every three to five years thereafter, depending on the cost. Keith Truscott agreed to talk with folks in the Chelan PUD Finance Department to determine what is involved in hiring an external auditor and the cost of the audit. Keith will report back to the Committees in March.

The Committees agreed to review the two documents and bring their edits, comments, and updates to the March meeting.

## **VI. Consolidation of Meetings/Processes**

Tracy Hillman reported that there are so many meetings conducted in the Upper Columbia that members have little time to work on assignments. Therefore, there is a need to combine meetings or agenda items that are common to different processes. For the HCP Tributary Committees, it makes sense to combine efforts with the Priest Rapids Coordinating Committee (PRCC) Habitat Subcommittee. However, because the HCP Tributary Committees and the PRCC have different policies and procedures, the groups cannot be combined. Therefore, Tracy proposed the following:

1. After agenda items are identified, Tracy Hillman, Denny Rohr, and Becky Gallaher will work together to identify common agenda items (items that overlap in both groups).
2. The agenda for the Tributary Committees will be set so that items common with the PRCC will occur at the end of the Committees meeting.
3. The PRCC will join the Tributary Committees to discuss those items that are common to both groups.
4. Following the Tributary Committees meeting, the PRCC Habitat Subcommittee will meet to discuss items that are relevant only to the PRCC.
5. Meeting minutes for the joint agenda items will be shared between the two groups.

The Committees agreed that combining common agenda items was appropriate and will rely on Tracy and Denny to organize agendas and schedules.

**VII. Information Updates**

The following information updates were provided during the meeting.

1. Approved Payment Requests in January:

Rock Island Plan Species Account:

- \$495.83 to Chelan County PUD for fourth-quarter administration in 2008.
- \$190.00 to LeMaster and Daniels for fourth-quarter financial management in 2008.
- \$2,083.35 to the Colville Confederated Tribes for completion of the conservation easement and draft baseline and stewardship plan for the Wildhorse Spring Creek Conservation Easement Project.

Rocky Reach Plan Species Account:

- \$422.85 to Chelan County PUD for fourth-quarter administration in 2008.
- \$190.00 to LeMaster and Daniels for fourth-quarter financial management in 2008.

Wells Plan Species Account:

- \$294.22 to Chelan County PUD for fourth quarter administration in 2008.
- \$165,127.70 to the Okanogan Nation Alliance for removal of a culvert, excavation of test pits, examination of soil types and stability, removal of concrete refuse, and installation of two additional 40-cm x 10-m culverts for the Okanogan River Restoration Initiative Project.

2. Approved Payment Requests in February:

Rock Island Plan Species Account:

- \$61,034.85 to the Colville Confederated Tribes for the conservation easement payment and transaction fees for the Wildhorse Spring Creek Conservation Easement.

Wells Plan Species Account:

- \$78.47 to the Methow Conservancy for species tags, photos, and height data for ten cages on the Luvon property under the Riparian Restoration and Regeneration Initiative.
- \$107.49 to the Okanogan Conservation District for conducting their final site visit and preparing the final report on the Lower Beaver Creek Livestock Exclusion Project.

3. Tracy Hillman reported that he and Tom Kahler attended the Entiat Implementation and Monitoring Workshop on 2 February. The major impetus of this workshop was to discuss how to pull off using the Entiat as an Intensively Monitored Watershed, which requires agreement on the study design and buy-in by all parties, including funders, implementers, and monitoring entities. The specific objectives of the workshop were to: (1) gain a better understanding of the long-term monitoring plans in the sub-basin, (2) identify specific types of projects for implementation in the short- and long-term that are consistent with the monitoring plans; and (3) agree on an implementation approach that is consistent with

biological priorities, feasible to implement, and leads to useful monitoring information for the region.

Tracy indicated that the monitoring approach in the Entiat will focus on population-scale assessments (i.e., the effects of tributary habitat restoration actions will be assessed at the population scale). Attempts to document the effectiveness of habitat action types at the project scale will be limited because of poor control of when and where habitat actions will be implemented and a lack of independence among habitat action types and their reference/control areas. Chris Jordan, Integrated Status and Effectiveness Monitoring Program (ISEMP) lead, will put together an approach or approaches for monitoring the effectiveness of restoration actions in the Entiat.

Tom noted that the workgroup also discussed the need to have coordination and collaboration among all entities involved in monitoring and implementation of habitat actions in the Entiat. Tracy will keep the Committees informed on updates from the Entiat.

4. Tracy Hillman reported that he and Becky Gallaher have completed Section 2.6 (Tributary Committees and Plan Species Accounts) of the Annual Report of Activities under the Anadromous Fish Agreement and Habitat Conservation Plan for each hydroelectric project. Members of the Committees should soon receive the draft reports for their reviews. The final reports will be submitted to the Federal Energy Regulatory Commission in April.
5. Tracy Hillman reported that he received from Douglas PUD the 2009 Action Plan for the Wells HCP. The Action Plan for the Wells Tributary Committee is as follows:

Annual Report – Plan Species Account Status

- Draft to Committee: February 2009
- Approval Deadline: March 2009
- Period Covered: January to December 2009

2009 Funding-Round Review and Funding Decisions

- RFP: To be determined (typically March)
- Approval Deadline: To be determined (typically December)

After the meeting, Keith Truscott provided the following draft information for both the Rocky Reach and Rock Island Tributary Committees:

- Plan Species Account Deposit: January 2009
- Project solicitation: To be determined (typically March)
- Project approval deadline: To be determined (typically December)
- Implementation: Ongoing

6. Tracy Hillman indicated that he has received requests from sponsors to attend the Tributary Committees meetings. When the request comes in late (within two days of the meeting), Tracy indicated that he denies the request to attend the meeting because there is not enough time to consult with each member. For requests made well in advance of the meeting, however, Tracy secures the approval of all Committee members. Although the

requests are not frequent, Tracy asked for guidance from the Committees on how to handle the requests.

The Committees indicated that the Chair has the authority to approve or deny a request by a sponsor or other entity to attend a Committees meeting. However, the visitor must understand that they will be asked to leave when the Committees go into executive session.

7. Tracy Hillman reported that the National Fish and Wildlife Foundation and the SRFB have announced requests for proposals from the Chelan County Community Salmon Fund. The Chelan County Community Salmon Fund awards grants of up to \$75,000 for small-scale, community-based restoration projects that reflect the goals of local salmon recovery strategies. The goals of the Fund are to:
  - Fund habitat protection and restoration projects that have a substantial benefit to watershed health and are consistent with the Upper Columbia River Salmon Recovery Plan.
  - Encourage landowners, business owners, and community groups to become engaged in salmon habitat conservation and stewardship.
  - Stimulate creativity and leadership among various constituencies to address conservation needs, especially farmers, rural forest landowners, suburban homeowners, businesses, and industries.

Applications for the Chelan County Community Salmon Fund are due on 4 March 2009.

8. Tracy Hillman reported that money from the economic stimulus package may become available for fish and wildlife habitat restoration on private lands via the U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program (note that this is a technical assistance program that has assistance monies; it is not a granting program). The purpose of the funding is to accomplish important ecological goals and provide employment opportunities in the local communities. More specifically, the goals are to:
  - Preserve and create jobs and promote economic recovery.
  - Assist those most impacted by the recession.
  - Provide investments needed to increase economic efficiency.
  - Invest in transportation, environmental protection, and other infrastructure.

Preference will be given to projects that can be started and completed expeditiously. It appears that about \$1.1-3.3 million will be available in Region 1.

On a related note, Dale Bambrick reported that money has been added to the Open Rivers Initiative for passage projects.

9. Tracy Hillman reported that the Upper Columbia Salmon Recovery Board (Board) will be hosting a 2009 Regional Technical Team Analysis Workshop. The purpose of the workshop is to provide information and data to assess progress in recovery of ESA-listed species in the Upper Columbia and to improve the implementation of future recovery actions. The objectives of the workshop are to:
  - Provide the current status of Upper Columbia populations and ESUs/DPSs.
  - Provide technical information on project effectiveness.
  - Assess deviations from targets or anticipated results.

- Provide recommendations for improvements to management actions and policies where appropriate.

The Board has proposed the following timelines:

- Two-Day Workshop in November 2009 (audience includes Regional Technical Team, scientific colleagues, and technical staff from the Watershed Action Teams).
- Workshop summary document released in February 2010.
- One-Day Workshop in March 2010 (audience includes Watershed Action Teams, public, policy makers, fish and land co-managers, and project sponsors).
- Adaptive Management Workshop in summer or fall 2010 (audience includes Watershed Action Teams, public, policy makers, project sponsors, and fish and land co-managers).

Tracy will provide the Committees with more information as it becomes available.

#### **VIII. Review of SRFB/General Salmon Habitat Program Application Forms**

The Committees reviewed the SRFB application form, which was also used by the Committees in 2008 for General Salmon Habitat Program proposals. Although the Committees identified much redundancy in the proposals, they were satisfied with the information requested in the application forms. That is, the information requested in the application form provided sufficient information to evaluate the proposals. It was suggested that the applications include more detail in the budget/cost estimates. The Committees acknowledged, however, that more detailed cost information could be requested by the Committees following the initial review of applications and during presentations.

#### **IX. Review of Small Projects Proposal**

The Committees received a Small Projects Program proposal from the Okanogan Conservation District titled, *Legacy Park Stream Restoration Project*. Because the Committees received the application the day before the meeting, they did not have time to review the application in detail. Therefore, review of the application was tabled until the March meeting. However, the Committees did request that the sponsor provide lengths, widths, and areas, of the riparian zone that is proposed for treatment along Bonaparte Creek. Tracy Hillman will request this information from the Okanogan Conservation District.

#### **X. Upper Columbia Salmon Recovery Board Update**

Julie Morgan (UCSRB Executive Director), Casey Baldwin (UCRTT Chair), and James White (UCSRB Data Steward) provided the Committees with updates on activities proposed by the Upper Columbia Salmon Recovery Board in 2009. What follows is a summary of information provided by each individual.

##### **Julie Morgan (Executive Director):**

Julie gave a brief presentation on the Board's goal of "Improving Returns on Investments." She indicated that the Board has identified six key tasks:

- Support Collaborative Decision Making

- Refine and Manage the Recovery Plan
- Coordinate Implementation and Reporting
- Coordinate Monitoring and Adaptive Management
- Coordinate with Public, Tribes, and Agencies
- Develop Financing Plan for Operation and Implementation

Julie then described the habitat adaptive management framework (described in Appendix Q in the Recovery Plan) adopted by the Board. The framework consists of two major components: (1) monitoring, technical review, and analysis and (2) plan management and outreach. Under the monitoring, technical review, and analysis component, the framework links monitoring, data compiling, and evaluation with design and implementation. Researchers, co-managers, monitors, and technical review teams are involved with this component. Under the plan management and outreach component, information from monitoring and evaluation is communicated to the Watershed Action Teams (WATs), co-managers, federal agencies, and the public. These entities then adjust the plan (if necessary), which is used to guide future design and implementation of habitat restoration actions.

Julie noted that the Board convened an Implementation Team (IT), which is responsible for facilitating the implementation of the Recovery Plan. The purpose of the IT is to:

- Promote coordination of recovery actions across watersheds to increase effectiveness and efficiency,
- Identify issues of implementation and develop recommendations for the Board's consideration,
- Conduct a periodic process audit of the adaptive management framework to evaluate regularly the overall efficacy of the framework's process flow, and
- Compile an annual summary of plan progress and implementation actions for the Board.

The IT meets regularly to coordinate funding sources, coordinate updates to the Recovery Plan implementation schedule, and coordinate monitoring and adaptive management of the Recovery Plan. The Implementation Team has no regulatory or enforcement functions.

There are five WATs working within the Upper Columbia whose role is to assist in updating the implementation schedule of actions, ensure a coordinated and sequenced implementation of recovery actions in their respective watershed, and to engage in the adaptive management framework. Each WAT has a lead person responsible for helping to ensure coordination with the IT and the Board. The five WATs are:

1. Wenatchee Subbasin: Habitat Subcommittee of the Wenatchee Watershed Planning Unit.
2. Entiat Subbasin: Habitat Subcommittee of the Entiat Watershed Planning Unit.
3. Methow Subbasin: Methow Restoration Council.
4. Okanogan Subbasin: Okanogan Restoration Council.
5. Douglas County Watersheds: Foster Creek-Moses Coulee Watershed Planning Unit.

Julie identified some of the challenges before the Board. They include resilience of decisions, All-H coordination, funding coordination of large-scale projects, and funding infrastructure for capacity, O&M, and outreach. Dale Bambrick asked Julie what role the Board expects to play in All-H coordination. Julie indicated that the Board understands that they are non-regulatory, but nevertheless would like to be in a position to report actions that are inconsistent with the recovery



plan. The Board also wants to be in a position to know what is happening in other venues so they can help the region focus on the greatest threats.

Lastly, Julie summarized the Board's 2009 Work Plan (see Attachment B), and funding coordination and development of the three-year implementation work plan (see Attachment C).

**Casey Baldwin (RTT Chair):**

Casey gave a brief update on the work of the RTT. The RTT has three main functions:

- Recommend region-wide approaches and priorities to protect and restore salmonid habitat.
- Develop and evaluate salmonid recovery projects.
- Develop and guide salmonid recovery monitoring plans.

Under the first function, the RTT will participate in the development of the three-year work plans, update the Biological Strategy, and plan for the 2009 RTT analysis workshop. Under the second function, the RTT will review SRFB proposals, General Salmon Habitat Program proposals (at the request of the Tributary Committees), Community Salmon Fund proposals, and provide other technical reviews as requested by project sponsors or the Board. Finally, under the third function, the RTT has established a Monitoring and Data Management Committee (MaDMC) that provides coordination and guidance to the Integrated Status and Effectiveness Monitoring Program, the Okanogan Basin Monitoring and Evaluation Program, and monitoring in the Methow. In addition, the MaDMC reviews the Data Steward work plan and prioritizes monitoring data gaps.

**James White (Data Steward):**

James gave a brief update on adaptive management, RME, and data management. He noted that he and others are currently preparing for the RTT Analysis Workshop, which is hosted by the Board and RTT and will occur in November 2009 and early spring 2010 (see Item #9 under Information Updates). He indicated that there are four major components in planning the workshop: (1) logistics, (2) data compilation, QA/QC, and delivery, (3) key questions and analysis, and (4) planning for the future. James is responsible for the last three components and has been working with all those involved with data collection in organizing and standardizing the flow of data in the Upper Columbia.

## **XI. Next Steps**

The Tributary Committees will meet on Thursday, 12 March at Chelan PUD in Wenatchee. Tentative agenda items include:

- Review of Policies and Procedures for Funding Projects and Tributary Committee Operating Procedures.
- Review of Small Projects Application.
- External audit.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

## Attachment A

This worksheet contemplates the pros and cons of the two options available in the Wells HCP for future Douglas PUD contributions to the Wells Plan Species Account. Section 7.4 of the Wells HCP describes the funding of the Wells Plan Species Account (account) and details the disbursement options. The account was established by a lump-sum contribution in the last quarter of 2004. The HCP presents two options for subsequent contributions, as described in Section 7.4.1.

7.4.1 The District shall make an initial contribution of \$1,982,000 in 1998 dollars to the Plan Species Account. Five years after the initial contribution to the Plan Species Account, the District shall do one of the following: 1) make annual payments of \$176,178 (2%) in 1998 dollars as long as the Agreement is in effect; or 2) provide an up front payment of \$1,761,780 (2% for 10 years) in 1998 dollars, but deducting the actual cost of bond issuance and interest.

The last sentence of Section 7.4.1 describes deductions from the 10-year lump sum that include interest and the cost of bond issuance. The following exercise will assist us in determining the magnitude of these deductions. Assuming a hypothetical amount for the purpose of calculations, how much would remain from a \$2,000,000.00 lump-sum contribution after interest and bond-issuance costs are subtracted?

Annual debt service on \$2,000,000 would be \$527,580, assuming a 4.5% annual rate and a 10-year term. Bond-issuance costs are typically between 1% and 2% of the bond amount. Thus, bond-issuance costs would be \$30,000, assuming a 1.5% cost on a \$2,000,000 bond. Combined, the total deductions from the 10-year lump-sum payment would be \$557,580, for a final contribution of \$1,442,420 (Table 1.).

**Table 1.** Calculations used to estimate the value of option 2 under Section 7.4.1 of the Wells HCP (up-front lump-sum payment)

\$2,000,000	Hypothetical Contribution on January 31, 2010
\$527,580	Estimated Total Debt Service (10-ys @ 4.5%)
\$30,000	Estimated Bond-issuance Cost (1.5% of \$2,000,000)
<b>\$1,442,420</b>	<b>Total 10-year Lump Sum After Deductions</b>

Funds in the Wells Plan Species Account are presently held in a money market account. Of course, interest would accrue on the lump sum while held in the account, but rates paid on such accounts are typically much lower than interest charged for borrowing. Therefore, depending upon how much of the contribution was held in the money market account and over what time period, the actual value obtained from the lump-sum contribution would exceed \$1,442,420, but would never approach the value obtained from annual payments (see below).

For comparison purposes, how much would \$176,178 (1998 dollars) annual payments yield over 10 years?

Using the US Department of Labor consumer price index (CPI) for the last ten years, I extrapolated the future value of the annual contributions (applying the 1999 CPI to 2009, 2000 CPI to 2010, etc). Starting with the \$176,178 as the initial 1998 dollar amount, and using the last

10 years (most recent 10 years available) of CPI values, I summed the estimated annual contributions that would be contributed over the next ten years (Table 2). For this exercise, the contributions begin in 2009 instead of 2010, as will occur in reality. With annual increases in the CPI, the annual contributions steadily increase, and without the deduction of the interest and bond-issuance costs as apply in the lump-sum option, the annual contributions over 10 years dramatically surpass the value of the lump-sum payment (\$1,442,420 vs. \$2,655,193).

**Table 2.** Calculations used to estimate the value of 10 years of annual payments of \$176,178 in 1998 dollars to the Wells Plan Species Account, using CPI values from the most recent 10 years.

<b>CPI Year</b>	<b>CPI</b>	<b>Future Year</b>	<b>Estimated Future Contribution</b>
1999	1.022086	2009	\$234,629.97
2000	1.056442	2010	\$242,516.69
2001	1.086503	2011	\$249,417.58
2002	1.103681	2012	\$253,360.94
2003	1.128834	2013	\$259,135.14
2004	1.158896	2014	\$266,036.02
2005	1.19816	2015	\$275,049.42
2006	1.23681	2016	\$283,921.98
2007	1.272037	2017	\$292,008.68
2008	1.303	2018	\$299,116.59
<b>10-year Total</b>			<b>\$2,655,193.02</b>

## Attachment B

### Upper Columbia Salmon Recovery Board 2009 Work Plan Summary December 18, 2009

2009 Tasks Throughout the Year
<ul style="list-style-type: none"> <li>• Facilitate and support collaborative decision-making</li> <li>• Development of products for the Upper Columbia Salmon Recovery Forum (UCSRF)</li> <li>• Continue outreach to federal and state agencies and partners</li> <li>• Improve outreach to local groups, focusing on success stories (e.g. irrigation districts, local governments, business interests) - WATs will lead and UCSRB staff will support when necessary</li> <li>• Facilitate next round of project funding (March thru December)</li> <li>• Funding coordination</li> <li>• Facilitate first round of UC adaptive management cycle</li> </ul>
January thru March
<ul style="list-style-type: none"> <li>• Development of the 3-year work plans (funding coordination)</li> <li>• Outreach on SRFB request to State for funding recovery</li> <li>• Development of UCSRB operations budget and secure funds (thru June)</li> <li>• UCSRB DC visits (March)</li> </ul>
April thru June
<ul style="list-style-type: none"> <li>• Presentation to federal caucus</li> <li>• Presentation to Northwest Power and Conservation Council</li> <li>• FCRPS workshops (April)</li> <li>• Tour of UC for members of the federal caucus and others (June?)</li> <li>• UCSRB policies (e.g. personnel policies, executive director transition)</li> </ul>
July thru September
<ul style="list-style-type: none"> <li>• Convene first meeting of the UC Board of Trustees (September)</li> <li>• UCSRB 10 year birthday celebration (September)</li> <li>• Approve adaptive management framework narrative and monitoring &amp; evaluation plan</li> </ul>
October thru December
<ul style="list-style-type: none"> <li>• UC RTT Analysis workshop</li> <li>• Implementation report</li> </ul>
2010 Tasks
<ul style="list-style-type: none"> <li>• UC RTT Analysis workshop Phase II</li> <li>• Adaptive Management workshops</li> </ul>

**Attachment C**

To: Watershed Action Teams (WATs)  
UC Implementation Team (UC IT)  
UC Regional Technical Team (UC RTT)

From: Lee Carlson, Yakama Nation  
Bill Towey, Colville Tribes  
Julie Morgan, UCSRB  
Derek Van Marter, UCSRB  
Casey Baldwin, UC RTT

Re: Funding Coordination of Salmon Recovery Projects in the Upper Columbia and the Development of the Mid-Range Implementation Plan/3-Year Work Plan

Date: January 16, 2009

For the last two decades, salmon recovery funding in the Upper Columbia has ostensibly operated on an annual or biennial basis. Access to these annual funding sources has been competitive and dominated by single, discrete, project focused recovery actions that are commensurate with the short-term nature of funding commitments. During this time period, regional partners have completed numerous habitat improvement and restoration projects that have increased habitat access and to some extent improved habitat characteristics in the Upper Columbia. These single-project-focused actions have reopened areas of tributary habitat, preserved key habitat areas in perpetuity, and protected countless fry and smolts from entrainment in irrigation diversions.

While these single-project-focused actions have provided important contributions to recovery, they also have a limit. Specifically, many of the most cost-effective and immediately beneficial single-project-focused actions have already been identified, funded, and accomplished. Under these circumstances, there is a growing consensus among biologists, project managers, and the entities providing salmon recovery funding, that the greatest current opportunities for habitat restoration projects that will yield the greatest biological benefits are found in the yet to be addressed large-scale, multi-year, multi-million dollar recovery activities. By their very nature, these long-term projects are more difficult to design, fund, coordinate and implement.

It has also become increasingly clear that the Upper Columbia cannot achieve the recovery of listed species without these larger-scale projects. The fisheries co-managers of the Upper Columbia and the Upper Columbia Salmon Recovery Board (UCSRB) are in agreement that pursuing isolated opportunities, though still important in some instances, will generally yield diminishing results and that a comprehensive, coordinated, and strategic approach to restoration is warranted to meet the objectives as specified in the Upper Columbia Recovery Plan (see Yakama Nation memo date September 8, 2008).

To date, these long-term, reach level efforts have not been implemented in the Upper Columbia for a number of reasons. Not only do such projects require a high level of local and regional coordination, cooperation, and planning, but they require a long-term commitment of stable funding. Just as no rational building contractor would undertake a three-year construction project

with only one year of committed funding, salmon recovery project implementers are hesitant to begin large complex projects without funding commitments.

Perhaps for the first time, there is an opportunity in the Upper Columbia to overcome the long-standing hurdles to implementing large-scale, long-term projects. Two key events in the last few years have changed the landscape of the Upper Columbia in a way that creates the first real opportunity to implement these essential large-scale projects. First, the completion of the locally developed Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan (August 2007, UCSRB) provides a regionally and federally accepted framework for implementing coordinated recovery actions. The Recovery Plan provides an important roadmap towards implementation of priority habitat actions. Second, the recent multi-year funding commitments by federal agencies to implement the reasonable and prudent alternatives associated with Federal Columbia River Power System (FCRPS) – coupled with the multi-year funding agreements in the Columbia Basin fish accords – provides a genuine opportunity for stable funding sources over a multi-year period.

Under these new circumstances, essential large-scale recovery projects are a feasible reality in the Upper Columbia. To capitalize on this opportunity, the partners in the Upper Columbia need to focus, now more than ever, on coordinating their funding and recovery efforts. These large-scale projects often involve numerous voluntary commitments from multiple landowners, and government agencies. Although the current climate supports such projects, these actions cannot get off the ground without the necessary commitment to coordinate funding and planning efforts of the partners within the Upper Columbia.

Not only is additional coordination necessary to help mobilize large-scale projects, but additional coordination efforts are essential to closing funding gaps. Despite recent increases in funding commitments, current allocations still remain below projected recovery needs identified in the Implementation Schedules of the Recovery Plan. Increased coordination and development of large projects with demonstrable benefits will build the region's credibility and encourage funding entities that money is being well spent.

A number of funding entities are very committed to supporting recovery actions in the Upper Columbia, and to working with the Watershed Action Teams (WATs), Implementation Team (IT), and the Regional Technical Team (RTT). The priority of the UCSRB is to restore salmonid populations based on the VSP criteria and it recognizes that a strategic way to do so is through the development of a mid-range implementation/3-year work plan and coordinated funding. This will afford project sponsors greater certainty of funding commitments consistent with the duration of large-scale projects. Under the 2008 FCRPS BiOp and the tribes' fish accords, funds over a ten-year horizon will be available to the Upper Columbia. The UCSRB, WATs, IT, RTT, and our partners are in a position to define how these dollars are spent, guided by the Upper Columbia Salmon Recovery Plan. Through a series of working sessions, the UCSRB, RTT and WATs will develop the work plan and coordinate the available funds for restoration and protection of the Upper Columbia salmonids. Please note that we are not suggesting an abandonment of the past and current funding processes. Rather, through this approach, we anticipate making the current and future funding processes congruent with the need for funding larger and more complex projects. The proposed schedule for these working sessions is outlined below.

#### Overview of purpose and schedule to the WATs (January 2009)

In January, the UC Implementation Team Leader will introduce the purpose, tasks, and schedule at the Watershed Action Team meetings. Also confirm that the Implementation Schedules and the priority areas/reaches are updated and that the actions identified within are ready for expansion into a mid-range/3-year work plan.

<b>Tributary Subbasin</b>	<b>WAT</b>	<b>Date</b>	<b>Location</b>
Methow	MRC	Tuesday, January 20 <sup>th</sup>	Twisp
Wenatchee	WHSC	Wednesday, January 21 <sup>st</sup>	Leavenworth
Okanogan	ORC	Monday, January 26 <sup>th</sup>	Okanogan
Entiat	EHSC	Tuesday, January 27 <sup>th</sup>	Entiat

Between the January and February WAT meetings, the UC Implementation Team Leader and the WAT Leads will work with project sponsors to identify projects for inclusion in the updated implementation schedule.

Workshop #1 - Regional Technical Team Biological Priorities: In February, the RTT will present to the WATs the results of their effort to recommend the most biologically important reaches and actions. The WATs will reference this information in confirming that the projects currently proposed and in development are consistent with these biological priorities. Throughout February, the UC Implementation Team Leader and the WAT Leads will continue to work with project sponsors to identify projects for inclusion in the updated implementation schedule.

<b>Tributary Subbasin</b>	<b>WAT</b>	<b>Date</b>	<b>Location</b>
Methow	MRC	Tuesday, February 17 <sup>th</sup>	Twisp
Wenatchee	WHSC	Wednesday, February 18 <sup>th</sup>	Leavenworth
Entiat	EHSC	Thursday, February 19 <sup>th</sup>	Entiat
Okanogan	ORC	Monday, February 23 <sup>rd</sup>	Okanogan

Workshop #2 – Continued Implementation Schedule Updates and Development of Mid-range/3-year work plan (March, 2009)

In March, the WATs will continue to work on the first draft of the updated implementation schedule, including details on the next 3 years of projects will continue at the Watershed Action Team meetings. The purpose is to continue to update the implementation schedule with detailed information for the next 3 years (or more) of work. The March WAT meetings will be facilitated as workshops with RTT participation to provide technical guidance to the WATs using the RTT biological priorities report. The WATs will focus on identifying project sponsors and potential funding sources for each of the projects over the next three years. This information will be compiled into a 3-year work plan for discussion at the March Implementation Team meeting.

<b>Tributary Subbasin</b>	<b>WAT</b>	<b>Date</b>	<b>Location</b>
Methow	MRC	Tuesday, March 17 <sup>th</sup>	Twisp
Wenatchee	WHSC	Wednesday, March 18 <sup>th</sup>	Leavenworth
Okanogan	ORC	Monday, March 23 <sup>rd</sup>	Okanogan
Entiat	EHSC	Tuesday, March 24 <sup>th</sup>	Entiat

Workshop #3 – Continued Implementation Schedule Updates and Development of Mid-range/3-year work plan (April, 2009)

In April, the WATs will work on the second draft of the updated implementation schedule will continue at the Watershed Action Team meetings, particularly focused on incorporating feedback from the Implementation Team review of funding coordination. The April WAT meetings will be facilitated as workshops with RTT participation to provide technical guidance to the WATs. The focus will be on finalizing project details for the next three years and refining the funding coordination through the identification of fund sources and potential project sponsors.

<b>Tributary Subbasin</b>	<b>WAT</b>	<b>Date</b>	<b>Location</b>
Methow	MRC	Tuesday, April 15 <sup>th</sup>	Twisp
Wenatchee	WHSC	Wednesday, April 21 <sup>st</sup>	Leavenworth
Okanogan	ORC	Monday, April 27 <sup>th</sup>	Okanogan
Entiat	EHSC	Tuesday, April 28 <sup>th</sup>	Entiat

Finalize Updates to the Implementation Schedule and Mid-range/3-year work plan (May 2009)

In May the groups will finalize the implementation schedule updates and development of the mid-range/3-year work plan at the Watershed Action Team meetings. The May WAT meetings will be utilized to provide final input before the tables are finalized. UCSRB staff will use the mid-range/3-year work plan as an outreach tool to facilitate commitments from various funding entities.

<b>Tributary Subbasin</b>	<b>WAT</b>	<b>Date</b>	<b>Location</b>
Methow	MRC	Tuesday, May 19 <sup>th</sup>	Twisp
Wenatchee	WHSC	Wednesday, May 20 <sup>th</sup>	Leavenworth
Okanogan	ORC	Monday, May 25 <sup>th</sup>	Okanogan
Entiat	EHSC	Tuesday, May 26 <sup>th</sup>	Entiat



## Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 12 March 2009

---

**Members Present:** Dennis Beich (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Bob Rose<sup>1</sup> (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Others Present:** Becky Gallaher (HCP Project Coordinator), and Joe Miller (Chelan PUD). Ben Lenz (Grant PUD) and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the last hour of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Wenatchee, Washington, on Thursday, 12 March 2009 from 9:00 am to 12:10 pm.

### **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda with the following additions/changes:

- Addition of three Information Update items.

### **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 12 February meeting notes with revisions suggested by Tom Kahler, Dale Bambrick, and Tracy Hillman.

### **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- The Wildhorse Spring Creek Conservation Easement Project is complete and the Committees should receive a final report soon.
- Cascadia Conservation District would like to set up a budget with the Rocky Reach Committee for the \$150,000 that the Committee approved for the Below-the-Bridge Project. When the Committee approved the funds, they stipulated that the money would only be used for construction of the rock-wing dam (which will replace the existing push-up dam), the construction of the engineered log jam, and the restoration of the riparian community. The funds are not to be used to construct more boulder clusters or small woody debris structures. Cascadia, therefore, would like to know how much of the approved funds can be used for administration. The Committee decided that the ratio of

---

<sup>1</sup> Bob joined the first part of the meeting via conference call. Dale Bambrick was absent but indicated before the meeting that his vote on the Small Project Proposal would follow the recommendation of Chris Fisher.

the total administrative cost to the total cost of the project (\$398,998) would be multiplied by the Committee-approved amount (\$150,000) to estimate the administration budget for the portion of the project funded by the Committee. Becky indicated that she would provide that amount at the next meeting.

- Under the WRIA 45/46 Riparian Restoration Project, Cascadia Conservation District would like to shift some of the funds from landowner outreach to the gathering of native seed for riparian habitat restoration. The Rocky Reach Committee decided that they do not want funds that are allocated for outreach to be used to gather native seed. Rather, the Committee recommended that the sponsor submit a new proposal that requests funds for gathering seed and for raising plants for riparian restoration.
- The Salmon Recovery Funding Board (SRFB) has rejected the updated designs for instream structures under the Keystone Canyon Habitat Restoration Project. Cascadia Conservation District is currently looking for funds from other sources to cover the cost of the project. The Committees requested that the notes reflect the fact that Dale Bambrick was unsuccessful in convincing Marc Duboiski and Michelle Kremer with the SRFB that the replacement of rock barbs with wood was unfounded.

#### IV. Review of Small Projects Proposal

The Committees reviewed a Small Projects Program application from the Okanogan Conservation District titled *Legacy Park Stream Restoration Project*.

##### **Legacy Park Stream Restoration Project**

The purpose of this project is to improve water quality and salmonid rearing and spawning habitat within Bonaparte Creek by creating a filter strip of native vegetation adjacent to a stretch of Highway 97. The sponsor proposes to remove exotic vegetation (elm trees and noxious weeds) in an area of 2,000 ft<sup>2</sup> (100 ft x 20 ft) on the north side of the stream and 4,550 ft<sup>2</sup> (130 ft x 35 ft) on the south side of the stream. The exotic species will be replaced with grass filter strips consisting of water birch, red osier dogwood, snowberry, and woods rose. In addition, the sponsor proposes to design two information kiosks to educate the public about the negative impacts of poor water quality on fish habitat. The total cost of the project is \$22,370. The sponsor requested \$16,500 from HCP Tributary Funds. After careful consideration of the proposal, ***the Committees decided not to fund the project.***

Although the Committees appreciate projects that replace exotic species with native species and improve public understanding of habitat-fish relationships, the Committees were concerned that the proposed approach will reduce the stability of the streambanks and increase surface erosion during the first series of high-flow events. This is because the root system of the native vegetation will not be established well enough in the first few years to prevent erosion. In addition, the proposed project will likely result in a very small (immeasurable) improvement to water quality and rearing and spawning habitat for salmonids in Bonaparte Creek.

#### V. External Audit for Plan Species Accounts

Becky Gallaher reported that she talked with folks in the Chelan PUD Finance Department to determine what is involved in hiring an external auditor and the cost of the audit. The Finance Department advised the Committees to identify a Scope of Work (SOW) and submit it to local accounting firms for bids. The SOW should request an audit of dispersed funds, requested funds, and administrative costs. The intent is to make sure that payments from Plan Species Accounts

match payment requests. The Committees directed Becky and Tracy to put together a SOW and send it to local accounting firms before the next meeting.

Keith Truscott suggested that the Committees put together a brochure for the public that describes the projects funded by the Committees. The Committees directed Becky to look into the preparing a brochure.

## **VI. Updates to Policies and Procedures for Funding Projects and Operating Procedures**

Tracy Hillman asked Committees members for any edits, comments, or updates to the Tributary Fund Policies and Procedures for Funding Projects and the Tributary Committee Operating Procedures. Members identified a number of changes, which are identified in track changes in the two documents. Tracy will send the edited documents to the members for final review. During the April meeting, members will review edits and finalize the documents.

Joe Miller indicated that he will research what the maximum administrative cost should be for a project. He will provide this information to the Committees at the next meeting.

Dennis Beich reported that Casey Baldwin will be the WDFW alternate to the Tributary Committees. Keith Truscott indicated that he will be stepping down from the Committees later this year and Joe Miller will serve at the Chelan PUD representative on the Tributary Committees. Tom Kahler indicated that WDFW and CPUD will each need to submit a letter to the Coordinating Committees identifying their proposed alternates or replacements.

## **VII. Information Updates**

The following information updates were provided during the meeting.

### **1. Approved Payment Requests in March:**

Rocky Reach Plan Species Account:

- \$77.41 to Cascadia Conservation District for monitoring the Entiat PUD Canal Log Boom Installation Project.
- \$9,856.29 to Chelan County Treasurer for completion of the Harrison Side Channel Project and preparation of the final report.

Wells Plan Species Account:

- \$55,000 to Inland Professional Title for the Conservation Easement on the Neighbor-Vasquez Property under the Twisp River Riparian Project.
- \$580.15 to Okanagan Conservation District for site visit, assisting landowner with final receipts, taking photos, and preparing a final report on the Lower Beaver Creek Livestock Exclusion Project.

### **2. Tracy Hillman reported that Mike Schiewe (Chair of the HCP Coordinating Committees) sent letters to the Confederated Tribes of the Umatilla Indian Reservation and American Rivers inquiring about their interest in participating in a meeting with members of the HCP Coordination, Hatchery, and Tributary Committees. These parties were involved in negotiating the HCPs, but elected to not sign the HCPs. This is an opportunity for the Committees to provide them with a progress report on implementation, as well as give**

them an opportunity to ask questions of the Committees members. The two entities are to provide a formal response to the invitation by 31 March.

3. Tracy Hillman reported that the Upper Columbia Salmon Recovery Board and the Lead Entities will hold a debrief meeting of the Salmon Recovery Funding Board's ninth grant round. The meeting will be in Chelan on Tuesday, 31 March from 9:00 am to 2:00 pm. The Committees directed Becky Gallaher to attend the meeting. She will provide an update at the April meeting.
4. David Morgan reported on a large woody debris meeting that was convened by Mike Kaputa and Michael Kane with Chelan County in late February. The purpose of the meeting was to discuss possible liability issues associated with implementing habitat actions that include woody debris. Apparently, a user group from Lake Chelan has some issues with using woody debris in habitat restoration projects. Other groups from the Puget Sound area have also voiced concern. David noted that no other user groups in the Upper Columbia had an issue with the use of woody debris. Mike Kaputa intends to convene one or two more community workshops to discuss the issue of liability (e.g., who owns the wood). David noted that this could reduce the number of restoration projects that can be used to help recovery of listed species. David indicated that he will keep the Committees posted on upcoming workshops.
5. Chris Fisher provided an update on the Okanogan River Restoration Initiative (ORRI) Project. Chris noted that originally the ORRI project proposed the reconnection of two historic channel meanders or oxbows (Phase I) and the creation of two channel meanders (Phase II). Chris reported that during implementation, a dyke that channelized the Okanogan River was moved about 75 m from the channel to substantially increase floodplain area. The relocation of the dyke was completed in November 2008. Test pits were then dug within the area proposed for creation of two meanders. The test pits revealed that under an organic layer there was partially saturated, unconsolidated, coarse sand, which would likely not maintain lateral and vertical channel stability. The project manager, on-site engineer, project proponents, and regulatory agencies met in January to discuss modifications to the original plan.

The outcome of the meeting was to omit the creation of the upper-most meanders and reconnect a relic side channel immediately upstream and on the east side of the channelized reach. They decided that the side channel should contain flow year round. Using an upstream reference reach on the Okanogan River, they determined that during high flow conditions, the side channel should contain 40% of the total flow. During low flow conditions, the side channel should contain about 20% of the total flow. Gravels would be added to improve and increase spawning habitat and control structures would be added to maintain and mimic natural flows into the side channel.

David Morgan had several questions about the rationale for specific techniques that will be used under the modified design. Chris passed those questions to Chris Bull and Dr. Robert Newberry. David's questions and Dr. Newberry's responses are provided at the end of these notes as Attachment 1.

With regard to Phase II of the project, Chris noted that there are only two landowners involved. However, it appears that they are not interested in a conservation easement. Rather, they are currently more interested in selling their property.

Chris suggested that the Committees should think about a site visit sometime this fall when sockeye are spawning. The Committees decided to review possible dates for a site visit during the June or July meeting.

As a final note, Chris reported that the project is under budget and the sponsor may use some of the money for O&M.

6. Dennis Beich reported on the need for the Tributary Committees to coordinate with the Hatchery Committees on habitat and hatchery projects. Dennis noted that currently the Tributary Committees and Hatchery Committees are not trying to match actions, but perhaps should to improve overall benefits. For example, Dennis suggested that the Tributary Committees may want to focus habitat actions in areas where hatchery acclimation ponds have been proposed. This raised the question, is the intent to improve habitat to support or match hatchery production goals, or should hatchery production goals be matched to habitat availability? Dennis did not know, but indicated that this is why better coordination or communication within and among agencies and committees is needed to maximize benefits.

David Morgan and Keith Truscott indicated that the Tributary and Hatchery Committees had discussed this issue in the past, but, at that time, there was no formal decision to coordinate actions.

David indicated that the goal of the Tributary Committees should be to improve the quantity and quality of habitat for naturally produced fish. He noted that he would be disappointed if high quality habitat was lost because of hatchery fish acclimation. Tracy Hillman asked the Committees if they would be concerned if an off-channel habitat project they funded was used as a hatchery acclimation site. All members present indicated that they would be disappointed if that occurred (note, Dale Bambrick and Bob Rose were not present during this discussion). Tom Kahler pointed out that artificial rearing facilities, remote site incubation systems, and supplementation projects are not eligible for funding under the current Policies and Procedures for Funding Projects (see Section 4.3).

Members present recognized the need to communicate and coordinate better with the Hatchery Committees. They directed Tracy to discuss this issue with Mike Schiewe, who chairs the Hatchery Committees.

## **VIII. Next Steps**

The Tributary Committees will meet on Thursday, 9 April at Chelan PUD in Wenatchee. Tentative agenda items include:

- Review of Policies and Procedures for Funding Projects and Tributary Committee Operating Procedures.
- External audit.
- Information updates from Joe Miller, Becky Gallaher, and Tracy Hillman.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

**Attachment 1**

Chris Fisher asked Chris Bull and Dr. Robert Newberry to respond to questions posed by David Morgan about the rationale for specific techniques proposed under the modified design for the ORRI Project. What follows are David's questions and Dr. Newberry's responses. Chris provided this information to the Committees on Wednesday, 18 March in an email.

**Morgan:** "I assume part of the idea is to breach the dyke to partially restore river process. So why lock the river in place via the rock crests and riprap? Why not encourage oxbow movement within the new floodplain once dikes are set back? Also-if migration is a concern, why is the new set back dike not protected with riprap where the apex of the oxbow will most closely approach the dike? And what about on the opposite side where oxbow re-connects to main thread and may direct energy at existing dike to the east? Maybe they're already armored?"

**Newberry:** "These questions are insightful and correct for normal rivers. But in this case, all the channel forming median flood flows are backflooded by Vertical Drop Structure 13. There is a very low gradient in the Phase One lower end of the reach with velocities that are below the competency needed to move the bed materials and meander bends.

The reach profile from the 1980 survey plan is attached. The original gradient before VDS13 is about 0.18%. The gradient with VDS13 is 0.06%. In an overall sense what we are doing is creating short sections by breaking the profile into steeper spawning gravels segments with the old gradient separated by longer flatter pools. This should alleviate the sedimentation on the redds in the steeper segments. With 1/3 of the gradient the best we could do would be to restore 1/3 of the reach."

**Morgan:** "Why are rock crests needed across both the main thread and the new oxbow? Seems if any crests is needed, all you really need is one across the main thread to set that elevation higher and ensure the oxbow entrance is lower. If 100% of water goes into oxbow during low flow, is that a problem? Just because reference reach upstream has split flow doesn't mean it has to be same here. I assume these reference reaches have no rock crests."

**Newberry:** "The rock controls are there to split the low flows (10 cm/s or less) when the backwater effects are limited. They are placed at the head of the gravel spawning ramps to ensure that there is a local increase in gradient to limit the midwinter sedimentation on the redds (about 4X that in the natural gravel bars at split sections upstream). The bars are adjustable to ensure that the redds are not de-watered in either channel as the flow drops off in the winter.

There is no 3D model precedent to test how the backwater and adjusted profile will react together exactly. Hydraulic models that are based on the cross-section and slope are too gross for this level of detail. The advantage of using rock riffles for controls is that we can adjust them as we see how the ramps and flow behaves."

**Morgan:** "Why bring in gravel? How long will it last? Cost? Will it silt in? Why not allow natural deposition to happen and fish will figure out where they want to spawn? If slope is steeper at head ends (near rock crests), then perhaps they won't silt in."

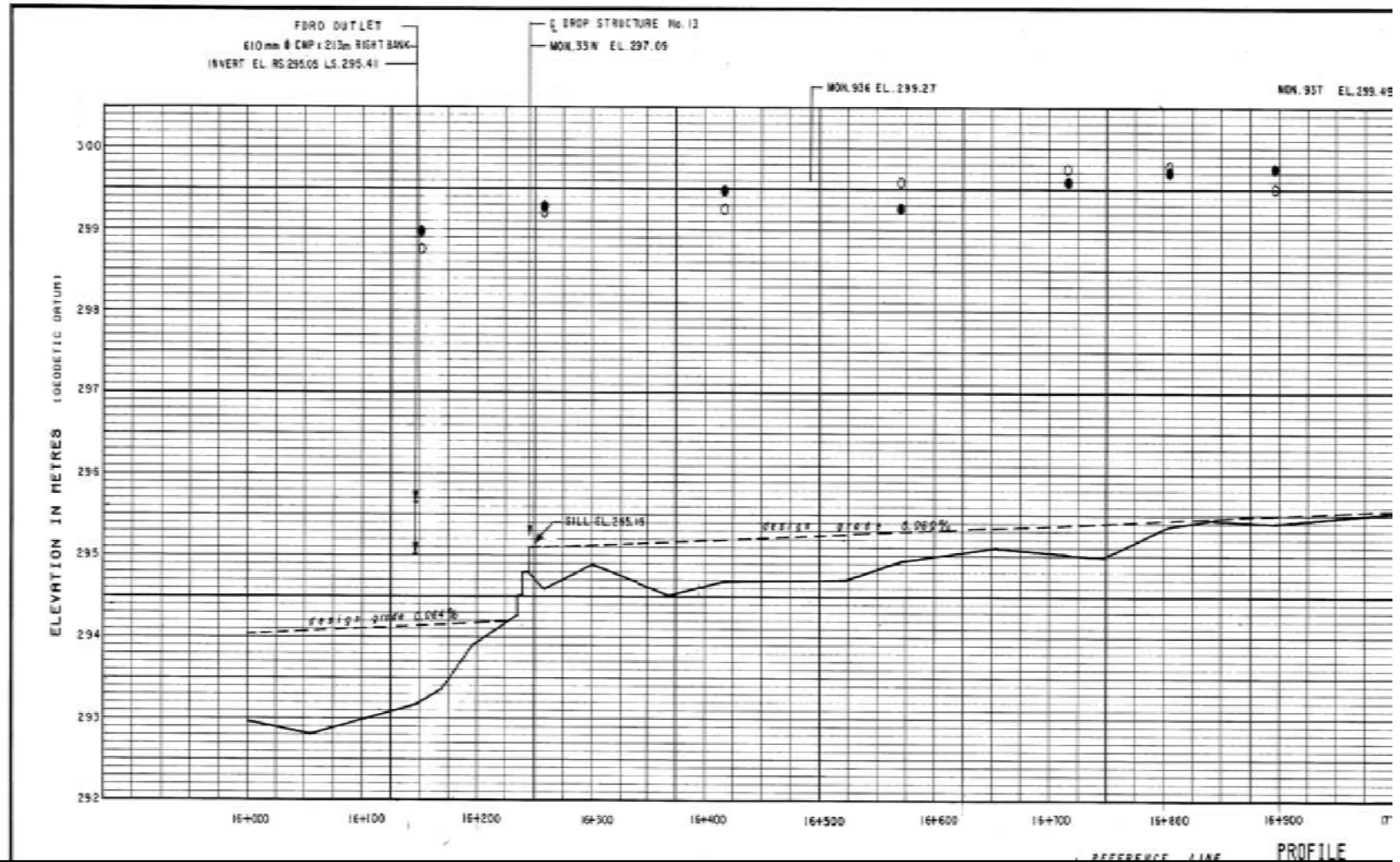
**Newberry:** "Spawning size gravels are slightly stable in the bars at spawning level flows. In contrast to a normal river their stability increases at higher flows because of the increasing effect of the VDS 13 backflooding. There is high flow gravel migration into the upper end of the ORRI reach but it tapers out as the backwater effect takes over. That seems to be at about 3/4 of the way up the reach in the first few hundred metres below Park Rill. We could have scabbed gravel off the bed in the low gradient reaches instead of building up the ramps but it looks like the

underlying materials are very fine sand that has infilled the old profile up to the sill level of VDS13. It could flood the lower river with fines if it is exposed.”

**Morgan:** “But what about gravel patches at lower ends of oxbows where I assume slope will be less and therefore deposition more likely?”

**Newberry:** “The gradient over the gravel patches at the end of the meanders are there to take advantage of a local gradient that occurs because there is a slight drop between the flow in the deep meanders and the shallow mainstem at the lower junction at spawning discharges.

A saving grace is that all of the works are accessible and adjustable. We will see what the fish have to say after a season or two.”





## Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 9 April 2009

---

**Members Present:** Casey Baldwin (WDFW), Dale Bambrick (NOAA Fisheries), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Members Absent:** Bob Rose<sup>1</sup> (Yakama Nation).

**Others Present:** Becky Gallaher (HCP Project Coordinator) and Joe Miller (Chelan PUD). Ben Lenz (Grant PUD) and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the last hour of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Wenatchee, Washington, on Thursday, 9 April 2009 from 9:00 am to 11:45 am.

### **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda.

### **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 12 March meeting notes with an edit suggested by Casey Baldwin.

### **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- HCP Tributary Committee/Sponsor Agreements are being prepared for the Below the Bridge Project, Poorman Creek Barrier Removal Project, Twisp River Conservation Acquisition II Project, and the Cashmere Pond Off-Channel Habitat Project.
- Under the Entiat Instream Structures Engineering and Permitting Project, Chelan County is preparing a contract with GeoEngineers to redesign the Knapp-Wham Diversion single-wing dam.
- Under the WRIA 45/46 Riparian Restoration Project, Cascadia Conservation District is actively recruiting willing landowners. They are continuing their outreach and education efforts and are in the process of developing a native plant brochure for landowners.

---

<sup>1</sup> Bob was unable to join the meeting. He did, however, provide his vote on decision items following the meeting.

- The Wildhorse Spring Creek Conservation Easement Project is complete and the Rock Island Tributary Committee received the final report, which is posted on the website.
- Landowner agreements have been secured for the Entiat PUD Canal System Conversion Project. The project manager and geotechnical consultant will meet on 9 April to discuss locations for test wells. The current schedule is to begin drilling test wells in May.
- Cascadia Conservation District completed the project summary for the Roaring Creek Flow Enhancement and Barrier Removal Project. The summary is needed to finalize a land transfer that will allow one of the wells to be located on private property rather than on USFWS property. Upon approval by the USFWS, Cascadia will develop a scope of work for surveying. The Certificate of Exemption and Boundary Line Adjustment will be completed after the survey is finished.
- The Yakama Nation is currently reviewing the design for the Keystone Canyon Habitat Restoration Project.
- Cascadia Conservation District will meet with the Natural Resources Conservation District engineer on 8 April to review possible modifications to the Entiat Canal Log Boom Installation Project. Information from that meeting will be provided to the Rocky Reach Committee in May.
- The Methow Conservancy asked the Wells Committee if it would be okay to expand the Riparian Restoration and Regeneration Initiative Project to properties in the Beaver Creek watershed. Recall that the purpose of this project is to build re-usable cages that protect seedlings and saplings of cottonwood, aspen, and willow trees within riparian areas along the Methow and Twisp rivers from wildlife browsing. The Conservancy would like to expand the geographic scope of the project to properties in the Beaver Creek watershed. There is no change in funding. ***The Wells Committee approved the change in geographic scope of the project.***
- The Methow Salmon Recovery Foundation (MSRF) asked the Rock Island Tributary Committee if the MSRF could use left-over money from the Twisp River Conservation Acquisition II Project to fund restoration work on the Yoakum and Doran properties. Recall that the MSRF received funding from the Rock Island Tributary Committee (\$220,000) and the Salmon Recovery Funding Board (SRFB; \$261,814) to purchase the two properties along the lower Twisp River (0.9-1.0 miles upstream from the mouth). The MSRF will purchase the land for \$394,000 (recent appraisals were \$369,000 for the Yoakum Property and \$25,000 for the Doran Property), saving \$86,000, of which \$38,500 is the Committee's portion. The MSRF would like to use the left-over money to fund the following actions on the two properties:
  - Removal of one stick-built residential structure (\$20,000),
  - Removal of one stick-built agricultural structure (\$8,000),
  - Removal of road and re-vegetate (\$10,000),
  - Re-establish native plantings in the cleared pasture area (\$15,000),
  - Install temporary water system (\$6,000),
  - Install exclusion fencing (\$15,000),
  - Remove fill placed in riparian areas (\$12,000).

Dale Bambrick noted that the SRFB will not allow the MSRF to use left-over SRFB money to fund restoration efforts on the properties. Although in general the Committee

supported the use of left-over funds for restoration activities, the Committee determined that they need more information before they could grant the request. The Committee would appreciate MSRF responses to the following questions:

- What, if any, elements of the original proposal changed? For example, the Committee understood that the resale of the uplands on the Yoakum Property would provide the funds needed for restoration of the riparian and floodplain areas. Now it appears that the MSRF is asking the Committee to cover a portion of the cost of the restoration work.
- To reduce the cost of removing the stick-built structures, can the local fire department use them for fire training?
- Would Chris Johnson be available by phone during the next Tributary Committees meeting to answer questions?

The Committee directed Tracy Hillman to share the Committee's questions with Mr. Johnson.

- In March, Cascadia Conservation District approached the Rocky Reach Committee with a request to set up a budget for the \$150,000 that the Committee approved for the Below-the-Bridge Project. When the Committee approved the funds, they stipulated that the money would only be used for construction of the rock-wing dam (which will replace the existing push-up dam), the construction of the engineered log jam, and the restoration of the riparian community. The funds are not to be used to construct more boulder clusters or small woody debris structures. Cascadia, therefore, would like to know how much of the approved funds can be used for administration. During the March meeting, the Committee decided that the ratio of the total administrative cost to the total cost of the project would be multiplied by the Committee-approved amount (\$150,000) to estimate the administration budget for the portion of the project funded by the Committee.

*At the time of the April meeting the Committee had not received the "total" administrative cost estimate on this project from the sponsor. However, following the meeting, Becky Gallaher received the estimate from the sponsor. Based on this information, the ratio was calculated as 0.15 (15%). Therefore, the portion of the total amount from the Committee (\$150,000) that is budgeted for administration is \$22,500.*

#### IV. Review of Small Projects Proposal

The Committees reviewed a Small Projects Program application from the Cascadia Conservation District titled *LWD/Rootwad Acquisition and Transport II*.

##### **LWD/Rootwad Acquisition and Transport II**

The purpose of this project is to acquire, transport, and stockpile more than 200 pieces of large woody debris (with rootwads) for instream projects in the Entiat and Wenatchee basins. The sponsor estimates that they will need about 10-30 pieces of wood in the Bridge-to-Bridge Reach on the Entiat, more than 150 pieces in the Preston Reach on the Entiat, and 8-16 pieces in Mission Creek. The wood will be used to help create habitat diversity and restore physical channel processes. The total cost of the project is \$35,000. The sponsor requested \$35,000 from HCP Tributary Funds. After careful consideration of the proposal, *the Rock Island Committee approved funding for this project.*

Although the Committee agreed to the project in general, the Committee placed the following conditions on this project.

1. The funds from this project are not to be used to support administrative functions, such as searching for wood, which should already be a component of their existing projects.
2. When wood is available, Cascadia must submit in writing (letter or email) their desire to use the available funds for the purchase, transport, and stockpile of wood.
3. In the written request, Cascadia must indicate the location, cost, general size, and species of wood available; where Cascadia intends to store the wood; and the type of habitat actions or projects that will benefit from the wood purchased with Tributary Funds. As quickly as possible the Committee will either grant or deny the request.

The purpose for placing these conditions on the project is to retain the right to approve distribution of funds for this project on a case-by-case basis. Some members were concerned that Plan Species Account money may be used to purchase wood that would never make it into a project funded by the Tributary Committee (or that the cost savings attributed to this project would be passed on to other projects the Committee would not support), while at the same time the Plan Species Account would be billed for collection of the necessary wood for Committee-funded projects. Finding wood for any funded project and stockpiling that wood next to the project site should be a component of every project, and thus should not require a separate project or administrative effort to locate and stockpile wood. It is assumed that some portion of the administrative cost embedded in most in-stream restoration projects is for acquiring wood. Thus, the conditions placed on the project should prevent Plan Species Account funds from being used to support the salary of a “wood prospector.” Rather, once the wood is available, the funds can be used to purchase, transport, and stockpile the wood near a project site. The Committee expects to see reduced costs associated with gathering and staging wood in future proposals from this sponsor.

## **V. External Financial Review for Plan Species Accounts**

Becky Gallaher reported that she talked with folks in the Chelan PUD Finance Department to determine what is involved in putting together an external audit. Becky provided a handout that identified the purpose and scope of work for the audit. Tom Kahler indicated that he had the Douglas PUD Treasurer review the purpose and scope of work. Tom noted that Douglas PUD was not entirely clear on the purpose of the audit as stated in the draft scope of work. The term “audit” has a specific meaning in accounting jargon, implying the highest level of review and includes the most in-depth examination and verification of financial accounts and records. This probably goes well beyond the intent of the Committees. Douglas PUD indicated that the purpose should be a simple “financial review” rather than an “audit.”

Tom stated that since the narrow role of the “account managers” (LeMaster & Daniels and Douglas PUD) of the three Plan Species Accounts is to respond to payment requests, track interest earned, handle contributions from the PUDs, and periodically report on the status of the accounts, review of their records should be relatively simple. The more complicated aspects of financial management reside with the Committees’ administration; thus, the majority of the effort of the “financial review” should focus on that end of the management of the funds. The Committees agreed to the financial review, which will consist of the following:

**Purpose:** Provide a report on the financial performance and position of the financial account manager.

**Scope of Work:**

- Incoming Funds—Review all areas associated with the receiving and handling of funds, including processes, internal controls, and work flow. Also review bank statements and statement reconciliation.
- Budget Process—Review project budgets and corresponding financial reporting, assuring that the record keeping is in balance with the intent of the budget.
- Allocating/Approval of Funds—Review procedures and controls associated with the allocation and approval of expenses to ensure a tight process.

The Committees directed Becky to ask local accountants for a cost estimate to do the financial review. The Committees directed Becky and Tracy to select the lowest bidder.

**VI. Updates to Policies and Procedures for Funding Projects and Operating Procedures**

Tracy Hillman walked the Committees through the proposed edits and comments to the Policies and Procedures for Funding Projects and the Tributary Committee Operating Procedures. Members agreed to the proposed changes and directed Tracy and Becky to post the revised drafts to the website. Tracy indicated that he would also fix some of the formatting problems in the documents.

Joe Miller shared with the Committees his research on what the maximum administrative cost should be for a project. He provided the Committees with a handout, which is attached to these notes as Attachment 1. As a proposal for reducing administrative costs in project applications, Joe identified a three-step process defining administrative costs, identifying reward/penalty for administrative costs, and identifying a method for calculating “reward” and “penalty.” The Committees asked Joe, Becky, and Tracy to identify what specific elements constitute administrative costs, identify a threshold value (i.e., percent of total budget that is made up of administrative costs), and describe how to quantitatively or qualitatively assign “penalty” and “reward.”

**VII. Information Updates**

The following information updates were provided during the meeting.

1. Approved Payment Requests in April:

Rocky Island Plan Species Account:

- \$192.04 to Chelan County PUD for first-quarter project coordination and administration.
- \$143.00 to LeMaster and Daniels for first-quarter financial management.

Rocky Reach Plan Species Account:

- \$192.04 to Chelan County PUD for first-quarter project coordination and administration.
- \$143.00 to LeMaster and Daniels for first-quarter financial management.

Wells Plan Species Account:

- \$192.04 to Chelan County PUD for first-quarter project coordination and administration.
  - \$50.00 to the Methow Conservancy for landowner contact and developing a list of potential properties for the Riparian Regeneration and Restoration Initiative.
2. Tracy Hillman reported that he talked with Mike Schiewe (Chair of the HCP Hatchery Committees) about the need for the Tributary Committees to coordinate with the Hatchery Committees on habitat and hatchery projects. Recall that during the last meeting Dennis Beich noted that currently the Tributary Committees and Hatchery Committees are not trying to match actions, but perhaps should to improve overall benefits. Dennis suggested that the Tributary Committees may want to focus habitat actions in areas where hatchery acclimation ponds have been proposed.

Tracy stated that Mike is in favor of better coordination and communication between the Committees and indicated that a joint meeting would be beneficial. However, the meeting would have to wait until the Hatchery Committees are finished or nearly finished with developing their Hatchery Genetic Management Plans. Mike indicated that he would like to have this joint meeting sometime this year. Committees members reiterated that they are in favor of better coordination and communication, but stressed that they are not in favor of using Tributary Funds to fund projects that would be used for hatchery fish acclimation. They indicated that Hatchery Funds should be used for those projects.

Casey Baldwin mentioned that he and Dennis have drafted a document that outlines some concepts of the integration. He thought that Dennis would seek input from the Committees on the draft document.

Tracy noted that he will stay in communication with Mike and the two will develop a draft agenda and time for the joint meeting.

3. Becky Gallaher reported that she attended the debrief meeting of the SRFB's ninth grant round on 31 March. Becky noted that the meeting provided project sponsors an opportunity to share their concerns about the SRFB process. One issue discussed during the meeting was the difference in the formats of pre-proposal and final proposal applications. Becky noted that the Lead Entity representatives will work with her to make the applications more similar. This will ease the transfer of information from the pre-proposals to the final proposals.

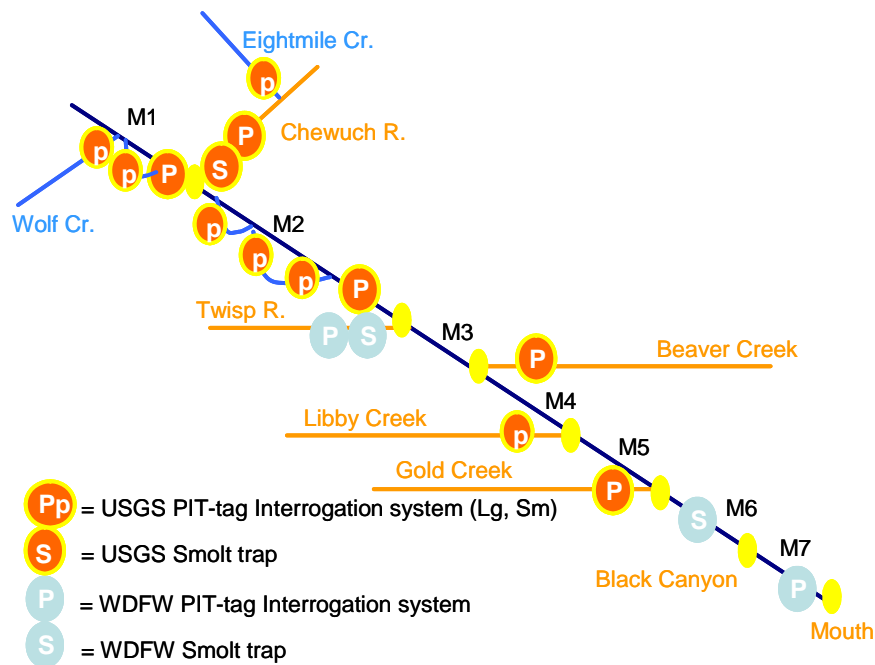
Becky also noted that sponsors were concerned that presentations come too early in the process. Their solution is to have tours before the presentations. This will help the sponsors develop better presentations and be more prepared to answer questions and address concerns. Tours are currently scheduled for the end of June (22-25 June) and presentations for early July (7 and/or 8 July). Becky shared the draft schedule with the Committees and asked members to send her edits and comments on the schedule.

Casey Baldwin noted that they also discussed the concern that the Regional Technical Team (RTT) is basing project scores on cost. Note that the RTT is not supposed to evaluate the overall cost of SRFB proposals, but they do consider certain technical aspects of the budget. Casey indicated that there was some discussion about forming an independent committee to evaluate costs. The NOAA Science Center has folks that can do this type of evaluation. Other discussions included the criteria that the Citizens Committee uses to evaluate cost and the fact that many of the members of the Citizens Committee do not have the expertise to evaluate critically the legitimacy of budgets for large, complex projects that are often proposed. Casey also that Derek Van Marter

(UCSRB assistant director) will be exploring some alternative or additional options for evaluating budgets, which may involve the RTT.

Tracy Hillman indicated that last year one of the project sponsors was upset because not all the information in their proposal was provided to the RTT and Tributary Committees. In an effort to minimize this problem in the future, there will be more time for copying and distributing the proposals. Given the economic crunch, however, Tracy asked the Committees if they would be okay receiving the proposals electronically. The cost to the Committees and Chelan PUD approaches \$3,000 for copying and mailing. This covers copies for both the Tributary Committees members and the RTT. The Committees agreed that proposals should be sent electronically to Committees members and the RTT.

4. Tracy Hillman shared with the Committees the Bureau of Reclamation's (BOR) proposed plan for monitoring the effectiveness of habitat actions in the Methow Basin. The plan was developed by Pat Connolly with the USGS Western Fisheries Research Center and is designed to address the effects of habitat restoration (primarily off-channel habitat restoration) on production and life-stage survivals of Chinook, steelhead, and bull trout. Tracy directed the members to Figure 1 in the report (shown below) that identifies the locations and types of sampling gear (PIT tag interrogators and smolt traps) proposed in the Methow Basin. Tracy noted that M1 is the reference reach (preferred condition), M2 is the treatment reach, and M3 is the control reach. Tracy noted that the BOR is coordinating with the Hatchery Committees to determine how best to deal with the confounding effects of hatchery actions and nutrient supplementation efforts.



5. Chris Fisher reported that he talked with Chris Bull about the desire of the Committees to visit the Okanogan River Restoration Initiative (ORRI) Project in September. Chris indicated that Chris Bull will not be available in September and proposed that the visit occur in October. The Committees agreed and noted that this would be a good time to observe sockeye spawning in the project area.

**VIII. Next Steps**

The Tributary Committees will meet on Thursday, 14 May at the Chelan PUD office in Leavenworth. Tentative agenda items include:

- External financial review.
- Review of the Twisp River Conservation Acquisition II request.
- Information updates from Becky Gallaher and Tracy Hillman.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).



## Attachment 1

### Proposal to reduce administrative costs

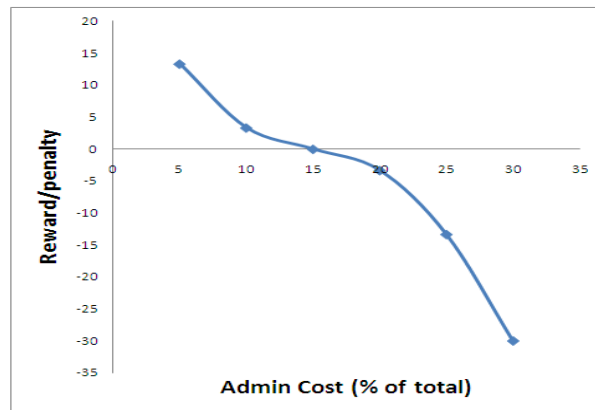
#### HCP Tributary committees, Draft 4/2/09

**Purpose:** This proposal describes a method to encourage Trib. Fund applicants to submit proposals with low administrative costs.

Step 1. Define administrative costs: We can set this up to target specific items we don't want to see or leave it somewhat vague. I'd start with the usual suspects: overhead, indirect, permitting costs that exceed x% of total, unexplained or redundant engineering costs, proposal development costs, etc.

Step 2. Identify rewarded/penalty level for administrative costs : For illustrative purposes, I chose a 15% threshold (i.e., the committee should agree on a level). This means that projects with admin costs above or below 15% of the total project cost are either rewarded or penalized: projects with admin costs above 15% are penalized; those below 15% are rewarded.

Step 3. Technical calculation of reward/penalty: The basic idea is to quantitatively guide applicants to the conclusion that more admin charges translate into lower project scores. In the figure below, I've tried to illustrate an exponential relationship<sup>2</sup> where the penalty or reward accelerates as the applicant's admin costs depart from 15%. The relationship chosen is arbitrary except to the extent it is not linear. I set the "maximum penalty" to 30 points, but it could be adjusted to any value.



The short story, if admin costs are greater than 15%, then a negative "penalty" results. If admin costs are less than 15%, then a positive "reward" occurs. These numbers would be added directly to the RTT score (or some other rating index chosen by the Trib. Committee). Implementing this type of reward/penalty system, up front, could help encourage on-the-ground projects and dissuade requests to fund administrative FTEs, proposal development costs, or other expenses with a "low impact/high cost" ratio. The key is not to create a technical scoring system that makes life difficult for the committee, but instead, provide a clear message to applicants that we *can* use an unambiguous, emotionless scoring system that penalizes projects with high admin costs.

<sup>2</sup>  $x$  = admin costs,  $y$  = reward or penalty: If  $x > 15\%$ , then  $y = -1 * [(x - 15)^2 / 7.5]$ , or if  $x < 15\%$ , then  $y = (x - 15)^2 / 7.5$

# Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 14 May 2009

---

**Members Present:** Dale Bambrick (NOAA Fisheries), Dennis Beich (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Lee Carlson (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Others Present:** Becky Gallaher (HCP Project Coordinator), Casey Baldwin (WDFW), and Joe Miller (Chelan PUD). Ben Lenz (Grant PUD) and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the last hour of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Leavenworth, Washington, on Thursday, 14 May 2009 from 9:00 am to 11:20 am.

## **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda.

## **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 9 April meeting notes with edit suggested by Casey Baldwin, Tom Kahler, and Tracy Hillman.

## **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- Under the WRIA 45/46 Riparian Restoration Project, Cascadia Conservation District has nearly completed the project and will soon prepare the final report. Cascadia requested a budget amendment for this project. They asked if they could transfer money from Contract Labor, Project Materials & Equipment, and Travel to Salaries & Benefits. This transfer would increase Salaries & Benefits from \$15,330 (original budget) to \$19,520 (amended budget), a 27% increase. *The Rock Island Tributary Committee denied the request.* Thus, the budget for Salaries & Benefits will remain at \$15,330.
- The PUD met with the contractor to locate sites for test wells for the Entiat PUD Canal System Conversion Project. The current schedule is to begin drilling test wells in May.
- For the Roaring Creek Flow Enhancement and Barrier Removal Project, Cascadia Conservation District is still working on the land transfer that will allow one of the wells to be located on private property rather than on USFWS property. Upon approval by the USFWS, Cascadia will develop a scope of work for surveying.

- Cascadia Conservation District was scheduled to reinstall the log boom, but because of steelhead spawning in the area and the fact that Cascadia did not have a current HPA, they were unable to complete the work.

#### IV. **Methow Salmon Recovery Foundation Request (Twisp River Acquisition II)**

In April, the Methow Salmon Recovery Foundation (MSRF) asked the Rock Island Tributary Committee if the MSRF could use left-over money from the Twisp River Conservation Acquisition II Project to fund restoration work on the Yoakum and Doran properties. The MSRF received funding from the Rock Island Tributary Committee (\$220,000) and the Salmon Recovery Funding Board (SRFB; \$261,814) to purchase the two properties along the lower Twisp River (0.9-1.0 miles upstream from the mouth). The MSRF will purchase the land for \$394,000 (recent appraisals were \$369,000 for the Yoakum Property and \$25,000 for the Doran Property), saving \$86,000, of which \$38,500 is the Committee's portion. The MSRF would like to use the left-over money to fund the following actions on the two properties:

- Removal of one stick-built residential structure (\$20,000),
- Removal of one stick-built agricultural structure (\$8,000),
- Removal of road and re-vegetate (\$10,000),
- Re-establish native plantings in the cleared pasture area (\$15,000),
- Install temporary water system (\$6,000),
- Install exclusion fencing (\$15,000),
- Remove fill placed in riparian areas (\$12,000).

During the April meeting, the Rock Island Tributary Committee questioned what, if any, elements of the original proposal had changed? For example, the Committee understood that the resale of the uplands on the Yoakum Property would provide the funds needed for restoration of the riparian and floodplain areas.

During the May meeting, Tracy Hillman quoted the following from the original proposal:

- "Existing manufactured home will be removed as a condition of purchase within 60 days of closing, and the site restored. Upland portions will be protected with conservation easements and remarketed for residential use. MSRF will use resale funds for restoration of the lower riparian and floodplain areas. Work will include removal of sections of bank armoring, planting riparian vegetation, plant protection through caging, and use of 'exclosure' fencing for release of natural vegetation."
- "MSRF proposed to secure needed funds for this project by marketing upland portions of the property for residential use to create a funding reserve for long-term maintenance and restoration needs. Sale of these properties will also be used to fill any potential funding gap between the amount requested from SRFB and TRIB and the actual appraised value."
- "One existing manufactured home and two accessory buildings are currently located on the riparian/floodplain portion of the Yoakum properties. The home will be removed as a condition of the purchase agreement. Accessory structures will be removed as restoration is implemented. One additional structure exists on the upland portion of the Yoakum site. This portion of the property will be retained for MSRF for re-sale to a conservation buyer as a funding mechanism for restoration."

After careful consideration, *the Rock Island Tributary Committee denied the request to use left-over money to implement restoration actions on the properties.* The Committee noted that it

expects the MSRF to use resale funds for restoration work on the properties. In the event that the resale funds are not sufficient to cover the costs of restoration work, the Committee would entertain a Small Projects Program Proposal or General Salmon Habitat Program Proposal.

## **V. Review of Small Projects Proposal**

The Committees reviewed a Small Projects Program application from the Cascadia Conservation District titled *2010 Entiat River Riparian Planting*.

### **2010 Entiat River Riparian Planting**

The purpose of this project is to improve instream habitat diversity and moderate extreme water temperatures by restoring degraded riparian habitat along the Entiat and Mad rivers. The sponsor intends to plant about 3.36 acres of riparian vegetation at four sites in 2010. The total cost of the project is \$49,951. The sponsor requested \$49,951 from HCP Tributary Funds. After careful consideration of the proposal, *the Committees elected not to fund this project.*

The Committees identified the following issues with the proposed project.

1. It was not clear if the properties selected for plantings were consistent with the priorities specified in GeoEngineers (2007) report. The sponsor cited the document in the proposal, but it was not apparent that the sponsor considered the priorities identified in the GeoEngineers report.
2. There was no information on which native species would be used and at what density they would be planted. The Committees assume that different mixes of species and densities would be needed at different sites.
3. The Committees also believed the total cost of the project was high. The cost of the project equated roughly to \$14,600 per acre.
4. Finally, the sponsor did not define the 351 hours of labor (at \$14,026) identified in the budget. They defined administration costs and costs for Professional Services (Cultural Resources) and Contracting (WCC). It was not clear what the 351 hours of labor would accomplish.

## **VI. Okanagan River Restoration Initiative Monitoring**

Chris Bull, ORRI Project Coordinator, submitted a monitoring report titled, “Aquatic Monitoring of the Okanagan River Restoration Initiative (ORRI)—the initial year, 2008” for Committee review. The Committees reviewed the report and noted that the monitoring efforts should continue as planned. Thus, *the Wells Committee chose to fund the following components for another year: (1) Fish Holding and Rearing for \$3,867, (2) Channel Morphometry and Hydraulics for \$9,680, and (3) Substrate Composition for \$5,713.* The Committee elected not to fund any other “unfunded” components of the monitoring plan. The Committee directed the sponsor to submit another report and budget at the end of the monitoring year (April 2010).

## **VII. Information Updates**

The following information updates were provided during the meeting.

1. Approved Payment Requests in April:  
Rock Island Plan Species Account:

- \$200,500.00 to Baines Title for the purchase of the Yoakum and Doran Properties under the Twisp River Acquisition II Project.
- \$14,925.18 to Cascadia Conservation District for ongoing public outreach and project coordination under the WRIA 45/46 Riparian Restoration Project.

Wells Plan Species Account:

- \$46,238.95 to the Okanagan Nation Alliance for final measurements and movement of materials, project coordination and planning, and outreach under the Okanagan River Restoration—Phase IV Project.
2. Becky Gallaher reported that she will be seeking bids from local accounting firms to conduct the financial review on the management of the Plan Species Accounts. The lowest bidder will be selected for the job.
  3. Tracy Hillman reported that he and Becky Gallaher updated the project information sheets. For each Plan Species Account, the sheets identify the projects funded by the Tributary Committees, the sponsor, fund type (General Salmon Habitat or Small Projects), project type (e.g., protection, fish passage, off-channel habitat, etc.), total cost of the project, Committees financial contribution, and the status of the project. Under the Wells Committee project sheet, Tom Kahler pointed out that the contribution to the Wells Account should state that contributions will be made “annually beginning in 2010.” Tracy indicated that he will send the sheets electronically to the Committees members along with the draft meeting notes.
  4. Tracy Hillman reported that the Policies and Procedures document contained a few minor errors. After the document was reformatted, the numbering of sections changed from the original document. This caused references to specific sections within the text to be incorrect. Tracy noted, for example, that in the text under Section 2 there is a reference to Section 6.7. The text should actually reference Section 6.8. The Committees directed Tracy to make the changes.
  5. Joe Miller and Becky Gallaher shared with the Committees their research on what the maximum administrative cost should be for a project. They provided the Committees with a handout describing their research. They addressed three questions: (1) what constitutes administrative costs, (2) what is the maximum allowable administrative cost as a percent of the total budget, and (3) how can the Committees qualitatively assign “penalty” and “reward?”

Joe reported that the Salmon Recovery Funding Board (SRFB) has already addressed the first two questions in their Reimbursement Manual. Tab D in the Reimbursement Manual provides a list of acceptable administrative costs associated with acquisitions. Tab E in the manual provides a list of acceptable administrative costs and architectural and engineering (A&E) costs for restoration projects. Becky noted that the lists in the handout do not include all items identified in the SRFB manual, because not all those listed in the manual apply to the Tributary Committees. Joe then reported that the SRFB limits administrative costs at 5% for acquisition projects and 30% for restoration projects (broken down by Joe and Becky as 15% for admin and 15% for A&E). With regard to ranking proposals, Joe indicated that proposals that demonstrate a high likelihood of tangible, on-the-ground results with a minimum of administrative costs would rank higher than proposals with similar anticipated results but higher admin costs.

The members of the Committees thanked Joe and Becky for their hard work on this issue. They questioned whether overhead and appraisal costs should be included in the list of

admin costs. Joe indicated that he would add overhead to the list of admin costs, but with regard to appraisal costs, he noted that the SRFB identifies appraisals as a project cost not an admin costs. The Committees agreed.

The Committees noted that they also receive design-only proposals. It is not clear how the current criteria would apply to design-only proposals. Joe indicated that he and Becky would draft some language for design-only proposals.

6. Tracy Hillman reported that the 2008 Rock Island, Rocky Reach, and Wells HCP Annual Reports were submitted to FERC. Tracy stated that each member should have received the link to the website containing the Rock Island and Rocky Reach reports and a CD containing the Wells report. Tom Kahler reported that the CD sent to FERC was corrupted. He also noted that there were errors in the reporting of broodstock protocols. Keith Truscott indicated that those errors were also in the Rock Island and Rocky Reach reports. Tom noted that those errors have been corrected.
7. Tracy Hillman reported that he received an email from Derek Van Marter indicating that the Upper Columbia Salmon Recovery Board has determined that it is the role of the Regional Technical Team (RTT) to evaluate cost-effectiveness of project proposals. The Citizens' Committee will evaluate cost-benefit to the community. Recall that in the past the RTT was not supposed to evaluate the overall cost of proposals, only certain technical aspects of the budget. Casey Baldwin reported that the RTT has drafted an approach to scoring the cost-effectiveness of proposals. According to the scoring approach developed by the RTT, cost-effectiveness will constitute about 20% of the overall score of a proposal.
8. David Morgan reported that the Chelan County Natural Resource Department has scheduled large woody debris (LWD) workshops for 20 May at 1:30 pm at the Leavenworth Fire Hall in Leavenworth and 21 May at 1:30 pm at the Chelan Fire Hall in Chelan. David noted that these are planning meetings. Casey Baldwin indicated that he received a draft agenda for the meeting. *Following the meeting, Casey sent an email that identified the objectives of the meetings. The objectives are to discuss expected outcomes and goals for the LWD Forum, identify issues to meet desired outcomes and goals, develop an agenda and speaker list for community meetings, and discuss next steps beyond community meetings.* Members of the Committees discussed the pros and cons of attending the meetings. Both David and Casey stated that they were planning to attend at least one of the meetings. Tracy indicated that he would provide Casey and David, and the rest of the Committees members, with a summary paper describing the role of LWD in streams.
9. Becky Gallaher reported that she attended the SRFB 10<sup>th</sup> Round Upper Columbia Regional Kick-off Meeting on Thursday, 7 May. The purpose of the meeting was to approve the regional Process Guide, review the regional technical and citizens' criteria, and review materials and process changes from the SRFB or Tributary Committees. Becky provided a copy of the process schedule, which is appended to the notes as Attachment 1. She noted that the pre-proposals are due on 1 June. Becky also noted that she would inform members via email after she has uploaded the proposals to the ftp site. Project tours are scheduled for 22-25 June, but it is unlikely that four days will be needed (based on past tours). Pre-proposal presentations will occur on 7 (tentative) and 8 July. The Tributary Committees will conduct their final review of pre-proposals on 9 July.

**VIII. Meeting with Chelan County Lead Entity**

Chelan County Lead Entity representatives Joy Juelson and Mike Kane intended to meet with the Committees, but because of other commitments, they were unable to attend.

**IX. Next Steps**

Because several members will be absent in early June, the Committees will not meet on Thursday, 11 June for their regularly scheduled meeting. Rather, the Committees will attend the project tours during 22-25 June and the pre-proposal workshop on 7 and 8 July. The next meeting of the Committees will be on 9 July at Chelan PUD in Wenatchee. Tentative agenda items include:

- Final review of pre-proposals.
- Update on administrative costs.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

## Attachment 1

## 2009 UPPER COLUMBIA PROCESS SCHEDULE

## Tributary Fund and SRFB

Project Proposal Development, Submission, and Review

DATE	ACTIVITY/MILESTONE (MEETING/DEADLINE)
APRIL	
1 April	SRFB/Tributary Fund Debrief of 2008; preparations for 2009
April	SRFB/Tributary Fund cycles announced; SRFB Policy Manual available
MAY	
7 May	SRFB/Tributary Fund Kickoff Meeting for the Region; RTT Technical criteria presentation; Citizens' Committee criteria presentation
May	Project Sponsors develop projects and pre-proposal materials (available from <a href="http://www.midcolumbiahcp.org/">http://www.midcolumbiahcp.org/</a> )
JUNE	
1 June	Pre-proposals due to Tributary Committees and to Lead Entities
5 June	Pre-proposals delivered to RTT members and Tributary Committee; and SRFB Panel Members (via PRISM)
11 June	Tributary Committees' internal review of pre-proposals
15 June	Conference Call to discuss project tour logistics (RTT, LEs, Trib and UCSRB)
22-25 June	SRFB/Trib Fund/RTT project tours <ul style="list-style-type: none"> <li>• 22<sup>nd</sup> – Okanogan</li> <li>• 23<sup>rd</sup> – Methow</li> <li>• 24<sup>th</sup> – Wenatchee</li> <li>• 25<sup>th</sup> – Entiat</li> </ul>
JULY	
7(tentative)-8 July (all day)	Pre-proposal Presentation Workshop: review pre-proposals with RTT, Tributary Committee and Citizens' Committee
9 July	Tributary Committees' final review of pre-proposals
16 July	Final comments from Tributary Committee due to project sponsors
24 July	Final project proposals due to Tributary Committees and Lead Entities
31 July	Project proposals delivered to RTT and Citizens Committees
AUGUST	
3 August	Draft project review forms due from State Technical Review Panel to LEs and project sponsors
11(tentative)-12 August	RTT Meeting: formal project reviews and technical ranking
19 August	RTT ratings delivered to Lead Entities and Tributary Committees
19-24 August	Individual Citizen's Committee project ranking
27 August	Joint Citizen's Committee identifies combined ranked list



SEPTEMBER	
<b>1 September</b>	<b>Lead Entity project applications due to SRFB and on to PRISM</b>
12 September	Tributary Committees' supplemental tours of selected projects (project sponsors will be notified in advance of visit)
<b>14 September</b>	<b>Final ranked list with regional funding recommendations due to SRFB; information submission questionnaire</b>
<b>30 September</b>	<b>Second Draft project review forms due from State Technical Review Panel to LEs and project sponsors</b>
OCTOBER	
8 October	Project Presentations to Tributary Committee ( <i>if needed</i> )
12-16 October	Regional Presentations to SRFB Review Panel
30 October	Draft report by Review Panel to SRFB
NOVEMBER	
5 November	Tributary Committees make initial internal decisions
20 November	Final report by Review Panel to SRFB
DECEMBER	
<b>10-11 December</b>	<b>SRFB makes formal decisions</b>
December	Tributary Committees make supplemental decisions

# Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 9 July 2009

---

**Members Present:** Dale Bambrick (NOAA Fisheries), Dennis Beich (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Bob Rose (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Others Present:** Becky Gallaher (HCP Project Coordinator), Casey Baldwin (WDFW), and Joe Miller (Chelan PUD). Ben Lenz (Grant PUD) and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the last 1.5 hours of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Wenatchee, Washington, on Thursday, 9 July 2009 from 8:30 am to 1:30 pm.

## **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda with the following changes:

- Sponsors of the *Entiat River Tyee Ranch Conservation Easement Pre-Acquisition* (Chelan-Douglas Land Trust) and the *Spatial Distribution, Hybridization, and Threat Abatement in Sympatric Bull Trout and Brook Trout Populations in the Methow Subbasin* (Wild Fish Conservancy) projects removed their pre-proposals from Tributary Committees consideration.
- The *Lower Wenatchee River CMZ 6 Side Channel* project was added to the list of pre-proposals to be reviewed by the Tributary Committees.

## **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 14 May meeting notes.

## **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- For the *Entiat Instream Structures Engineering and Permitting* project, Cascadia Conservation District completed the Knapp-Wham single wing dam, which helps divert water into the Knapp-Wham irrigation ditch. This is part of the Knapp-Wham, Hannan-Detwiler ditch consolidation project that will eliminate the Hannan-Detwiler ditch.
- Under the *WRIA 45/46 Riparian Restoration* project, Cascadia Conservation District has completed the project and will soon submit the final report.

- Under the *Entiat PUD Canal System Conversion*, all landowner agreements have been signed and the cultural resource consultation was completed for test well drilling and piping. A design memorandum, which recommended two test wells was prepared by the geotechnical consultant, Ground Affects, Inc. The two test wells were drilled on 2 June on the Asher and Milne properties. The 12-inch casing for the first test well is currently at a depth of 34 feet.
- For the *Keystone Canyon Habitat Restoration* project, the Yakama Nation is developing an amended design that includes many of the features in the original design. The amended design will be provided to the Committees for review. Cascadia Conservation District anticipates construction to begin in summer 2010.
- Under the *Okanagan River Restoration Initiative*, the old dyke was removed and the setback dyke was constructed, a hiking and bike path was paved, and fencing and gates were installed along the project boundary and private lands. Channel construction is scheduled to begin in late June and end in August. Pre-treatment monitoring has occurred and environmental and water quality monitoring will occur throughout the construction period. Tracy Hillman reminded the Committees that they will visit the site in October.
- Under the *Riparian Regeneration and Restoration Initiative*, so far the Methow Conservancy has placed cages around 150 young trees.
- Cascadia Conservation District has secured all the necessary permits for the *Below the Bridge* project on the Entiat River.

#### IV. Review of Small Projects Proposal

The Committees reviewed a Small Projects Program application from the Chelan County Natural Resource Department and the Chelan-Douglas Land Trust titled *Sleepy Hollow Reserve Protection Feasibility Assessment*.

##### **Sleepy Hollow Reserve Protection Feasibility Assessment**

The Committees reviewed a Small Projects Program application from the Chelan County Natural Resource Department and Chelan-Douglas Land Trust titled *Sleepy Hollow Reserve Protection Feasibility Assessment*. The purpose of the project is to evaluate about 240 acres of land on the north side of the lower Wenatchee River, downstream from the Sleepy Hollow Bridge, for various protection opportunities, including fee-simple acquisition, conservation easements, conservation buyers, landowner agreements, and regulatory measures. The sponsors will hire a consultant to develop the work products. The total cost of the project is \$25,000. The sponsor requested \$20,000 from HCP Tributary Funds.

The Committees first reviewed this proposal in July 2008. After requesting additional information from the sponsors, and reviewing the responses to the additional information requests, the Committees in September 2008 noted that this was an appropriate project for the sponsors and that it could serve as a pilot project; however, it was not clear if landowners potentially affected by the proposed plan agreed to the conservation plan concept. Therefore, the Committees asked the sponsors to secure signed landowner agreement forms from affected landowners in the proposed project area. In June 2009, the sponsors submitted two signed landowner agreement forms.

After reviewing the original proposal, responses to additional information requests, and the signed landowner agreement forms, *the Rock Island Tributary Committees elected to fund the project with the following conditions:*

1. The funds from this project are only to be used to identify and evaluate conservation alternatives and to develop a conservation plan. The funds are not to be used to support landowner outreach and ownership verification.
2. No expenses can be billed to this project until the landowners have agreed to participate in the process (requires signed landowner willingness forms).
3. The sponsors must identify on a map the locations of landowners who agree to participate in the process (e.g., identify property owners on the aerial photo attached with the proposal).

## **V. General Salmon Habitat Program Pre-Proposals**

The Committees received 16 pre-proposals submitted under the General Salmon Habitat Program. The Wild Fish Conservancy removed their pre-proposal and Chelan County Natural Resource Department added a project. The Committees reviewed 16 pre-proposals.

The Committees reviewed each pre-proposal and selected those that they believe warranted a full proposal. Projects that the Committees dismissed were either inconsistent with the intent of the Tributary Fund or did not have strong technical merit. In addition, the Committees assigned pre-proposals to one of three preliminary tiers: Tier 1—fundable, Tier 2—fundable with questions, and Tier 3—do not fund. It is important to note that these are ratings of pre-proposals and do not reflect ratings of full proposals. The Committees directed Tracy to notify sponsors with appropriate projects to submit a full proposal, with a discussion of the questions/comments identified for each pre-proposal listed below.

### **Nason Creek Upper White Pine Reconnection (Tier 2)**

The Committees recommend that the sponsor (Chelan County Natural Resource Department) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to describe how they intend to protect the PUD power poles and identify the costs associated with protection.

### **Nason Creek LWP Floodplain Reconnection Assessment (Tier 2)**

The Committees recommend that the sponsor (Chelan County Natural Resource Department) consider the following comments/suggestions as they develop the full proposal:

- The Committees strongly recommend that the sponsor approach the Bureau of Reclamation to complete the alternative analysis and conceptual design.
- The Committees would be interested in reviewing a proposal concerning landowner outreach.

### **White River Nason View Acquisition (Tier 2)**

The Committees recommend that the sponsor (Chelan-Douglas Land Trust) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to make it clear in the final proposal if the total cost of the acquisition includes the value of timber on the property.
- The sponsor should provide a map showing the ownership of the valley bottom from the Tall Timber Ranch to the mouth of the White River.

**White River Tall Timber Ranch Conservation Easement (Tier 2)**

The Committees recommend that the sponsor (Chelan-Douglas Land Trust) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to explain why this property is considerably more expensive per acre than the Whiter River Nason View Acquisition property.
- The sponsor should also provide a map showing the ownership of the valley bottom from the Tall Timber Ranch to the mouth of the White River.

**Peshastin Creek Reconnection Alternatives Analysis (RM 3.9) (Tier 1)**

The Committees have no specific comments/suggestions on this project. However, they hope that the sponsor (Chelan County Natural Resource Department) will consider the comments/suggestions offered by the RTT and Committees members during the site visit and presentation.

**Lower Wenatchee Instream Flow Enhancement Project (Tier 2)**

The Committees recommend that the sponsor (Washington Rivers Conservancy) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to describe in more detail the involvement of the City of Wenatchee in this project.
- The Committees recommend that the sponsor more completely nail down the budget for this project (e.g., specific contributions from the City of Wenatchee and other entities).
- The sponsor should describe how much it will cost annually for pumping and who will pay the pumping costs.
- The Committees recommend including an implementation timeline for the project once necessary funds are secured. Also, because cost shares are the majority of the funding for this project, the Committees would like more details on the anticipated timing of receiving the cost shares.

**Habitat Farming Enterprise Program Pilot Project (Tier 3)**

The Committees recommend that this project, sponsored by the Initiative for Rural Innovation and Stewardship (IRIS), should not be submitted as a full proposal to the Tributary Committees for the following reasons:

- This project has a relatively low level of certainty of success.
- The sponsor should build on the existing Conservation Reserve Enhancement Program so that it works better for irrigated agriculture and orchards, and work with WSU on cost share.

**Entiat River Foreman Floodplain Reconnection (Tier 2)**

The Committees recommend that the sponsor (Chelan County Natural Resource Department) consider the following comments/suggestions as they develop the full proposal:

- The Committees recommend that the sponsor revise the project to include the approach suggested by Joe Lange during the site visit (i.e., expand the project upstream by removing the small orchard near the stream, extending and building up the road to serve as a dyke, and reconnect the floodplain to the channel at a point further upstream). If this cannot be accomplished in the near term, the sponsor should describe how the current proposed approach will not preclude expanding the project in the future.

**Entiat River Troy Acquisition (Tier 2)**

The Committees recommend that the sponsor (Chelan-Douglas Land Trust) consider the following comments/suggestions as they develop the full proposal:

- The Committees would like to know if it is possible to purchase only the bottom lands (riparian area on the west side of the road).

**Entiat National Fish Hatchery Habitat Improvement Project (Tier 2)**

The Committees recommend that the sponsors (Cascadia Conservation District and USFWS Mid-Columbia River Fishery Resource Office) consider the following comments/suggestions as they develop the full proposal:

- The sponsors need to describe how water use on the site will change as a result of this project.
- The sponsors should describe the intended function of the log jams near the downstream end of the project area (i.e., the function of the revetment-type jams).
- The Committees recommend that the proposed culverts be replaced with fords. If this is not possible, please explain why (see RTT 7-8 July notes for more details).

**Upper Methow Riparian Protection II (Tawlks Property) (Tier 1)**

The Committees have no specific comments/suggestions on this project. However, they hope that the sponsor (Methow Conservancy) will consider the comments/suggestions offered by the RTT and Committees members during the site visit and presentation.

**Upper Methow Riparian Protection III (Hardy Property) (Tier 1)**

The Committees have no specific comments/suggestions on this project. However, they hope that the sponsor (Methow Conservancy) will consider the comments/suggestions offered by the RTT and Committees members during the site visit and presentation.

**Lower Libby Creek Riparian Acquisition (Tier 2)**

The Committees recommend that the sponsor (Washington Department of Fish and Wildlife) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to describe any future plans for the site to be used as a hatchery acclimation site.
- The sponsor should describe the connection of this property to other protected or public lands in the area (provide a map showing the ownership of lands in the Libby Creek drainage).

**Driscoll Island Restoration, Phase I (Tier 2)**

The Committees recommend that the sponsor (Washington Department of Fish and Wildlife) consider the following comments/suggestions as they develop the full proposal:

- The sponsor should include the engineering report, or at least the results of the engineering report in the full proposal.
- The sponsor should consider reconfiguring the proposed weir in the cross channel to also serve as a means to access the island. This would allow for the complete removal of the existing ford.

**McLoughlin Falls Conservation (Tier 2)**

The Committees recommend that the sponsor (Washington Department of Fish and Wildlife) consider the following comments/suggestions as they develop the full proposal:

- The sponsor needs to identify in the full proposal which properties are part of the proposal (with signed landowner agreement forms) and the specific costs of the acquisitions or conservation easements for each property.
- The sponsor should describe the criteria of the easements and the fate (intended use) of the lands after purchase.
- The sponsor needs to identify in the full proposal the amount of uplands included on each of the properties.
- The Committees recommend that the sponsor include a map showing the specific properties that will be included in the full proposal. The sponsor should also identify existing landowners on the map.

**Lower Wenatchee River CMZ 6 Side Channel (Tier 1)**

The Committees have no specific comments/suggestions on this project. However, they hope that the sponsor (Chelan County Natural Resource Department) will consider the comments/suggestions offered by the RTT and Committees members during the site visit and presentation.

**VI. Information Updates**

The following information updates were provided during the meeting.

1. Approved Payment Requests in April:

Rock Island Plan Species Account:

- \$845.79 to Chelan County PUD for second-quarter project coordination and administration.
- \$100.00 to LeMaster and Daniels for second-quarter financial management.

Rocky Reach Plan Species Account:

- \$845.79 to Chelan County PUD for second-quarter project coordination and administration.
- \$100.00 to LeMaster and Daniels for second-quarter financial management.
- \$4,024.36 to Cascadian Conservation District for securing permits and administration costs on the Entiat Instream Structure project.

Wells Plan Species Account:

- \$865.54 to Chelan County PUD for second-quarter project coordination and administration.
- \$66,295.31 to the Okanogan Nation Alliance for dyke removal and setback, paving the walking and bike path, and installation of fencing and gates under the Okanogan River Restoration—Phase IV Project.

2. Tracy Hillman reported that he added Section 4.4 (Administrative and Support Costs) to the Policies and Procedures for Funding Projects document. This section includes the

information that Joe Miller and Becky Gallaher compiled for the Committees for the May meeting. The Committees reviewed and accepted the updated information added to the Policies and Procedures document. Tracy also reported that he updated the Tributary Committee Operating Procedures. He changed Dale Bambrick's affiliation from NOAA to National Marine Fisheries Service. Casey Baldwin noted that the Chelan County PUD representative should be changed from Chuck Peven to Keith Truscott. The Committees agreed to the changes to the Operating Procedures document.

3. Tracy Hillman reported that the Salmon Recovery Funding Board allotted \$18 million for projects for the 2009 grant round. The Upper Columbia will receive about 10.8% (\$1,953,000) of the funds. Puget Sound will receive about 42% of the funds.
4. David Morgan provided an update on the large woody debris (LWD) meeting he attended in May hosted by Chelan County Natural Resource Department. The objectives of the meeting in May were to discuss expected outcomes and goals for the LWD Forum, identify issues to meet desired outcomes and goals, develop an agenda and speaker list for community meetings, and discuss next steps beyond community meetings. David noted that Chelan County seemed to agree with the participants at the meeting in Leavenworth that the upcoming forum should focus on Lake Chelan, since a Lake Chelan interest group (Lake Chelan Sailing Association) was the only group to voice concern over the use of LWD in restoration projects. David said that another important outcome of the meeting was to focus on river safety in general. That is, the proposed upcoming forum should discuss all hazards, including bridge piers, inexperienced users, and other risks, rather than focus only on LWD.

Following the Tributary Committee meeting, David forwarded an email from Chelan County NRD that identified the next steps for the Lake Chelan LWD meeting. As identified in the email, here are the next steps:

- Regulatory agencies will convene to discuss their various permitting policies and requirements and look for opportunities for coordination. Lead: Anne Knapp, Office of Regulatory Assistance. The Corp of Engineers is currently reviewing available studies regarding effects of overwater structures and appropriate forms of mitigation as they apply to Lake Chelan.
  - An inventory of LWD structures with potential placement and construction issues will be conducted and surveyed in the next few weeks. Lead: Ken Bevis, Washington Department of Fish and Wildlife (WDFW) and Debbie Knaub, Corp of Engineers. WDFW, Corps of Engineers, and Washington Department of Ecology conducted site reviews at LWD sites of concern on Lake Chelan and will determine what can be done at these sites to alleviate concerns.
  - A panel of experts will be convened for a community forum on the role of LWD in the ecology of Lake Chelan. Lead: Mike Kaputa, CCNRD. Chelan County is working to convene the forum, which will likely occur in September or October.
5. Dennis Beich asked if the Committees have opportunities to review/revise the Policies and Procedures document. Tracy Hillman indicated that the Committees conduct an annual review of the document (usually in January), but because it is a living document, it can be reviewed/revise at any time by the Committees. That said, Dennis indicated that he would like the Committees to review the language in the document that indicates that projects funded by the Tributary Committees cannot be linked to, or used to support hatchery supplementation facilities and systems. Tracy indicated that he would include this as an agenda item for the August meeting.



**VII. Cost Share Opportunities with Priest Rapids Coordinating Committee Habitat Subcommittee**

Becky Gallaher indicated that a few sponsors (e.g., Chelan-Douglas Land Trust) had asked about how they could apply for funds through the Priest Rapids Coordinating Committee (PRCC) Habitat Subcommittee. Although the process/application for seeking funds from the PRCC Habitat Subcommittee is simple, Denny Rohr indicated that he would send to interested groups the PRCC Habitat Funds Project Specifications Sheet, which is a simple one-two page application. In addition, sponsors can find the Specifications Sheet online at: <http://www.gcpud.org/prcc/PRCC%20Habitat.htm>.

**VIII. Next Steps**

Tracy Hillman noted that full proposals are due to the Tributary Committees and Lead Entities on Friday, 24 July (see Attachment 1). Becky Gallaher will let members know when the proposals are posted on the website. Tracy also reported that the RTT will review and score full proposals on 11 and/or 12 August. RTT evaluations will be available to the Committees before the August meeting.

The next meeting of the Committees will be on Thursday, 20 August at Chelan PUD in Wenatchee. Tentative agenda items include:

- Initial review of full proposals.
- Review ineligible projects and elements (Section 4.3) in the Policies and Procedures document.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

## Attachment 1

## 2009 UPPER COLUMBIA PROCESS SCHEDULE

## Tributary Fund and SRFB

Project Proposal Development, Submission, and Review

DATE	ACTIVITY/MILESTONE (MEETING/DEADLINE)
APRIL	
1 April	SRFB/Tributary Fund Debrief of 2008; preparations for 2009
April	SRFB/Tributary Fund cycles announced; SRFB Policy Manual available
MAY	
7 May	SRFB/Tributary Fund Kickoff Meeting for the Region; RTT Technical criteria presentation; Citizens' Committee criteria presentation
May	Project Sponsors develop projects and pre-proposal materials (available from <a href="http://www.midcolumbiahcp.org/">http://www.midcolumbiahcp.org/</a> )
JUNE	
1 June	Pre-proposals due to Tributary Committees and to Lead Entities
5 June	Pre-proposals delivered to RTT members and Tributary Committee; and SRFB Panel Members (via PRISM)
11 June	Tributary Committees' internal review of pre-proposals
15 June	Conference Call to discuss project tour logistics (RTT, LEs, Trib and UCSRB)
22-25 June	SRFB/Trib Fund/RTT project tours <ul style="list-style-type: none"> <li>• 22<sup>nd</sup> – Okanogan</li> <li>• 23<sup>rd</sup> – Methow</li> <li>• 24<sup>th</sup> – Wenatchee</li> <li>• 25<sup>th</sup> – Entiat</li> </ul>
JULY	
7(tentative)-8 July (all day)	Pre-proposal Presentation Workshop: review pre-proposals with RTT, Tributary Committee and Citizens' Committee
9 July	Tributary Committees' final review of pre-proposals
16 July	Final comments from Tributary Committee due to project sponsors
24 July	Final project proposals due to Tributary Committees and Lead Entities
31 July	Project proposals delivered to RTT and Citizens Committees
AUGUST	
3 August	Draft project review forms due from State Technical Review Panel to LEs and project sponsors
11(tentative)-12 August	RTT Meeting: formal project reviews and technical ranking
19 August	RTT ratings delivered to Lead Entities and Tributary Committees
19-24 August	Individual Citizen's Committee project ranking
27 August	Joint Citizen's Committee identifies combined ranked list

SEPTEMBER	
<b>1 September</b>	<b>Lead Entity project applications due to SRFB and on to PRISM</b>
12 September	Tributary Committees' supplemental tours of selected projects (project sponsors will be notified in advance of visit)
<b>14 September</b>	<b>Final ranked list with regional funding recommendations due to SRFB; information submission questionnaire</b>
<b>30 September</b>	<b>Second Draft project review forms due from State Technical Review Panel to LEs and project sponsors</b>
OCTOBER	
8 October	Project Presentations to Tributary Committee ( <i>if needed</i> )
12-16 October	Regional Presentations to SRFB Review Panel
30 October	Draft report by Review Panel to SRFB
NOVEMBER	
5 November	Tributary Committees make initial internal decisions
20 November	Final report by Review Panel to SRFB
DECEMBER	
<b>10-11 December</b>	<b>SRFB makes formal decisions</b>
December	Tributary Committees make supplemental decisions

## Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 20 August 2009

---

**Members Present:** Dale Bambrick (NOAA Fisheries), Dennis Beich (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Lee Carlson (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Others Present:** Becky Gallaher (HCP Project Coordinator), Casey Baldwin (WDFW), Joe Miller (Chelan PUD), and Greg Mackey (Douglas PUD). Ben Lenz (Grant PUD) joined the last hour of the meeting. Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the last half hour of the meeting.

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Auditorium in Wenatchee, Washington, on Thursday, 20 August 2009 from 9:00 am to 12:30 pm.

### **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda with the following changes:

- Addition of two information updates from Keith Truscott.
- Annual review of the Tributary Committees Chair.

### **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 9 July meeting notes with edits offered by Keith Truscott, Tom Kahler, and Casey Baldwin.

### **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- Cascadia Conservation District has acquired 42 trees/logs for the *Below the Bridge* project. They secured 24 trees that were 25 feet in length and had rootwads and 18 logs that were 33 feet in length and had no rootwads.
- Under the *Entiat PUD Canal System Conversion* Project, bedrock for test well #1 (Asher property) was encountered at a depth of 63 feet. Drilling proceeded to 65 feet. Ground Affects, Inc. developed a screen design and Chelan PUD is working with Bach Drilling and Johnson Screen on approving the screen-shop drawing. The PUD anticipates that the screen will be ordered and installed before the end of August. Drilling will begin on test well #2 (Milne property) in September, following the pump test of test well #1.

- Under the *Riparian Regeneration and Restoration Initiative*, the Methow Conservancy recently completed caging 120 seedlings. An additional 15-20 will be caged before the end of the month. In addition, WDFW has signed a landowner willingness form and the sponsor will begin caging seedlings within the Methow Wildlife Area in late September.
- Under the *Okanagan River Restoration Initiative*, the old dyke was removed and the setback dyke was constructed and spawning gravel was added to the channel. Work at McIntyre Dam is progressing and fish passage should be available in September.
- Construction under the *Cashmere Pond Off-Channel Habitat Project* has begun. The pond has been dewatered and construction crews are digging it deeper (below the groundwater level). In addition, the outlet channel has been constructed, but is shorter than described in the original proposal. Also, a rock sill was constructed downstream from the pond to prevent channel migration. Becky indicated that she will visit the project site and report back to the Tributary Committees in September.

#### IV. General Salmon Habitat Program Proposals

The Committees received 14 proposals submitted under the General Salmon Habitat Program. Committee members evaluated each proposal and assigned them to one of three preliminary tiers: Tier 1—fundable, Tier 2—fundable with questions, and Tier 3—do not fund. It is important to note that these are “preliminary ratings” and ratings may change after further discussion and evaluation. The following table summarizes the preliminary rankings of the proposals (these ratings may change after further discussion).

Proposed Project	Preliminary Rankings			Comments
	Tier 1	Tier 2	Tier 3	
Nason Creek UWP Floodplain Reconnection Levee Breach	X			Keith Truscott will provide updates on discussions between the sponsor and the PUD. The PUD requires access to the power poles and that the poles be protected.
Nason Creek LWP Floodplain Reconnection Assessment			X	Bureau of Reclamation should take the lead on the assessment.
Lower Wenatchee River CMZ 6 Side Channel			X	The project will likely have low benefits and will destroy existing riparian vegetation.
White River Nason View Acquisition	X			The White River is an important spawning area for sockeye salmon. Not clear on the level of risk of development on the property. Not sure how many homes could be built on the property.
White River Tall Timber Ranch Conservation Easement	X			The White River is an important spawning area for sockeye salmon. Would it be more appropriate to sell the land rather than establish conservation easements?
Peshastin Creek Reconnection Alternatives Analysis			X	A transportation plan will be developed for Highway 97. This plan will include restoration/conservation measures.

Proposed Project	Preliminary Rankings			Comments
	Tier 1	Tier 2	Tier 3	
				Thus, this project appears premature. In addition, there are about 13 landowners that would need to agree to the proposed project.
Lower Wenatchee Instream Flow Enhancement Project	X			The funding status is still pending for some funding entities. This project may serve as a pilot project for other streamflow restoration actions.
Foreman Floodplain Reconnection Side Channel Construction	X			This is an appropriate action for this section of the Entiat River.
Entiat River Troy Acquisition		X		Need to find out if the upland can be sold and the money from the sale returned to the Tributary Committees. Identify the number of home sites on the floodplain.
Entiat Nation Fish Hatchery Habitat Improvement Project		X		Additional information from hydraulic modeling should be available soon. Recommend that the sponsor provide a presentation after the modeling work is complete.
Upper Methow II (Tawlks) Riparian Protection	X			No comments
Upper Methow III (Hardy) Riparian Protection			X	Concern about maintaining a trail for small, motorized vehicles. Also, the conservation easement protects a relatively small portion of the floodplain and shoreline.
Driscoll Island Restoration Phase I	X			This project could have a relatively large benefit to summer Chinook by providing spawning habitat. Benefits to steelhead will probably be minor.
McLoughlin Falls Conservation		X		This project appears premature. Chris Fisher will provide the Committees with additional information on the cost of the Pariseau property. WDFW will provide appraised cost on the Wilson property.

The Committees directed Tracy Hillman to contact the U.S. Fish and Wildlife Service to schedule a time for a presentation on the Entiat National Fish Hatchery Habitat Improvement Project. The Committees requested no other presentations from sponsors. However, the Committees asked Tracy to contact the Chelan-Douglas Land Trust to find out if the upland portion of the Entiat River Troy Acquisition can be sold and the money from the sale be returned to the Committees. In addition, the Land Trust should identify the number of potential home sites on the floodplain.

Members of the Committees will review the proposals in more detail during the November and December meetings.

**V. Information Updates**

The following information updates were provided during the meeting.

1. Approved Payment Requests in July and August:

Rock Island Plan Species Account:

- \$228.21 to Cascadia Conservation District for preparing the final report on the WRIA 45/46 Riparian Restoration Project.

Rocky Reach Plan Species Account:

- \$8,850.00 to Cascadia Conservation District for the purchase of 42 logs for the Below the Bridge Project.
  - \$28,641.82 to Cascadia Conservation District for engineering and permitting costs on the Entiat Instream Structure Engineering Project.
  - The following payment request was denied: \$745.84 to Cascadia Conservation District for monitoring and rental of heavy equipment for the Entiat PUD Canal Log-Boom Installation Project. The sponsor was unable to realign the boom because they did not secure appropriate permits. Keith Truscott reported that the crews identified steelhead spawning in the area of the log boom.
2. Becky Gallaher reported that she has requested bids from three accounting firms to complete the financial review. Bids are due on 13 September. The lowest bidder will be selected to conduct the review.
3. Tracy Hillman reported that he received a letter from William Dobbins, General Manager of Douglas PUD, indicating that Shane Bickford will replace Rick Klinge as the Douglas PUD alternate representative for the Wells HCP Tributary Committee. This is because Rick's health does not currently allow him to participate on the Committee. For those interested in tracking Rick's progress, please see the following site:  
<http://tinmanofwenatchee.blogspot.com>
4. Tracy Hillman noted that the U.S. Fish and Wildlife Service is requesting proposals for fiscal year 2010 cooperative restoration and recovery projects in Washington State. The Service provides technical assistance and funding for restoration and recovery projects through the following programs: (1) Puget Sound Coastal Program, (2) Partners for Fish and Wildlife Program, (3) Chehalis Fisheries Restoration Program, and (4) the Recovery Program. Proposals seeking funds from these programs are due on 11 September (for more information on these programs contact Judy Delavergne).
- The Service has two other national restoration programs: (1) National Fish Passage Program and (2) Western Native Trout Initiative. The former is a voluntary program to restore native fish and other aquatic species to sustainable levels by reconnecting habitat that has been fragmented by man-made barriers. The latter is a non-regulatory, science-based, cooperative program to fund conservation actions for western native trout. Proposals to these programs are due on 18 September (for more information on these programs contact Kate Terrell).
5. Tracy Hillman reported that Bonneville Power Administration (BPA) is preparing an Environmental Impact Statement that analyzes the reintroduction of coho salmon into mid-Columbia tributaries (Wenatchee and Methow basins) in Chelan and Okanogan counties. As BPA initiates the process for assessing the potential environmental impacts of the project, they have scheduled two public meetings: (1) Thursday, 20 August, 6:30

pm to 9:00 pm at the Chelan Fire District 3 Community Center in Leavenworth and (2) Friday, 21 August, 6:30 pm to 9:00 pm at the Methow Valley Community Center in Twisp. Dennis Beich noted that WDFW intends to provide written comments.

6. After two years of service with the Committees, Tracy Hillman asked the members for feedback on how he could better serve them as their Chairperson. Tracy noted that a formal review will be conducted next year, after three years of service. Members requested that Tracy (1) more freely offer technical information on projects and monitoring and (2) provide occasional updates on monitoring activities in the region. With regard to the first suggestion, Tracy noted that his contracts with the PUDs do not allow him to offer technical advice and opinions. The Committees agreed that Tracy should provide technical advice and information provided he does not attempt to persuade members in how to vote on projects. Thus, he can provide technical advice and information without compromising his independence. Members indicated that they would let Tracy know when he crossed the line to advocacy. Finally, Tracy indicated that he would call upon Casey Baldwin to provide information updates from the Upper Columbia Recovery Board.
7. Keith Truscott shared with the Committees that he received a letter from the Upper Columbia Salmon Recovery Board and Regional Technical Team requesting money to help fund the upcoming analysis workshops (one in November and others in spring). The purpose of the workshops is to provide information and data to assess recovery plan progress, and to interpret information gathered from monitoring and research, assess deviations from targets or anticipated results, and recommend changes in policies or management actions where appropriate. Keith noted that Chelan PUD will not be contributing financially to the workshop, but noted that if the Committees so desire, they could contribute money from the Rock Island and Rocky Reach administration fund. The Committees elected not to contribute money from the administration fund. Members noted that funds for the workshop should come from each agency, but not from the Committees.
8. Keith Truscott reported that flows last December pushed large sediments (cobbles and boulders) down Peshastin Creek and into the Wenatchee River. The deposition of these materials, which resulted from flood flows washing out the highway during the winter of 2008-2009, has now migrated downstream toward the Dryden Dam right-bank fish ladder. The concern is that the deposition of large sediments could block fish passage along the right bank. Keith showed photographs of the current location of the rock bar. Prior to the meeting, Keith met with Dale Bambrick at the site and discussed possible solutions. The current recommendation is to cut a notch in the bar to provide fish passage. The material removed from the bar would be redistributed in the channel. This will allow the river to rework the materials during high flows.

## **VI. Review of Ineligible Projects and Elements (in the Policies and Procedures Document)**

Dennis Beich requested a review of the language in the Policies and Procedures document that states that projects funded by the Tributary Committees cannot be linked to, or used to support hatchery supplementation facilities and systems. Section 4.3 in the Policies and Procedures document states that there are specific projects that are ineligible for funding consideration. The following elements apply to hatchery facilities and systems:



- Purchase or construction of buildings or land not essential to the functions or operation and maintenance of the project site.
- Net pens, artificial rearing facilities, remote site incubation systems and supplementation.

Dennis suggested that it should be appropriate for the Tributary Committees to provide funds for the purchase of land in which part of the acquired land could be used in the future for hatchery production. Dennis noted, for example, that the Tributary Committees could provide funds for the purchase of the 28-acre Libby Creek Acquisition property. The Hatchery Committee could then fund the construction of production facilities on 5 acres of the property. According to Dennis, this would not only protect high-quality habitat on lower Libby Creek, but would also help increase production of salmon and/or steelhead in the Methow Basin.

Several members noted that it should be the responsibility of the Hatchery Committees to find the land, provide funds for the purchase of the land, and to fund the construction of the production facilities. It was also noted that lands acquired with Tributary Funds cannot be used for mitigation projects or activities (see third bullet under Section 4.3 in the Policies and Procedures document). For example, properties purchased with Tributary Funds cannot be used to support Action Agency (Bonneville Power Administration, Army Corp of Engineers, and Bureau of Reclamation) mitigation needs. That is, BPA-funded hatchery facilities cannot be placed on lands acquired with Tributary funds.

Tom Kahler suggested that perhaps the language in Section 4.3 does not necessarily preclude the Committees from providing funds for purchase of lands in which some portion of the land could be used for construction of HCP production facilities; but it certainly precludes the use of Tributary Committee funds for the purchase or construction of production facilities. Some members suggested that the Tributary Committees could provide funds for the purchase of the property, but the Hatchery Committees would have to reimburse the Tributary Committees if the land was used for hatchery production.

Tracy Hillman stated that Section 3.8 (Management Guidelines for Conservation Easements/Acquired Lands) in the Policies and Procedures document describes the intended management of the property. The language does not specifically state that hatchery facilities cannot be constructed on acquired properties, but does identify limits on the use of the properties. The Committees directed Tracy to draft for consideration by the Committees some language under Section 3.8 that indicates that acquired lands may be used for HCP hatchery production systems insofar as the systems are consistent with the other management elements identified in Section 3.8. That is, if the construction of a hatchery system on a property requires bank armoring, and will reduce over-bank flows and decrease LWD recruitment and retention, then the facility cannot be constructed on the property.

## **VII. Next Steps**

Tracy Hillman noted that the next meeting will be on Thursday, 10 September at Chelan PUD in Wenatchee. At that time, if modeling results are available, the Committees will hear a presentation from the U.S. Fish and Wildlife Service on the Entiat National Fish Hatchery Habitat Improvement Project. On 7 and 8 October, the Committees will visit the Okanogan River Restoration Initiative project in Canada. Tracy also shared with the Committees the SRFB/TC schedule for the rest of the year (see Attachment 1).

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

## Attachment 1

## 2009 UPPER COLUMBIA PROCESS SCHEDULE

## Tributary Fund and SRFB

Project Proposal Development, Submission, and Review

DATE	ACTIVITY/MILESTONE (MEETING/DEADLINE)
APRIL	
1 April	SRFB/Tributary Fund Debrief of 2008; preparations for 2009
April	SRFB/Tributary Fund cycles announced; SRFB Policy Manual available
MAY	
7 May	SRFB/Tributary Fund Kickoff Meeting for the Region; RTT Technical criteria presentation; Citizens' Committee criteria presentation
May	Project Sponsors develop projects and pre-proposal materials (available from <a href="http://www.midcolumbiahcp.org/">http://www.midcolumbiahcp.org/</a> )
JUNE	
1 June	Pre-proposals due to Tributary Committees and to Lead Entities
5 June	Pre-proposals delivered to RTT members and Tributary Committee; and SRFB Panel Members (via PRISM)
11 June	Tributary Committees' internal review of pre-proposals
15 June	Conference Call to discuss project tour logistics (RTT, LEs, Trib and UCSRB)
22-25 June	SRFB/Trib Fund/RTT project tours <ul style="list-style-type: none"> <li>• 22<sup>nd</sup> – Okanogan</li> <li>• 23<sup>rd</sup> – Methow</li> <li>• 24<sup>th</sup> – Wenatchee</li> <li>• 25<sup>th</sup> – Entiat</li> </ul>
JULY	
7(tentative)-8 July (all day)	Pre-proposal Presentation Workshop: review pre-proposals with RTT, Tributary Committee and Citizens' Committee
9 July	Tributary Committees' final review of pre-proposals
16 July	Final comments from Tributary Committee due to project sponsors
24 July	Final project proposals due to Tributary Committees and Lead Entities
31 July	Project proposals delivered to RTT and Citizens Committees
AUGUST	
3 August	Draft project review forms due from State Technical Review Panel to LEs and project sponsors
11(tentative)-12 August	RTT Meeting: formal project reviews and technical ranking
19 August	RTT ratings delivered to Lead Entities and Tributary Committees
19-24 August	Individual Citizen's Committee project ranking
27 August	Joint Citizen's Committee identifies combined ranked list

SEPTEMBER	
<b>1 September</b>	<b>Lead Entity project applications due to SRFB and on to PRISM</b>
12 September	Tributary Committees' supplemental tours of selected projects (project sponsors will be notified in advance of visit)
<b>14 September</b>	<b>Final ranked list with regional funding recommendations due to SRFB; information submission questionnaire</b>
<b>30 September</b>	<b>Second Draft project review forms due from State Technical Review Panel to LEs and project sponsors</b>
OCTOBER	
8 October	Project Presentations to Tributary Committee ( <i>if needed</i> )
12-16 October	Regional Presentations to SRFB Review Panel
30 October	Draft report by Review Panel to SRFB
NOVEMBER	
5 November	Tributary Committees make initial internal decisions
20 November	Final report by Review Panel to SRFB
DECEMBER	
<b>10-11 December</b>	<b>SRFB makes formal decisions</b>
December	Tributary Committees make supplemental decisions

## Wells, Rocky Reach, and Rock Island HCP Tributary Committees Meeting Notes 5 November 2009

---

**Members Present:** Dale Bambrick (NOAA Fisheries), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), David Morgan (USFWS), Lee Carlson (Yakama Nation), Keith Truscott (Chelan PUD), and Tracy Hillman (Committees Chair).

**Members Absent:** Dennis Beich<sup>1</sup> (WDFW).

**Others Present:** Becky Gallaher (HCP Project Coordinator). Robes Parrish (USFWS) joined the meeting for the fourth agenda item (Entiat National Fish Hatchery Habitat Improvement Project presentation).

---

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at the Chelan PUD Service Building Conference Room in Wenatchee, Washington, on Thursday, 5 November 2009 from 9:00 am to 12:35 pm.

### **I. Review and Adopt Agenda**

Tracy Hillman welcomed everyone to the meeting, and the Committees adopted the proposed agenda with the following additions:

- Information updates from Dale Bambrick, David Morgan, and Chris Fisher.

### **II. Review and Approval of Meeting Minutes**

The Committees reviewed and approved the 20 August meeting notes with edits offered by Keith Truscott and Tom Kahler.

### **III. Monthly Update on Ongoing Projects**

Becky Gallaher gave an update on funded projects.

- For the *Below the Bridge* project, Cascadia Conservation District hired Award Construction out of Ferndale, WA, to construct the instream structures, ELJs, and diversion.
- Under the *Entiat PUD Canal System Conversion* project, drilling of Test Well #1 was completed on 16 October. The pump test yielded a maximum production rate of 62.5 gallons per minute (gpm). This falls short of the 73 gpm goal for this well. Based on these results, the engineer recommended drilling two additional test wells. Drilling on Test Well #2 began on 4 November.

---

<sup>1</sup> Dennis was unable to join the meeting. He did, however, provide his vote on decision items following the meeting.

- Under the *Riparian Regeneration and Restoration Initiative*, the Methow Conservancy has caged 577 seedlings on 12 properties. The Sponsor requested a time extension beyond the original project termination date of 31 December 2009. The Conservancy asked the Wells Committee to extend the date to 31 October 2010. This will allow them to continue to protect seedlings in 2010. ***The Wells Tributary Committee agreed to extend the termination date to 31 October 2010.***
- Under the *Twisp River Riparian Protection* project, the Pampanin and Spier Conservation Easements will close on 18 November.
- The *Poorman Creek Barrier Removal* project is complete. The Methow Salmon Recovery Foundation will be submitting a final report to the Wells Tributary Committee soon. Chris Fisher asked that the final report include photos showing the channel roughness inside the culvert.

#### IV. Entiat National Fish Hatchery Habitat Improvement Project Presentation

Mr. Robes Parrish with the U.S. Fish and Wildlife Service provided a brief presentation to the Committees on the Entiat National Fish Hatchery Habitat Improvement Project, which is being considered for funding by the Salmon Recovery Funding Board and the Tributary Committees. Robes began by reminding the Committees that the project has three main components: breaching the levee, placement of engineered log jams (ELJs), and structure enhancement. He then noted that the final modeling results will not be available until 18 November. The Bureau of Reclamation is currently modeling individual project elements and their cumulative effects. This is a small set back, because, as Robes noted, it is difficult to describe the exact design without the modeling results. Therefore, the sponsor is proposing a two phased approach: (1) breach the levee and (2) construct ELJs and off-channel habitat.

The levee will be breached up to the existing terrace. Current modeling information is sufficient to predict the results of breaching. The intent is to return the entire floodplain to a more normative function. All trees removed during breaching will be incorporated into woody debris structures. Small ring dikes will be constructed around the existing wells to protect them from all flows. This is much cheaper than relocating the wells. Materials from the levee will be used to construct the ring dikes. The roads that access the wells will be lowered to the elevation of the floodplain. In addition, the road culverts will be removed and replaced with rock fords. Finally, riparian vegetation will be planted in the floodplain to enhance floodplain function and connectivity.

Robes noted that they will decide this winter what type of modeling (1D or 2D) will be needed to determine the effects of ELJs and off-channel habitat actions on stream dynamics. Robes was certain that the higher gradient section of the river will require some wood to divert water onto the floodplain. Modeling work will also help identify timeframes for design completion and implementation.

Robes indicated that the phased approach may not fit well with the design of the Entiat Intensively Monitored Watershed (IMW) approach. The IMW proposes to track the effects of habitat actions in the Entiat River by implementing habitat actions in a sequenced approach, beginning upstream and moving downstream over time. The IMW design will not be confounded if the Entiat National Fish Hatchery Habitat Improvement Project can be implemented in 2010. However, actions implemented in 2011 may confound the IMW design. One option being discussed is to delay the project to better fit the IMW design. Robes noted that he is working closely with those involved with the Entiat IMW.

Finally, Robes stated that the total cost of the project is \$285,886. The sponsor is requesting \$87,673 from the Salmon Recovery Funding Board and \$61,373 from the HCP Tributary Committees. Robes noted that the \$74,990 from the Community Salmon Fund may be lost if the money is not used in 2010. He indicated that he would check into the possibility of losing these funds. The USFWS is providing a \$61,850 cost share (direct and in-kind). When asked how much it costs to construct an ELJ, Robes noted that they cost about \$25,000 per structure.

## **V. Entiat River Troy Acquisition Update**

In August, the Committees asked Tracy Hillman to contact the Chelan-Douglas Land Trust to find out if the upland portion of the Entiat River Troy Acquisition could be sold and the money from the sale be returned to the Committees. In addition, they asked the Land Trust to identify the number of home sites on the floodplain.

In an email from Mickey Fleming with the Chelan-Douglas Land Trust, she indicated that the 40-acre riparian area southwest of the road is zoned for minimum 10-acre parcels. However, because there is no access across the river and the land area between the river and the road is relatively small, they are estimating only one homesite on the floodplain. The 25 acres north of the road is zoned for minimum 5-acre parcels, but because of the steep topography, they figure only one homesite north of the road.

Mickey noted that the Land Trust would be willing to try and sell the upland as a single homesite to a conservation buyer. By itself, the property would not command anywhere near the value of properties with waterfront, and is less desirable because of the steep topography. She noted that the Land Trust would need to make an investment to split the property through a certificate of exemption. There would be a filing fee of \$500, plus additional costs for staff time, legal fees, and a survey. In sum, they would be willing to return the balance of the proceeds after subtracting all expenses and reasonable overhead.

## **VI. Acquisition of Lands for Hatchery Facilities and Systems**

As directed by the Committees during the August meeting, Tracy Hillman drafted language for the Policies and Procedures document that addresses the use of Tributary Funds to purchase lands that may be used for hatchery production systems. Under Section 3.8, Tracy drafted the following language:

- *Lands acquired with Tributary Funds may be used for hatchery production systems insofar as the development and use of those systems are consistent with the above identified management elements.*

David Morgan noted that the draft language does not adequately capture the thinking of the Committees. Specifically, it does not state that the HCP Hatchery Committees would reimburse the Tributary Funds if hatchery facilities or systems were placed on the lands.

Members present noted that adding language to the policies and procedures document is not necessary and each acquisition should be handled on a case-by-case basis. That is, rather than add language that does or does not allow acquired lands to be used for hatchery systems, the Committees would rather evaluate the merits of each acquisition proposal independent of any policy or procedure statement. Thus, the members present believe that no language should be added to the policies and procedures document regarding the purchase of lands that may be used for hatchery systems. This does not mean that the Committees will not accept proposals that intend to purchase lands that could be used for hatchery production systems. Several members did

note that it should be the responsibility of the Hatchery Committees, not the Tributary Committees, to purchase lands that will be used for future hatchery systems.

Because Dennis Beich introduced this issue to the Committees earlier this year, and he was not available to participate in the discussion during the current meeting, the Committees will revisit this issue when Dennis is present.

## **VII. Entiat Riparian Outreach and Planting Projects**

Becky Gallaher reported that she was contacted by Phylisha Olin with Cascadia Conservation District regarding landowner outreach, coordination, and riparian planting. She reminded the Committees that last May, Cascadia submitted a Small Projects Proposal asking the Committees to fund landowner coordination and public education and outreach, which would lead to riparian planting projects in the Wenatchee and Entiat basins. The Committees declined funding because of the high cost of the proposal and the lack of information on when, where, and how the project would be implemented. And before that, Cascadia submitted a Small Projects Proposal asking for additional funds (i.e., funds in addition to the WRIA's 45/46 Riparian Restoration Project) to do riparian plantings in the two basins. That proposal was not funded because the total amount of the riparian planting project exceeded the \$50,000 limit for Small Projects.

Cascadia believes that riparian plantings are an important component of habitat restoration and recovery of listed species, and that this type of restoration cannot occur without landowner outreach, coordination, and education. Therefore, they are wondering how to approach the Committees to seek funding for this work. After discussion, the Committees believe the best approach would be to submit the project under the General Salmon Habitat Program, which has no upper funding limit. In addition, the Committees recommended that the sponsor address all the concerns that they raised with the Small Projects Proposals, including where and when outreach will occur, what native species will be used, and at what density they will be planted.

Becky will relay this information back to Cascadia Conservation District.

## **VIII. Okanagan/ORRI Site Visit**

Tracy Hillman, with much help from Chris Fisher, David Morgan, and Keith Truscott, provided a briefing on their trip to the Okanagan River Restoration Initiative (ORRI) Project in Canada (the Power Point presentation is posted on the Tributary Committees ftp and website). During the first day of the visit (7 October), members of the Committees toured McIntyre Dam. The Dam diverts water from the Okanagan River to the Town of Oliver. At the time of the visit, engineers were testing the new passage structures. Sockeye were attempting to pass the structure, but many failed because the passage structures (horizontal lift gates) were raised to their maximum height. In addition, some sockeye became temporarily trapped in a cavity along the outer edge of the horizontal lift gate. Members recommended that a half-pipe be welded onto the leading edge of the gate to minimize trapping and injury to fish.

Members of the Committees then visited a rock, push-up diversion on Vaseux Creek. A large percentage of the flow in Vaseux Creek is diverted into an unlined canal, which transmits water to agricultural lands. The Okanagan Nation Alliance (ONA) is considering several different options to minimize water loss, including: (1) pipe system, (2) re-reg reservoir, (3) lining the canal, (4) intake screen, and (5) closing the diversion and pumping water from the Okanagan River. Once the ONA decides on a recommended approach, they may submit a proposal to the Tributary Committees for funding. This stream is an important steelhead/rainbow spawning and rearing stream.

Members then visited the lower portion of Shuttleworth Creek. The lower portion of Shuttleworth Creek was reconfigured to act as a sediment trap. As such, the lower portion of the stream is wide, shallow, and heavily embedded with fine sediments. The banks are laid-back and there is limited channel structure and riparian vegetation. In addition, there is a partial barrier just upstream from the mouth of the stream. Restoration actions under consideration include removing the barrier, reconfiguring the channel, and restoring riparian vegetation. This stream is also an important spawning and rearing area for steelhead/rainbow. In the future, the Committees may see a proposal from ONA to help fund restoration in this stream.

On the second day (8 October), members visited the ORRI Project, which is located just upstream from the Town of Oliver. The first phase of implementation, which is nearly complete, was to rebuild the setback dike in the lower portion of the project area. Members observed the completed side channel and instream rock structures. Although sockeye were spawning in the main channel, no spawning was occurring in the side channel at the time of the visit. Members also observed the constructed gravels bars that were placed along the margin of the main channel to enhance flow meander.

Work during the second phase of the project will reconnect the channel with the floodplain and rebuild setback dikes in the upper portion of the project area, and address drop structures in the lower portion of the project area. Eight different options are being evaluated under Phase II.<sup>2</sup> One approach, remove the dikes and let the river do the work, is not a valid option because there is not enough stream energy to do restoration work with the drop structures in place. However, there is an option to modify the drop structures. The intent would be to lower the structure by about 30 cm (~12 inches), which would reduce energy dissipation and allow the stream to remove fines that embed redds upstream from the structures. The cost to lower the structure would be about \$50-\$60K. The ONA, fisheries agencies, and engineers are conducting cost-benefit analyses on the eight different options.

Dr. Newberry stated that although the Okanagan River has limited woody debris, it may not be feasible to add wood because it can detach and collect at the drop structures. In addition, they are also limited on the type of trees that they can plant along the river.

## **IX. Information Updates**

The following information updates were provided during the meeting.

### **1. Approved Payment Requests in September and October:**

#### **Rock Island Plan Species Account:**

- \$179.00 to LeMaster and Daniels for administration for third quarter 2009.
- \$1,244.65 to Chelan County PUD for administration and project coordination for third quarter 2009.

#### **Rocky Reach Plan Species Account:**

- \$213.67 to Cascadia Conservation District for staff time to secure logs and rootwads for the Below the Bridge project.
- \$179.00 to LeMaster and Daniels for administration for third quarter 2009.
- \$1,366.31 to Chelan County PUD for administration and project coordination for third quarter 2009.

---

<sup>2</sup> During the visit, Dr. Newberry did not identify the eight different options they are currently considering.



Wells Plan Species Account:

- \$2,340.14 to Douglas County PUD for account administration for fiscal year ending 31 August 2009.
  - \$1,069.06 to Chelan County PUD for project coordination for third quarter 2009.
  - \$4,905.80 to the Methow Conservancy for purchasing materials, meeting with landowners, and caging about 230 seedlings on five properties under the Riparian Regeneration and Restoration Initiative.
  - \$48,649.00 to Inland Professional Title for the Pampanin Property Conservation Easement under the Twisp River Riparian Protection project.
  - \$23,993.00 to Inland Professional Title for the Speir Property Conservation Easement under the Twisp River Riparian Protection project.
  - \$53,748.00 to the Methow Salmon Recovery Foundation for the Poorman Creek Barrier Removal project.
2. Becky Gallaher reported that Cordell, Nehr, & Company, PLLC was selected to conduct the financial review. They have already begun the review.
  3. Becky Gallaher gave an update on the amount of money available in each Plan Species Accounts. She reported that there is about \$1.1 million available in the Rock Island Account, about \$382K in the Rocky Reach Account, and about \$600K in the Wells Account.
  4. Tracy Hillman reported that he received an email from Mickey Fleming with the Chelan-Douglas Land Trust stating that the PRCC Habitat Subcommittee has verbally agreed to contribute \$388,790 toward the 117 acre Nason View Acquisition on the White River. However, the email noted that the total cost of the project has increased from \$457,900 to \$545,000, because the landowners found that there were several aspects of the DNR forestry easement program that make it infeasible to combine it with a fish-habitat funded purchase. That is, the DNR money would apparently be considered ordinary income (sale of a crop) rather than sale of real estate. In addition, the landowners may have to cut some timber to show that it is harvestable. Nevertheless, the Land Trust still supports the project and is asking \$64,575 from the Salmon Recovery Funding Board and \$91,635 from the Tributary Committees. The original proposal requested \$365,925 from the Committees.
  5. Tracy Hillman updated the Committees on the efforts by the co-managers, Bonneville Power Administration (BPA), Columbia Basin Fish and Wildlife Authority (CBFWA), the Northwest Power and Conservation Council (Council), and others to develop a regional monitoring strategy for the Columbia Basin. Since the release of the most recent Federal Columbia River Power System (FCRPS) Biological Opinion, the Action Agencies, NOAA, and the Council have been developing monitoring strategies to address the RPA requirements in the BiOp. In order to implement the monitoring recommendations most efficiently and effectively, the Council recommended that the Action Agencies, NOAA, CBFWA, and the Council convene all interested parties, include local, state, federal, and tribal entities, to identify existing monitoring efforts, monitoring gaps, and monitoring needs. The region held two workshops: one on 20-21 October and the other on 3-5 November. Both policy and technical representatives from each entity were present.

The goal of the workshops was to agree on an efficient and effective framework and project-specific implementation strategy for anadromous salmon and steelhead monitoring to assess (1) VSP parameters, (2) habitat effectiveness, and (3) hatchery effectiveness. The framework should meet the needs of the FCRPS BiOp, address the needs of the Council's Fish and Wildlife Program, contribute to the monitoring needs of ESA recovery planning, and contribute to other regional fisheries management needs. Some of the key outcomes and next steps of the workshops were development of a draft Columbia River Basin Anadromous Fish Monitoring Framework document, identification of monitoring gaps needed to fulfill FCRPS BiOp needs, confirm existing monitoring projects, estimate costs and budget balancing, and develop a draft plan for basin-wide hatchery RME.

Tracy noted that the Upper Columbia was well represented in the workshops. He also reported that BPA and the Bureau of Reclamation will likely provide additional funding to fill existing monitoring gaps in the Upper Columbia (filling these gaps will satisfy BiOp requirements, but may not fill all monitoring needs associated with ESA recovery planning). In addition, the Upper Columbia, unlike most other regions in the Columbia Basin, has some of the most intensive and extensive monitoring in the region. This is largely due to hatchery effectiveness monitoring conducted under the HCPs and relicensing agreements, and the Integrated Status and Effectiveness Monitoring Program funded by BPA and NOAA. Without this level of monitoring, the Upper Columbia would have significant monitoring gaps. Tracy indicated that he and Casey Baldwin will continue to update the Committees on further developments and outcomes from the regional efforts.

6. Tracy Hillman reported that the Upper Columbia Regional Technical Team Analysis Workshop has been rescheduled for 12-13 January 2010. The workshop will be at the Red Lion Hotel in Wenatchee. The purpose of the workshop is to address key management questions associated with VSP, limiting factors and threats, habitat status and trend, habitat effectiveness, and data gaps and research. Information from the workshop will help support adaptive management, which is a critical component of the Upper Columbia spring Chinook salmon and steelhead recovery plan. Tracy urged members of the Tributary Committees to attend the workshop.
7. David Morgan reported that he recently spoke with the Chelan County Planning Department about the risk of development along rivers. The Planning Department indicated that it is difficult to get a variance to build along the river, which, as David noted, is not necessarily consistent with conventional wisdom. Ultimately, it is up to the County Commissioners to grant the variance. If the Committees have questions, the Planning Department may be willing to discuss projects on a case-by-case basis.
8. David Morgan reported that he attended the Wenatchee Watershed Planning Unit Meeting in which there was discussion about the proposed Campbell Creek Off-Channel Reservoir. David noted that Chelan County Natural Resource Department is pushing the project even though the landowner has no interest in having the reservoir on his land. In addition, if the reservoir is constructed upstream on Forest Service land, the private landowner will not allow any technical analysis or pipeline easement on his land. David noted that there was also discussion about taking water out of Icicle Creek, which does not have water to spare, and via the existing canal. David and others believe that Campbell Creek should not be emphasized. Instead, pumping water directly from the Wenatchee River into the irrigation canal may be more promising.

9. David Morgan noted that during a Habitat Subcommittee Meeting, the Washington Department of Transportation talked about focusing habitat work on lower Peshastin Creek. Lower Peshastin Creek is in need of habitat rehabilitation, but suitable stream flow is still one of the primary limiting factors in that system. It appears that this might be an opportunity to formally engage with the Department of Transportation's "chronic deficiencies" program, and potentially discuss big-picture planning actions such as relocating significant portions of Highway 97. This would allow the stream greater access to its pre-1960 floodplain.
10. Dale Bambrick shared with the Committees his visit with the Chewuch Canal Company. He reported that there are opportunities for the Company to use less water in their system. They currently divert about 34 cfs when Chewuch River flows reach 100 cfs. Dale noted that it should be possible with an efficient system to irrigate the number of acres currently irrigated (~1,447 acres) with about 15 cfs. Dale proposed an agreement with the Company in which the Tributary Committees, PRCC, and/or BPA could provide funding for system improvements and advocacy with the Department of Ecology to enable more freedom in the operation of the lake in exchange for restricting the amount of water diverted at a given river discharge. Dale suggested that the Company test the proposal for at least three years. This would give them enough time to see if it is possible to operate with less water in their system. The Company noted that this could become an issue if those currently not irrigating, or those who have never irrigated but are paying their assessments, suddenly ask for water. Dale will continue to update the Committees on his exchanges with the Chewuch Canal Company.
11. Chris Fisher updated the Committees on his recent conversation with Mike Kane, Chelan County Natural Resource Department, about the Nason Creek Upper White Pine Floodplain Reconnection Project. The original proposal called for selectively breaching the levee to reconnect about 25 acres of off-channel and floodplain habitat within the Upper White Pine Reach on Nason Creek. After reviewing the proposal, the SRFB Review Panel requested that the sponsor consider a more aggressive breaching approach that would allow channel migration processes into the floodplain area. The Review Panel also asked for hydraulic modeling information that shows the frequency of the rearing connection and how long-term channel profile changes may affect the connection. The Bureau of Reclamation has agreed to do further analyses. Because the project lies on Forest Service lands, the Forest Service would like to take a more active role in the project, which could start a NEPA process. Keith Truscott noted that Chelan PUD must have access to the power poles. Chris and Keith agreed to update the Committees on future changes or modifications to the proposed project.

## **X. Next Steps**

The Committees decided not to meet in December, because of the holidays and because funding decisions by the SRFB will not be available until 10-11 December. Therefore, the Committees will next meet on Thursday, 14 January. At that time, the Committees will make their final funding decisions on the 2009 General Salmon Habitat Program proposals. The meeting will follow the Upper Columbia RTT Analysis Workshop.

Meeting notes submitted by Tracy Hillman ([tracy.hillman@bioanalysts.net](mailto:tracy.hillman@bioanalysts.net)).

APPENDIX D  
LIST OF WELLS HCP COMMITTEE  
MEMBERS

---

## Wells Dam Mid-Columbia HCP Committees

### Coordinating Committee

Name	Organization
Michael Schiewe (Chair)	Anchor QEA, LLC
Jerry Marco	Colville Tribes
Tom Kahler	Douglas PUD
Bryan Nordlund	NOAA Fisheries
Jim Craig	USFWS
Bill Tweit	WDFW
Steve Parker	Yakama Nation

### Hatchery Committee

Name	Organization
Michael Schiewe (Chair)	Anchor QEA, LLC
Kirk Truscott	Colville Tribes
Tom Kahler	Douglas PUD
Kristine Petersen	NOAA Fisheries
Bill Gale	USFWS
Jeff Korth	WDFW
Tom Scribner	Yakama Nation

### Tributary Committee

Name	Organization
Tracy Hillman (Chair)	BioAnalysts
Chris Fisher	Colville Tribes
Tom Kahler	Douglas PUD
Dale Bambrick	NOAA Fisheries
David Morgan	USFWS
Dennis Beich	WDFW
Bob Rose	Yakama Nation

### Policy Committee

Name	Organization
Michael Schiewe (Facilitator)	Anchor QEA, LLC
Joe Peone	Colville Tribes
Shane Bickford	Douglas PUD
Keith Kirkendall	NOAA Fisheries
Mark Miller	USFWS
Bill Tweit	WDFW
Virgil Lewis	Yakama Nation

APPENDIX E  
STATEMENTS OF AGREEMENT FOR  
COORDINATING COMMITTEES

---

**Wells HCP Coordinating Committee  
Statement of Agreement  
To Memorialize the Decision by the Fisheries Parties to Accept the  
Recommendation of the Wells Tributary Committee Regarding Future Douglas  
PUD Contributions to the Wells Plan Species Account  
March 24, 2009**

**Statement**

The Fisheries Parties to the Wells HCP, agree with the unanimous recommendation of the Wells Tributary Committee (12 February 2009) to receive future contributions by Douglas PUD to the Wells Plan Species Account as annual payments of \$176,178 in 1998 dollars, beginning in January 2010, and continuing as long as the agreement (Wells HCP) is in effect.

**Background**

Section 7 of the Wells HCP describes the establishment of the Plan Species Account (Account) and the formation of the Tributary Committee to select and fund, via the Account, projects for the protection and restoration of Plan Species habitat. Section 7.4 describes the funding of the Account and details the disbursement options. The Account was established by a lump-sum contribution in September 2004. The HCP presents two options for subsequent contributions, as described in Section 7.4.1.

7.4.1 The District shall make an initial contribution of \$1,982,000 in 1998 dollars to the Plan Species Account. Five years after the initial contribution to the Plan Species Account, the District shall do one of the following: 1) make annual payments of \$176,178 (2%) in 1998 dollars as long as the Agreement is in effect; or 2) provide an up front payment of \$1,761,780 (2% for 10 years) in 1998 dollars, but deducting the actual cost of bond issuance and interest.

The HCP does not specify that the Tributary Committee shall choose between the funding options described in Section 7.4.1; rather, Section 7.4.5 states only that the Fisheries Parties (FP) shall choose. At the January 2009 Coordinating Committee meeting, Tom Kahler notified the FP representatives that the FP must choose between contribution options. The Coordinating Committee indicated that they would consult within their respective entities regarding the contribution options but all agreed that they wished to have the input of their Tributary Committee representative on this matter. At the February 2009 Tributary Committee meeting, Tom Kahler explained how the last sentence of Section 7.4.1 describes deductions from the 10-year lump sum that include interest and the cost of bond issuance, and that, with these deducted costs, the annual contributions over ten years dramatically surpass the value of the 10-year lump-sum option. In consideration of the reduced value of the lump-sum option, the Wells Tributary Committee unanimously agreed to the annual-payment option for future Douglas PUD contributions to the Wells Plan Species Account.

**Wells HCP Coordinating Committee**  
**Statement of Agreement**  
**Regarding 2010 Wells Dam Survival Verification Study**  
**Phase III (Standard Achieved)**  
**June 12, 2009**  
**Approved June 23, 2009**

**Statement**

The Wells HCP Coordinating Committee approves the Douglas PUD study proposal, dated June 12, 2009, *Wells Project Survival Verification Study; Phase III (Standard Achieved), 2010 Study Plan*. The goal of the study is to verify the achievement of Phase III (Standard Achieved) for yearling Chinook and steelhead migrating through the Wells Project as per Section 4.2.5.1 of the Wells HCP.

**Background**

During Phase I of the Wells HCP Passage Survival Plan (Section 4), Douglas PUD conducted three years of valid juvenile project survival studies with steelhead and yearling Chinook salmon. Results from those studies consistently exceeded the 93% juvenile project survival standard and the precision and accuracy requirements of the HCP. The average juvenile project survival for yearling Chinook and steelhead over the three years of study was 96.2%. The results from the Phase I juvenile project survival studies, coupled with the results from the adult passage studies, provided the necessary information for the HCP Coordinating Committee to determine that the Wells Project could proceed to Phase III (Standard Achieved) for yearling Chinook and steelhead (adopted at the February 2005 Coordinating Committee meeting).

Phase III of the Passage Survival Plan (Wells HCP Section 4.2.5.1) indicates that when the appropriate survival standard has been achieved, periodic monitoring is required to ensure that the survival of Plan Species is maintained and remains in compliance with the survival standards set forth in the plan for the term of the Agreement. Section 4.2.5 states that:

*In this case, the District shall re-evaluate performance under the applicable standards every 10 years. The Coordinating Committee shall pick representative species for all Plan Species. However, only one species will be utilized to represent spring migrants and one species for summer migrants. This reevaluation will occur over one year and be included in the pertinent average for that particular species. If the survival standard is met, then Phase III (Standards Achieved) status will remain in effect.*



APPENDIX F  
STATEMENTS OF AGREEMENT FOR  
HATCHERY COMMITTEES

---

**Wells HCP Hatchery Committee  
Statement of Agreement  
Regarding Collection of 200,000 summer Chinook eggs for Entiat National Fish Hatchery  
(USFWS)**

**Statement**

The Wells HCP Hatchery committee approves the collection and spawning of additional summer Chinook (50 pair) during broodstock collection efforts at Wells hatchery volunteer ladder trap for the 2009 brood year. This agreement is in effect for only one year. These additional eggs (up to 200,000) will be transferred as green eggs to the US Fish and Wildlife Service's Entiat NFH for the initiation of a new summer Chinook program. This will result in an increase in the number of adult summer Chinook brood stock targeted for collection in the Final Draft 2009 Upper Columbia River Salmon and Steelhead Broodstock Objectives and Site-Based Broodstock Collection Protocols. US Fish and Wildlife Service agrees to provide staff assistance for these collection efforts as needed and at the discretion of Wells Hatchery staff.

**Background**

The US Fish and Wildlife Service (FWS) in conjunction with other parties (Yakama Nation, Confederated Colville Tribes, NOAA, WDFW, BOR) is currently in the process of developing plans to implement a new summer Chinook production program at Entiat NFH. The long term goal of this program is to provide fish for tribal, commercial, and sport harvest and to meet tribal trust responsibilities as mitigation for Grand Coulee Dam. A Hatchery and Genetics Management Plan (HGMP) is being developed by the FWS for this program which will be coordinated as appropriate with the other parties. At this time, the program concept is that at full implementation this program will be a segregated-harvest program with a yearly release goal of 350-400K yearling summer Chinook smolts released into the Entiat River. During the next two brood years the Service is planning to initiate partial hatchery production (up to 200K smolt release) with full program implementation planned for the 2011 brood year. The first release from this partial production will occur in spring of 2011. To initiate this production program the Service plans to use adult summer Chinook collected at Wells Hatchery as volunteer returns to the facility for broodstock. This broodstock collection effort will entail transfer of eggs in the first year of partial production (BY 2009), and transfer of adults in all subsequent years. Full production will require the collection of up to 300 hatchery origin summer Chinook adults (enough to provide up to 400K eggs). As the progeny of the initial Wells Hatchery collections return as adults (to Entiat NFH) they will be used as broodstock and the number of adults needed from Wells Hatchery will be reduced. It is anticipated that by brood year 2016 the Entiat NFH program will utilize hatchery volunteers for 100% of broodstock needs. Funding for this new program will be the responsibility of the FWS and BOR.

Broodstock collection will occur concurrent with the currently planned WDFW efforts as detailed in the Final Draft 2009 Upper Columbia River Salmon and Steelhead Broodstock Objectives and Site-Based Broodstock Collection Protocols developed in conjunction with the HCP-Hatchery subcommittee.

Future summer Chinook broodstock management and adult holding at Entiat NFH will likely overlap with YN adult coho holding and spawning. The earliest that adult summer Chinook would be brought on station would be in brood year 2010. The FWS and YN are currently developing plans for how this will occur without impacting either program. Current options include splitting the Entiat NFH adult pond into two separate ponds, one designated for coho and the other for summer Chinook, or transferring the YN coho adult holding and spawning activities to the Leavenworth NFH.

In addition to working with appropriate co managers to develop agreement concerning implementation of summer Chinook production at Entiat NFH (i.e. completion of an HGMP), the Service will provide a proposal for consideration by parties to the *US vs OR agreement*. Furthermore, before summer Chinook are released from Entiat NFH the Service will ensure that ESA Section 7 consultation has been completed with both NOAA and USFWS. Coordination between the interested parties has been ongoing since the fall of 2008, all coordination and consultation activities will occur during the transition from partial to full production and will be completed prior to the first smolt release (spring 2011).

APPENDIX G  
2009 JUVENILE BYPASS OPERATING  
PLAN

---



# Public Utility District No. 1 of Douglas County

1151 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553 • [www.douglaspud.org](http://www.douglaspud.org)

## Memorandum

TO: Wells HCP Coordinating Committee

FROM: Rick Klinge, Douglas PUD

DATE: January 29, 2009

SUBJECT: 2009 Juvenile Bypass Operating Plan

The 2009 spring and summer outmigration at Wells Dam will consist of naturally produced fish whose parents spawned during brood years 2007 and 2008. The spring migration will be made up of progeny from 2,793 BY 2007 adult and jack spring Chinook. Spring migrants will also be progeny from 22,273 BY 2007 adult sockeye. The spring migration will also have juvenile steelhead that are age two migrants (from 7,500 adults, BY-2007) and yearling migrants (from 9,808 adults, BY-2008). The naturally produced summer migrating fish will be summer/fall Chinook sub-yearlings from 28,858 BY 2008 adult and jacks.

Scheduled hatchery releases, above Wells Dam, include yearling spring Chinook from the Chewuch (183,000), Twisp (57,868) and Methow Acclimation Ponds (69,747) and the Winthrop National Fish Hatchery (400,000). The Winthrop National Fish Hatchery will release 430,000 coho this spring. Summer Chinook yearlings will be released from the Carlton (464,254), Similkameen (517,961) and Bonaparte Ponds (104,364). Hatchery summer steelhead will be released throughout the Methow and Okanogan rivers. Hatchery steelhead released above Wells Dam are from Wells Hatchery (459,854) and Winthrop NFH (102,000). In general, the hatchery yearling Chinook and steelhead are scheduled to be released on April 15<sup>th</sup> with Winthrop coho scheduled to be released on April 20<sup>th</sup>. By the end of April, all of the Chinook and coho will be released. The steelhead releases historically continue into the middle of May.

The summer outmigration expected to pass Wells Dam in 2009 are 100% naturally produced ocean-type summer/fall Chinook spawned during brood year 2008. Natural escapement of summer / fall Chinook in 2008 was 28,858 counted at Wells Dam.

Operation of the bypass system throughout the 2009 season will be guided by the criteria contained within the Wells Dam Juvenile Dam Passage Survival Plan (Wells Juvenile Bypass Plan) found in Section 4.3 of the Wells HCP. One of the main goals of the Wells Juvenile Bypass Plan is to provide bypass operation for at least 95% of the spring and at least 95% of the summer migration of juvenile plan species.

Bypass operations are implemented based upon an analysis of 21 years of hydroacoustic and 14 years of species composition information collected on juvenile run patterns at Wells Dam. Based upon this analysis, Douglas PUD has proposed bypass operating dates that have been broader than those contained within the Wells HCP Agreement. The HCP Agreement originally directed the District to operate the bypass continuously from April 10<sup>th</sup> to August 15<sup>th</sup>. However, based upon the District's 21-year run-timing analysis, presented and agreed to by both the Wells HCP Committee and the Wells Coordinating Committee in February 2004, initiation of the Wells bypass system on April 12<sup>th</sup> and termination on August 26<sup>th</sup> will conservatively provide bypass operations for 95% of both the spring and summer outmigrations.

Historically, initiation of the bypass system on April 12<sup>th</sup> would provide a non-turbine passage alternative for 95.5% of the spring migration. Similarly, shutting down the bypass system on August 26<sup>th</sup>, on average would provide bypass operation for 95.0% of the summer migration. Similar to the past 7 years and for accounting purposes, the end of the 2009 spring bypass season will be June 13<sup>th</sup> at 2400 hours and the beginning of the summer bypass season will be June 14<sup>th</sup> at 0000 hours.

# APPENDIX H

## BROODSTOCK COLLECTION PROTOCOLS

---

**STATE OF WASHINGTON**  
**DEPARTMENT OF FISH AND WILDLIFE**  
**Mid-Columbia Field Office**

3515 Chelan Hwy 97-A Wenatchee, WA 98801 (509) 664-1227 FAX (509) 662-6606

April 15, 2009

To: Kristine Petersen, Salmon Recovery Division, NMFS

From: Kirk Truscott, WDFW

Subject: **Final DRAFT 2009 UPPER COLUMBIA RIVER SALMON AND STEELHEAD  
BROODSTOCK OBJECTIVES AND SITE-BASED BROODSTOCK  
COLLECTION PROTOCOLS**

The attached protocol was developed in coordination with the mid-Columbia Habitat Conservation Plans (HCPs) for hatchery programs rearing spring Chinook salmon, sockeye salmon, summer Chinook salmon and summer steelhead associated with the mid-Columbia HCPs, spring Chinook salmon and steelhead programs associated with the 2008 Biological Opinion for the Priest Rapids Hydroelectric Project (FERC No. 2114) and fall Chinook consistent with Grant County Public Utility District and Federal mitigation obligations associated with Priest Rapids and John Day dams, respectively. These programs are funded by Chelan, Douglas, and Grant County Public Utility Districts (PUDs) and are operated by the Washington Department of Fish and Wildlife (WDFW). Additionally, the Yakama Nation's (YN) Coho Reintroduction Program broodstock collection protocol, when provided by the YN, will be included in this protocol because of the overlap in trapping dates and locations.

This protocol is intended to be a guide for 2009 collection of salmon and steelhead broodstocks in the Methow, Wenatchee, and Columbia River basins. It is consistent with previously defined program objectives such as program operational intent (i.e., conservation and/or harvest augmentation), mitigation production levels (HCPs, Priest Rapids Dam 2008 Biological Opinion and to comply with ESA permit provisions.

Notable in this years protocols are: (1) Wenatchee spring Chinook broodstock collection strategies targeting Chiwawa hatchery origin Chinook at Tumwater Dam, intended to provide improved hatchery origin broodstock collection and to reduce the number of Leavenworth NFH strays into other Wenatchee basin UCR spring Chinook spawning aggregates; (2) Natural origin Chiwawa spring Chinook collection at the Chiwawa Weir, consistent with ESA Section 10 Permit 1196; (3) Methow spring Chinook broodstock protocol targeting natural origin spring Chinook at Wells Dam and at the Twisp River weir; (4) utilization of genetic sampling/assessment to differentiate Twisp River and non Twisp River natural origin adults collected at Wells Dam and CWT interrogation during spawning of hatchery spring Chinook collected at the Twisp Weir, Methow FH and Winthrop NFH to differentiate Twisp and Methow Composite hatchery fish for discrete management of Twisp and Methow Composite production components; (5) the collection of hatchery origin spring Chinook for the Methow River Basin program in excess of production requirements for BKD management, (6) the use of ultra-sound technology to determine sex of Wenatchee summer Chinook during collection to aid in achieving the appropriate female equivalents for programmed production, and (7) the potential collection of Wells summer Chinook



to support the Yakama Nation (YN) summer Chinook re-introduction program in the Yakima River Basin (requires agreement of the HCP Hatchery Committee). These protocols may be adjusted in-season, based on actual run monitoring at mainstem dams and other sampling locations.

## **Above Wells Dam**

### *Spring Chinook*

Natural origin fish inclusion into the broodstock will be a priority, with natural origin fish specifically being targeted. Natural origin fish collections will not exceed 33 percent of the MetComp and Twisp natural origin run escapement at Wells Dam.

To facilitate BKD management, to comply with ESA Section 10 permit take provisions and to meet programmed production, hatchery origin spring Chinook will be collected in numbers excess to program production requirements. Based on historical Methow FH spring Chinook ELISA levels above 0.12, the hatchery origin spring Chinook broodstock collection will include hatchery origin spring Chinook in excess to broodstock requirements by approximately 18 percent. The parties to the HCP have acknowledged that targeting broodstock collection objectives at levels that provide for culling of eggs from higher ELISA level hatchery origin females and prioritizing natural origin fish for rearing to yearling smolt stage is a viable approach to balance the promotion of fish health while limiting indirect reductions in genetic diversity and reduced program production, particularly for ESA listed supplementation programs. For purposes of BKD management and to comply with maximum production levels and other take provisions specified in ESA Section 10 permit 1196, culling will include the destruction of eggs from hatchery origin females with ELISA levels greater than 0.12 and or that number of hatchery origin eggs required to maintain production at 550,000 yearling smolts. Culling of eggs from natural origin females will not occur, unless their ELISA levels are determined by WDFW Fish Health to be a substantial risk to the program. Juveniles from natural origin females with ELISA levels greater than 0.12 will be differentially tagged for evaluation purposes. To monitor the efficacy of culling in reducing the prevalence of BKD in Methow Basin spring Chinook, annual monitoring and evaluation of the prevalence and level of BKD in returning hatchery and natural origin spring Chinook will continue and will be reported in the annual monitoring and evaluation report for this program.

The 2009 Methow spring Chinook broodstock collection will occur at Wells Dam, Twisp River Weir, Methow FH and Winthrop NFH. Limited on-station release of smolts from the Methow FH, absence of a trapping facility on the Chewuch River and poor trapping success at Foghorn Dam on the mainstem Methow River preclude reasonable certainty of meeting adult collection requirements via tributary and Methow FH outfall collections. The aforementioned limitations are the principle reasons for the inclusion of broodstock collection at Wells Dam and Winthrop NFH during 2009.

Recent WDFW genetic assessment of natural origin Methow spring Chinook (Small et al. 2007) suggest that Twisp natural-origin spring Chinook can be identified with sufficient confidence that natural origin collections can occur at Wells Dam, thereby facilitating natural origin inclusion in the broodstock, while maintaining the ability to manage separately the Twisp origin spring Chinook spawning aggregate. Although Twisp natural origin fish can be assigned to the Twisp population with confidence, some gene flow between the Twisp and Methow Composite spawning aggregates are anticipated as a result of collecting natural origin broodstock at Wells Dam. Based on projected Proportion Natural Origin (pNOB) broodstock composition for Twisp and Methow Composite programs (31% and 30%, respectively) and composite brood year assignment errors for wild Twisp

and MetComp spring Chinook provided in Snow et al. (2007), the projected non-source fish contributions to the Twisp and MetComp hatchery programs for 2009 are 1.6% and 1.5%, respectively. In this instance, percent non-source fish contribution may be considered a gene flow estimate between the two program production elements (Twisp and Methow Composite) and is an unavoidable consequence associated with natural origin broodstock collection at Wells Dam during 2009. Although gene flow between the two hatchery production components is likely, it is expected to be relatively low in 2009 and supports a hatchery broodstock collection program objective to infuse natural origin fish into the hatchery program to maintain/improve genetic diversity and reduced domestication. For complete discussion regarding Methow Spring Chinook genetic monitoring and evaluation see Snow et al. (2007).

Non-lethal tissue samples (fin clips) for genetic analysis and scale samples will be obtained from adipose present, non-CWT, non-ventral clipped spring Chinook (suspected natural origin spring Chinook) collected at Wells Dam for origin analysis. Natural origin fish retained for broodstock will be tagged with a PIT tag (dorsal sinus) for tissue sample/genetic analysis cross-reference. Tissue samples will be preserved and sent to WDFW genetics lab in Olympia Washington for genetic/stock analysis. The spring Chinook sampled will be retained at Methow FH and will be sorted as Twisp or non-Twisp natural origin fish prior to spawning. The number of natural origin Twisp and Methow Composite (non-Twisp) spring Chinook retained will be dependent upon the number of natural origin adults returning and the collection objective limiting extraction to no greater than 33% of the natural origin spring Chinook return past Wells Dam. Based on the broodstock collection schedule (3-day/week, 16 hours/day), natural origin spring Chinook extraction is expected to be approximately 33% or less.

Weekly estimates of natural-origin spring Chinook passage past Wells Dam will be provided through stock assessment and broodstock collection activities and will provide the opportunity to adjust, in-season, the extraction of natural origin spring Chinook to maintain no greater than 33% extraction of Twisp and Methow Composite natural origin components while maximizing the opportunity for the inclusion of natural origin spring Chinook in the broodstock. Additionally, in-season estimates of Twisp and Methow Composite natural origin escapement past Wells Dam provides the opportunity to utilize both Wells Dam and the Twisp Weir as natural origin collection sites for the Twisp production component, thereby providing additional flexibility to account for differences between projected and actual returns of Twisp and Methow Composite natural origin fish. Twisp and Methow Composite hatchery origin spring Chinook will be captured at the Twisp Weir, Methow FH outfall. Trapping at the Winthrop NFH will be included if needed to address broodstock shortfalls.

The Methow FH rears spring Chinook salmon for three acclimation/release sites in the Methow River Basin, including: (1) Methow River (Methow FH); (2) Twisp River (Twisp Acclimation Pond) and (3) Chewuch River (Chewuch Acclimation Pond). The total production level target is 550,000 smolts divided equally among the three release sites (approximately 183,000 smolts per site).

Pre-season run-escapement of Methow origin spring Chinook past Wells Dam during 2009 are estimated at 2,237 spring Chinook, including 1,943 hatchery and 294 natural origin Chinook (Table 1 and Table 2). In-season estimates of natural origin spring Chinook will be adjusted proportional to the estimated returns to Wells Dam at weekly intervals and may result in adjustments to the broodstock collection targets presented in this document.

Based on current juvenile rearing capacity at Methow FH, programmed production levels (550,000 smolts), BKD management strategies, projected return for BY 2009 Methow Basin spring Chinook at Wells Dam (Table 1 and Table 2), and assumptions listed in Table 3, the following broodstock collection protocol was developed.

The 2009 Methow spring Chinook broodstock collection will target 359 adult spring Chinook. Based on the pre-season run forecast, Twisp fish are expected to represent 3% of the adipose present, CWT tagged hatchery adults and 12% of the natural origin spring Chinook passing above Wells Dam (Tables 1 and 2). Based on this proportional contribution, and a collection objective to limit extraction to no greater than 33%, the 2009 Twisp origin broodstock collection will be predominantly hatchery origin and total 33 fish (11 wild and 22 Hatchery), representing 30% of the broodstock necessary to meet Twisp program production of 183,000 smolts. Methow Composite fish are expected to represent 97% of the adipose present CWT tagged hatchery adults and 88% of the natural origin spring Chinook passing above Wells Dam (Tables 1 and 2). Based on this proportional contribution and a collection objective to limit extraction to no greater than 33%, the 2009 Methow Composite (combined Methow and Chewuch river spawning aggregates) broodstock collection will be predominantly hatchery origin and total 326 spring Chinook (86 wild and 240 Hatchery). The broodstock collected for the Methow Composite production represents 100% of the broodstock necessary to meet Methow Composite program production of 367,000 smolts (combined Methow and Chewuch production), and sufficient to backfill the expected shortfall of 129,000 Twisp River spring Chinook. The Twisp River releases will be limited to releasing progeny of broodstock identified as wild Twisp and or known Twisp hatchery origin fish, per ESA Permit 1196. The Chewuch Pond and Methow FH releases will include progeny of broodstock identified as wild non-Twisp origin and known Methow Composite hatchery origin fish.

Table 1. Brood Year 2004-2006 age-class return projection for wild spring Chinook Dam above Wells during 2009.											
Smolt Estimate											
1/ BY	2/ Methow		Age-at-Return								
	Twisp	Basin	Twisp				Methow Basin				
			Age-3	Age-4	Age-5	Total	Age-3	Age-4	Age-5	Total	3/ SAR
2004	5,873	22,941	2	21	10	33	6	83	38	128	0.005581
2005	5,372	55,381	1	19	9	30	15	201	93	309	0.005581
2006	18,580	198,400	5	67	31	104	55	720	332	1107	0.005581
2009 Return Year			5	19	10	34	55	201	38	294	
<div>1/- Smolt estimate based on sub-yearling and yearling emigration (Snow et al. 2008)</div> <div>2/- Estimated Methow Basin smolt emigration, based on Twisp Basin smolt emigration, proportional redd deposition in the Twisp River and Twisp Basin smolt production estimate.</div> <div>3/- Mean 1998-2003 Chiwawa River wild SAR as a surrogate wild SAR for Methow spring Chinook</div>											

**BY 2004-2006 age-class and origin run-escapement projection for UCR spring Chinook at Wells Dam, 2009**

Stock	Projected Escapement											
	Origin								Total			
	Hatchery				Wild				Methow Basin			
	Age-3	Age-4	Age-5	Total	Age-3	Age-4	Age-5	Total	Age-3	Age-4	Age-5	Total
MetComp	164	947	42	1,153	50	182	28	260	214	1,129	70	1,413
% Total				59%				88%				63%
Twisp	14	47	6	67	5	19	10	34	19	66	16	101
% Total				3%				12%				5%
Winthrop (MetComp)				723								723
				37%								
Total				1,943	55	201	38	294				2,237
				87%				13%				100%

**Table 3. Assumptions and calculations to determine number of broodstock needed for BY 2009 production of 550,00 smolts**

<b>Smolt release</b>		<b>550,000</b>	<b>Smolts</b>
Fertilization-to-release survival	90%		
Egg-take (Production)		611,000	Eggs
18% cull allowance <sup>2/</sup>		73,000	
<b>Total Egg Take</b>		<b>684,000</b>	<b>Eggs</b>
Fecundity	4,000 <sup>1/</sup>	171	Females spawned
Female to male ratio	1 to 1	341	Total spawned
<b>Pre-spawn survival</b>	<b>95%</b>	<b>359</b>	<b>Broodstock collection target</b>

<sup>1/</sup> - Based on historical program age-4 fecundities and expected 2009 return age structure (Table 1).

<sup>2/-</sup> Hatchery origin MetComp. component only, and is based on projected natural origin collection and assumption that all Twisp (hatchery and wild) and wild MetComp. will be retained for production.

Trapping at Wells Dam will occur at the East and West ladder traps beginning on 04 May, or at such time as the first spring Chinook are observed passing Wells Dam and continue through 24 June 2009. Access to the east ladder trap will be coordinated with staff at Wells Dam due to rotor rewind project. Trapping schedule will consists of 3-day/week (Monday-Wednesday), up to 16-hours/day. Two of the three trapping days will be concurrent with the stock assessment sampling activities authorized through the 2009 Douglas PUD Hatchery M&E Implementation Plan. Natural origin spring Chinook will be retained from the run, consistent with spring Chinook run timing at Wells Dam (weekly collection quotas). Once the weekly quota target is reached, broodstock collection will cease until the beginning of the next week. If a shortfall occurs in the weekly trapping quota, the shortfall will carry forward to the following weeks collection quota. All natural origin spring Chinook collected at Wells Dam for broodstock will be held at the Methow FH.

To meet Methow FH broodstock collection for hatchery origin Methow Composite and Twisp River stocks, adipose-present coded-wire tagged hatchery fish will be collected at Methow FH, Winthrop NFH and the Twisp Weir beginning 01 May or at such time as spring Chinook are observed passing Wells Dam and continuing through 21 August 2009. Natural origin spring Chinook will be retained at the Twisp weir as necessary to bolster the Twisp program production so long as the aggregate collection at Wells Dam and Twisp River weir does not exceed 33% of the estimated Twisp River natural origin return past Wells Dam. All hatchery and natural origin fish collected at Methow FH, Twisp Weir and Winthrop NFH for broodstock will be held at the Methow FH.

### Steelhead

Steelhead mitigation programs above Wells Dam (including the USFWS steelhead program at Winthrop NFH) utilize adult broodstock collections at Wells Dam and incubation/rearing at Wells Fish Hatchery (FH). The Wells Steelhead Program also provides eggs for UCR steelhead reared at Ringold FH, not as a mitigation requirement, but rather an opportunity to reduce the prevalence of early spawn hatchery steelhead in the mitigation component above Wells Dam. Typically, Wells hatchery origin steelhead held at Wells FH spawn earlier than natural origin steelhead. Early maturation of hatchery fish in the hatchery may indicate a propensity for these fish to spawn early in the natural environment as well and may have a negative effect on hatchery spawner success. In efforts to minimize impacts from early maturation, the Wells Hatchery program has transferred eggs from the earliest spawn hatchery steelhead to Ringold FH. Preliminary evaluations indicate that the mean spawn timing of HxH steelhead at Wells FH has been delayed and may be a function of these actions (Figure 1). Based on these preliminary evaluations, WDFW proposes to continue the transfer eggs from early spawn hatchery origin steelhead to Ringold FH.

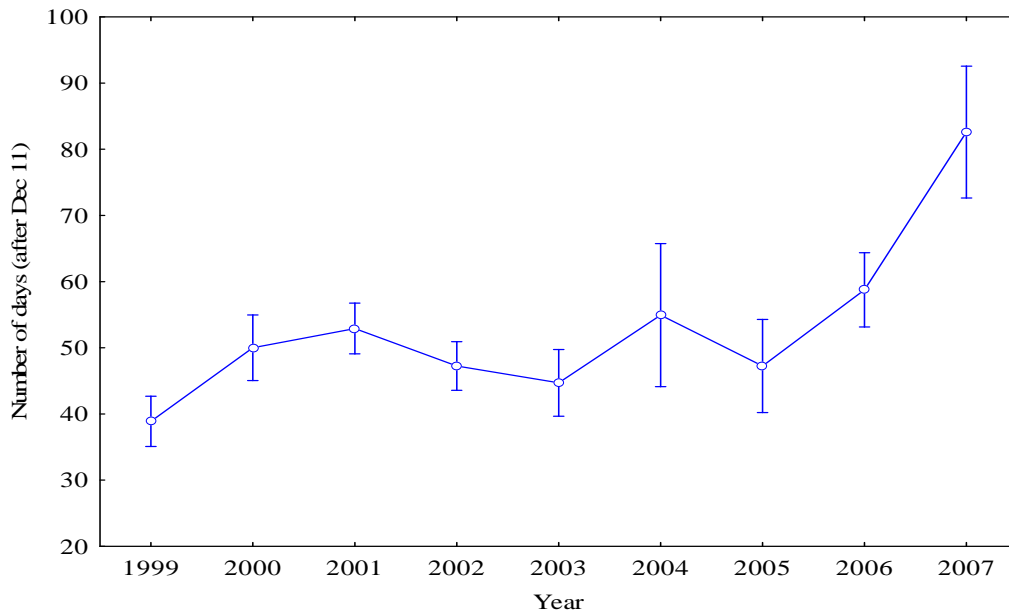


Figure 1. Mean spawn timing of HxH steelhead at Wells FH, BY 1999-2007 (WDFW unpublished Data).

Based on mitigation program production objectives (Table 4) and program assumptions (Table 5), the following broodstock collection protocol was developed.

Trapping at Wells Dam will selectively retain 366 steelhead (east and west ladder collection). Access to the east ladder trap will be coordinated with staff at Wells Dam due to rotor rewind project. Hatchery and natural origin collections will be consistent with run-timing of hatchery and natural origin steelhead at Wells Dam. The collection will retain no greater than 33% natural origin broodstock for the mitigation programs and 100% hatchery origin within the Ringold FH production component. Overall collection will be limited to no more than 33% of the entire run or 33% of the natural origin return. The east and west ladder trapping at Wells Dam will begin on 01 August and terminate by 31 October and will be operated concurrently, three days per week, up to 16 hours per day, if required to meet broodstock objectives. Trapping on the east ladder will be concurrent with summer Chinook broodstocking efforts through 14 September and will continue through 31 October, concurrent with west ladder steelhead collections. Adult return composition including number, origin, age structure, and sex ratio will be assessed in-season at Priest Rapids and Wells dams. Broodstock collection adjustments may be made based on in-season monitoring and evaluation.

**Table 4. Adult steelhead collection objectives for programs supported through adult steelhead broodstock collection at Wells Dam.**

Program	# Smolts	# eyed eggs	% Wild	# Wild	# Hatchery	Total Adults
DCPUD <sup>1/</sup>	349,000	401,149	33%	59	119	178
GCPUD <sup>1/</sup>	80,000	91,954	33%	14	27	41
USFWS <sup>1/</sup>	80,000	91,954	33%	14	27	41 <sup>3/</sup>
<b>Sub-Total</b>	<b>509,000</b>	<b>585,057</b>	<b>33%</b>	<b>87</b>	<b>174</b>	<b>260</b>
Ringold	180,000	240,000	0%	0	106	106 <sup>3/</sup>
<b>Sub-Total</b>	<b>180,000</b>	<b>240,000</b>	<b>0%</b>	<b>0</b>	<b>106</b>	<b>106</b>
<b>Grand Total <sup>2/</sup></b>	<b>689,000</b>	<b>825,057</b>	<b>24%</b>	<b>87</b>	<b>289</b>	<b>366</b>
<sup>1/</sup> - Above Wells Dam releases. Target HxW parental adults as the hatchery component <sup>2/</sup> - Based on steelhead production consistent with Mid Columbia HCP's, GCPUD BiOp and Section 10 Permit 1395. <sup>3/</sup> - Based on adults required for eyed egg allotment						

**Table 5. Program assumptions used to determine adult collection required to meet steelhead production objectives for programs above Wells Dam and at Ringold Springs Fish Hatchery.**

Program assumption	Standard
Pre-spawn survival	97%
Female to male ratio	1.0 : 1.0
Fecundity	5,400
Propagation survival	
87% fertilization to eyed egg	87%
86% eyed egg to yearling release	86% <sup>1/</sup>
75% fertilization to yearling release	75% <sup>1/</sup>
<sup>1/</sup> - Not applicable to Ringold Springs Fish Hatchery	

### Summer/fall Chinook

Summer/fall Chinook mitigation programs above Wells Dam utilize adult broodstock collections at Wells Dam and incubation/rearing at Eastbank Fish Hatchery. The total production level target is 976,000 summer/fall Chinook smolts for two acclimation/release sites on the Methow and Similkameen rivers (Carlton Pond and Similkameen Pond, respectively).

The TAC 2009 Columbia River UCR summer Chinook return projection to the Columbia River (Appendix A) and BY 2005, 2006 and 2007 spawn escapement to tributaries above Wells Dam indicate sufficient summer Chinook will return past Wells Dam to achieve full broodstock collection for supplementation programs above Wells Dam. Based on initial run expectations of summer Chinook to the Columbia River, program objectives and program assumptions (Table 6); the following broodstock collection protocol was developed.

WDFW will retain 556 natural-origin summer/fall Chinook at Wells Dam east and west ladder, including 278 females. Collection will be proportional to return timing between 01 July and 13 September. Access to the east ladder trap will be coordinated with staff at Wells Dam due to rotor rewind project. Trapping will occur 3-days/week, 16 hours/day. The 3-year old component will be limited to 10 percent of the broodstock collection. If the probability of achieving the broodstock goal is reduced based on actual natural-origin escapement levels, broodstock origin composition will be adjusted to meet the broodstock collection objective.

**Table 6. Assumptions and calculations to determine number of broodstock needed for summer/fall Chinook production at Carlton and Similkameen ponds.**

<u>Program Assumption</u>		<u>Carlton Pond</u>	<u>Similkameen Pond</u>	<u>Total</u>
<b>Smolt release</b>		<b>400,000</b>	<b>576,000</b>	<b>976,000</b>
Fertilization-to-release survival	90%			
<b>Eggtake Target</b>		<b>512,821</b>	<b>738,462</b>	<b>1,251,282</b>
Fecundity	5,000			
<b>Female target</b>		<b>103</b>	<b>148</b>	<b>250</b>
Female to male ratio	1 to 1			
<b>Broodstock target</b>		<b>205</b>	<b>295</b>	<b>501</b>
Pre-spawn survival	95%			
<b>Total collection target</b>		<b>228</b>	<b>328</b>	<b>556</b>

### **Columbia River Mainstem below Wells Dam**

#### Summer/fall Chinook

Summer/fall Chinook mitigation programs that release juveniles directly into the Columbia River between Wells and Rocky Reach dams are supported through adult broodstock collections at Wells Dam. The total production level supported by this collection is 520,000 yearling and 1,562,000 sub-yearling Chinook. Upon agreement in the HCP, the 2009, summer Chinook broodstock collections at Wells FH may also include 250,000 green eggs to support the Yakama Nation (YN) reintroduction of summer Chinook to the Yakima River Basin. If approved by the HCP Hatchery Committee, the YN eggs will be the last eggs taken and will be the responsibility of staff associated with the YN program.



Adults returning from this program are to support harvest opportunities and are not intended to increase natural production and have been termed segregated harvest programs. These programs have contributed to harvest opportunities; however, adults from these programs have been documented contributing to the adult spawning escapement in tributaries upstream and downstream from their release locations. Because adults from these programs contribute to the natural spawn escapement, the broodstock collection will incorporate 10 percent natural-origin fish into the broodstock to reduce the potential genetic risk to the naturalized summer/fall Chinook stocks in the upper Columbia River region. Based on mitigation objectives and program assumptions (Table 7), the following broodstock collection protocol was developed.

WDFW will collect 1,476 run-at-large summer Chinook including 1,339 hatchery fish from the volunteer ladder trap at Wells Fish Hatchery outfall and 137 natural-origin fish from the Wells Hatchery outfall, and/or Wells Dam east and west ladders. Access to the east ladder trap will be coordinated with staff at Wells Dam due to rotor rewind project. Overall extraction of natural-origin fish passing Wells Dam (Wells program and above Wells Dam summer/fall Chinook programs) will not exceed 33 percent. West ladder collections will begin 01 July and completed by 14 September and will be consistent with run timing past Wells Dam. Due to fish health concerns associated with the volunteer collection site (warming Columbia River water during late August), the volunteer collection will begin 10 July and terminate by 31 August. The 3-year old component will be limited to 10 percent of the broodstock collection.

<b>Table 7. Assumptions and calculations to determine number of broodstock needed for summer/fall Chinook production at Wells and Turtle Rock Island hatcheries.</b>								
							<sup>1/</sup>	
	<u>Standard</u>	<u>Wells FH</u>	<u>Turtle Rock FH</u>				<u>YN</u>	
<u>Program Assumption</u>	<u>Sub-yearling</u>	<u>Sub-yearling</u>	<u>Sub-yearling</u>	<u>Yearling</u>	<u>Yearling</u>	<u>Yearling</u>	<u>green-egg</u>	<u>Total</u>
<b>Smolt release</b>		484,000	320,000	1,078,000	200,000	250,000	NA	NA
Fertilization-to-release survival	73% <sup>2/</sup>	78%					NA	NA
<b>Eggtake Target</b>		663,014	410,256	1,476,712	256,410	250,000		3,056,392
Fecundity	4,600	4,600						
<b>Female target</b>		144	89	321	56	54		664
Female to male ratio	1 to 1	1 to 1						
<b>Broodstock target</b>		288	178	642	111	109		1,328
Pre-spawn survival	90%	90%						
<b>Total collection target</b>		<b>320</b>	<b>198</b>	<b>713</b>	<b>124</b>	<b>121</b>		<b>1,476</b>
<sup>1/</sup> - Green eggs for YN reintroduction program in the Yakima River Basin.								
<sup>2/</sup> - Based on increased monitoring of the green egg-to-marking loss for BY 07 and 08 that indicates a un-fertilized- to- marking loss of 27%.								

### Coho

Yakama Nation will provide broodstock collection objectives for the coho reintroduction program in the Methow River basin. WDFW will work collaboratively with the Yakama Nation to facilitate coho collections at Wells Dam. Access to the east ladder trap will be coordinating with staff at Wells Dam due to the rotor rewind project.

## **Wenatchee River Basin**

### Spring Chinook

The Eastbank Fish Hatchery (FH) rears spring Chinook salmon for the Chiwawa River acclimation pond located on the Chiwawa River. The program production level target is 672,000 smolts, requiring a total broodstock collection of 379 spring Chinook (Table 8).

<b>Table 8. Assumptions and calculations to determine number of broodstock needed for Chiwawa program release of 672,000 smolts.</b>		
<b>Program Assumption</b>	<b>Standard</b>	<b>Chiwawa program</b>
<b>Smolt release</b>		<b>672,000</b>
Fertilization-to-release survival	83%	
<b>Eggtake Target</b>		<b>809,639</b>
Fecundity	4,400	
<b>Female target</b>		<b>184</b>
Female to male ratio	1 to 1	
<b>broodstock target</b>		<b>368</b>
Pre-spawn survival	97%	
<b>Total broodstock collection</b>		<b>379</b>

Natural origin fish inclusion into the broodstock will continue to be a priority, with natural origin fish specifically being targeted. Consistent with ESA Section 10 Permit 1196, natural origin fish collections will not exceed 33 percent of the return to the Chiwawa River and will provide, at a minimum, 33 percent of the total broodstock retained.

In addition to production levels and ESA permit provisions, the 2009 broodstock collection, will again, as in 2008, target hatchery origin Chiwawa spring Chinook at Tumwater Dam. Also in 2009, an interim measure will include extraction of adipose clipped non-coded wire tag adult spring Chinook, as a strategy to reduce straying of Leavenworth NFH spring Chinook to the upper Basin habitat.

Pre-season estimates project 5,114 spring Chinook destined for the Chiwawa River, of which 703 (13.7%) and 4,411 fish (86.3%) are expected to be natural and hatchery origin spring Chinook, respectively (Table 9 and 10). Based on the projected 2009 Chiwawa River run-size and origin composition, and provisions in ESA Section 10 Permit 1196, WDFW will retain 379 spring

Chinook for broodstock purposes, representing 100% of the program broodstock objective. Two hundred and thirty-two (232) natural origin spring Chinook will be retained at the Chiwawa Weir and 147 adipose-clipped, CWT hatchery origin spring Chinook will be collected at Tumwater Dam. In-season assessment of the magnitude and origin composition of the spring Chinook return above Tumwater Dam will be used to provide in-season adjustments to broodstock collection, consistent ESA Section 10 Permit 1196.

**Table 9. BY 2004-2006 age-class return projection for wild spring Chinook above Tumwater Dam during 2009**

	Smolt Estimate		Chiwawa				Wen. Basin above Tumwater Dam				
Brood Year	1/ Chiwawa	2/ Wen. Basin	3/ Age-3	3/ Age-4	3/ Age-5	Total	3/ Age-3	3/ Age-4	3/ Age-5	Total	4/ SAR
2004	101,172	197,944	28	367	169	565	55	718	331	1,105	0.005581
2005	140,737	338,079	39	510	236	785	94	1,226	566	1,887	0.005581
2006	86,579	153,918	24	314	145	483	43	558	258	859	0.005581
Total 2008 Return			24	510	169	703	43	1,226	331	1,600	

1/- Smolt production estimate.

2/- smolt production estimate based on proportional redd disposition in the Wenatchee Basin above Tumwater Dam and Chiwawa smolt production estimate.

3/- Based on average age-at-return for natural-origin spring Chinook above Tumwater Dam (WDFW unpublished data).

4/- Mean Chiwawa spring Chinook SAR to the Wenatchee Basin (BY 1998-2003)(WDFW unpublished data).

**Table 10. BY 2004-2006 age-class return projection for Chiwawa Hatchery spring Chinook above Tumwater Dam during 2009**

	<u>Smolt Estimate</u>	<u>Adult Return</u>				
<b>Brood Year</b>	<b>1/ Chiwawa</b>	<b>2/ Age-3</b>	<b>2/ Age-4</b>	<b>2/ Age-5</b>	<b>Total</b>	<b>3/ SAR</b>
2004	494,517	883	2,564	<b>757</b>	4,203	0.0085
2005	494,012	882	<b>2,561</b>	756	4,199	0.0085
2006	612,482	<b>1,093</b>	3,176	937	5,206	0.0085
<b>Total 2008 Return</b>		<b>1,093</b>	<b>2,561</b>	<b>757</b>	<b>4,411</b>	

<sup>1</sup>/ - Chiwawa smolt release (Hillman et al. 2007)

<sup>2</sup>/ - Based on average age-at-return for natural-origin spring Chinook above Tumwater Dam (Hillman et al. 2007) . and total estimated BY return.

<sup>3</sup>/ - Mean Chiwawa hatchery spring Chinook SAR to the Wenatchee Basin (BY 1996-2001)

Trapping at Tumwater Dam will begin 01 May and will be concurrent with trapping for the Spring Chinook Reproductive Success Study. Collection at both Tumwater Dam and Chiwawa Weir will be based on weekly quotas, consistent with average run timing at Tumwater Dam. If the weekly quota is attained prior to the end of the week, retention of spring Chinook for broodstock will cease. If the weekly quota is not attained, the shortfall will carry forward to the next week. The number of hatchery origin fish retained at Tumwater Dam will be adjusted in-season, based on estimated Chiwawa River natural-origin returns provided through extrapolation of returns past Tumwater

Dam. If hatchery origin Chinook are retained in excess to that required to maintain a minimum 33 percent natural origin composition in the broodstock, excess fish will be returned to the Chiwawa River beginning the third week of July.

Throughout broodstock collection at Tumwater Dam, adipose absent, non-CWT spring Chinook will be extracted and provided to USFWS as a measure to reduce the prevalence of non-endemic spring Chinook above Tumwater Dam. All adults that are found at Tumwater Dam with a missing adipose fin and lacking a coded wire tag will be putatively classified as LNFH strays. However, it is likely that some proportion of the adipose clipped non-CWT fish are ESA-listed hatchery adults that have shed their tags. Based on the BY 2004, 2005, and 2006 tag rate for Chiwawa spring Chinook and the projected 2009 Chiwawa hatchery return to Tumwater Dam, the extraction of adipose clipped non-CWT spring Chinook may include 61 Chiwawa spring Chinook, representing just 1.4% of the projected 4,411 returning Chiwawa hatchery origin spring Chinook. Based on the USFWS estimates of projected LNFH strays arriving at Tumwater Dam in 2009 (USFWS 2009), the extraction action is expected to remove an estimated 89 LNFH strays, representing 54% of the total stray estimate. With reduced rates of CWT marking at LNFH (in upcoming return years) the USFWS forecasts that the rate of extraction of LNFH strays at Tumwater will increase to 68% in 2010, 75% in 2011, and 80% in 2011. As long as CWT marking rates remain at the current USFWS goal of 17%, the extraction rate of LNFH strays at Tumwater Dam will remain greater than 80% for 2012 and beyond. Logistics for 2009 extraction activities will be coordinated between USFWS, WDFW and CPUD.

Broodstock collection at the Chiwawa Weir will begin 01 June and terminate no later than 10 September. Spring Chinook trapping at the Chiwawa Weir will follow a 4-days up and 3-days down schedule, consistent with weekly broodstock collection quotas that approximate the historical run timing and a maximum 33 percent retention of the projected natural-origin escapement to the Chiwawa River. If the weekly quota is attained prior to the end of the 4-day trapping period, trapping will cease. If the weekly quota is not attained within the 4- day trapping period, the shortfall will carry forward to the next week.

All bull trout and spring Chinook in excess of broodstock needs trapped at the Chiwawa weir will be transported by tank truck and released into a resting/recovery pool at least 1.0 km upstream from the Chiwawa River Weir.

### Steelhead

The steelhead mitigation program in the Wenatchee Basin use broodstock collections at Dryden and Tumwater dams located on the Wenatchee River. Per ESA section 10 Permit 1395 provisions, broodstock collection will target 50% natural origin fish and 50% hatchery origin fish, not to exceed 33% of the natural origin steelhead return to the Wenatchee Basin. Based on these limitations and the assumptions listed below (Table 11), the following broodstock collection protocol was developed.

WDFW will retain 208 mixed origin steelhead at Dryden and Tumwater dams, including 104 natural origin and 104 hatchery origin steelhead. Collection will be proportional to return timing between 01 July and 12 November. Collection may also occur between 13 November and 3 December at both traps, concurrent with the Yakama Nation coho broodstock collection activities. Hatchery x hatchery parental cross and unknown hatchery parental cross adults will be excluded from the broodstock collection. Hatchery steelhead parental origins will be determined through

evaluation of VIE tags and PIT tag interrogation during collection. Adult return composition including number, origin, age structure, and sex ratio will be assessed in-season at Priest Rapids and at Dryden Dam. Broodstock collection adjustments may be made based on these in-season monitoring and evaluation.

In the event that steelhead collections fall substantially behind schedule, WDFW may initiate/coordinated adult steelhead collection in the mainstem Wenatchee River by hook and line. In addition to trapping and hook and line collection efforts, Tumwater and Dryden dams may be operated between February and early April to supplement broodstock numbers if the fall trapping effort provides fewer than 208 adults.

<b>Table 11. Assumptions and calculations to determine number and origin of adult steelhead needed for Wenatchee Basin Steelhead program release of 400,000 smolts.</b>		
<b>Program Assumption</b>	<b>Standard</b>	<b>Wenatchee program</b>
<b>Smolt release</b>		<b>400,000</b>
Fertilization-to-release survival	75%	
<b>Eggtake Target</b>		<b>533,333</b>
Fecundity	5,400	
<b>Female target</b>		<b>99</b>
Female to male ratio	1 to 1	
<b>broodstock target</b>		<b>198</b>
Pre-spawn survival	95%	
<b>Total broodstock collection</b>		<b>208</b>
Natural : hatchery ratio	1 to 1	
<b>Natural origin collection total</b>		<b>104</b>
<b>Hatchery origin collection total</b>		<b>104</b>

### Summer/fall Chinook

Summer/fall Chinook mitigation programs in the Wenatchee River Basin utilize adult broodstock collections at Dryden and Tumwater dams, incubation/rearing at Eastbank Fish Hatchery (FH) and acclimation/release from the Dryden Acclimation Pond. The total production level target is 864,000 smolts.

The TAC 2009 Columbia River UCR summer Chinook return projection to the Columbia River (Appendix A) and BY 2005, 2006 and 2007 spawn escapement to the Wenatchee River indicate sufficient summer Chinook will return to the Wenatchee River to achieve full broodstock collection for the Wenatchee River summer Chinook supplementation program. Review of recent summer/fall Chinook run-timing past Dryden and Tumwater dam indicates that previous broodstock collection activities have omitted the early returning summer/fall Chinook, primarily due to limitations imposed by ESA Section 10 Permit 1347 to minimize impacts to listed spring Chinook. In an effort to incorporate broodstock that better represent the summer/fall Chinook run timing in the Wenatchee Basin, the broodstock collection will front-load the collection to account for the disproportionate collection timing. Approximately 43 percent of the summer/fall Chinook passage to the upper Basin occurs prior to the end of the first week of July; therefore, the collection will provide 43 percent of the objective by the end of the first week of July. Weekly collection after the

first week of July will be consistent with run timing of summer/fall Chinook during the remainder of the trapping period. Collections will be limited to a 33 percent extraction of the estimated natural-origin escapement to the Wenatchee Basin. Based on these limitations and the assumptions listed below (Table 12), the following broodstock collection protocol was developed.

WDFW will retain 492 natural-origin, summer Chinook at Dryden and Tumwater dams, including 246 females. To better assure achieving the appropriate females equivalents for programmed production, the collection will utilize ultra-sound equipment to determine the sex of each fish retained for broodstock. Trapping at Dryden Dam will begin 01 July and terminate no later than 14 September and operate up to 7-days/week, 24-hours/day. Trapping at Tumwater Dam may begin 15 July and terminate no later than 14 September and operate 3-days/week, 8-hours/day.

If the probability of achieving the broodstock goal is reduced, based on the estimated escapement levels, broodstock composition will be adjusted to meet the broodstock collection objective of 492 summer Chinook..

<b>Table 9. Assumptions and calculations to determine number of summer Chinook broodstock needed for Wenatchee Basin program release of 864,000 smolts.</b>		
<b>Program Assumption</b>	<b>Standard</b>	<b>Wenatchee program</b>
<b>Smolt release</b>		<b>864,000</b>
Fertilization-to-release survival	78%	
<b>Eggtake Target</b>		<b>1,107,692</b>
Fecundity	5,000	
<b>Female target</b>		<b>222</b>
Female to male ratio	1 to 1	
<b>broodstock target</b>		<b>443</b>
Pre-spawn survival	90%	
<b>Total broodstock collection</b>		<b>492</b>

### Sockeye

Sockeye Salmon mitigation in the Wenatchee River Basin utilizes adult broodstock collections at Tumwater Dam, incubation/rearing at Eastbank Fish Hatchery (FH) and rearing/pre-smolt releases from the net pens in Lake Wenatchee. The total production level for the 2009 BY is 200,000 pre-smolts. <sup>1/</sup>

The TAC 2009 UCR sockeye return projection to Columbia River (Appendix A) indicates sufficient Lake Wenatchee sockeye will be available to meet broodstock collection objectives. Based on TAC projected return, 100% natural-origin broodstock composition and assumptions listed below (Table 13), the following broodstock collection protocol was developed.

WDFW will retain 260 natural origin sockeye, proportional to run timing at Tumwater Dam. Due to the unequal sex ratio in previous years, attempts will be made to collect an equal number of males and females. Trapping may begin on 15 July and terminate by 15 August. Trapping will occur no more than 3-days/week, 8- hours/day.

1/- Chelan HCP Hatchery Committee has agreed to future production level of 280,000 fish, pending appropriate infrastructure improvements.

<b>Table 13. Assumptions and calculations to determine number of sockeye salmon broodstock needed for Wenatchee Basin program release of 200,000 pre-smolts.</b>		
<b>Program Assumption</b>	<b>Standard</b>	<b>Wenatchee program</b>
<b>Smolt release</b>		<b>200,000</b>
Fertilization-to-release survival	78%	
<b>Eggtake Target</b>		<b>256,410</b>
Fecundity	2,615	
<b>Female target</b>		<b>99</b>
Female to male ratio	1 to 1	
<b>broodstock target</b>		<b>198</b>
Pre-spawn survival	76%	
<b>Total broodstock collection</b>		<b>260</b>

### Coho

Yakama Nation will provide broodstock collection objectives and program assumptions for the coho reintroduction program in the Wenatchee River basin. WDFW will work collaboratively with the Yakama Nation to facilitate coho broodstock collections at Dryden and Tumwater Dam.

### White River Spring Chinook Captive Brood

Smolt production associated with the White River Captive Broodstock Program (150,000 smolts) will be separate from the smolt production objective associated with the Chiwawa River adult supplementation program. Spawning, incubation, rearing acclimation and release will be consistent with provisions of ESA Permit 1592.

Broodstock collection efforts for brood year 2009 will be addressed in a document separate from this 2009 broodstock collection/protocol document and developed through the Priest Rapids Coordinating Committee Hatchery Committee (PRCC HC).

### Priest Rapids Fall Chinook

Collection of fall Chinook broodstock at Priest Rapids Hatchery will generally begin in early September and continue through mid November. Smolt release objectives specific to Grant PUD (5,000,000 sub-yearlings) and Federal (1,700,000 sub-yearlings) mitigation commitments and biological assumptions are detailed in Table 14.

Agreements are in place and/or being negotiated that would allow Priest Rapids to take up to 3.7M eyed eggs for the Ringold Springs Rearing Facility. Us V Oregon parties recently agreed that the brood stock used for the program at Ringold should be Priest Rapids stock. This was also a key recommendation by HSRG. This program is partial mitigation for the John Day Dam and will be funded by the ACOE if implemented. Upon negotiated agreement among the effected parties for the additional egg collection for Ringold Springs Rearing Facility, the broodstock collection total will be adjusted accordingly.

Table 14. Assumptions and calculations to determine the number of fall Chinook broodstock needed for the Priest Rapids program release of 6,700,000 sub-yearling fall Chinook		
Biological Assumptions	Standard	Program Objective
<b>Smolt Production level:</b>		
<i>Grant PUD Mitigation-PUD Funded</i>		<b>5,000,000</b>
<i>John Day Mitigation- Federally Funded</i>		<b>1,700,000</b>
Fert.-to-release survival	87%	
<b>Eggtake Target</b>		<b>7,700,000</b>
<i>Fecundity</i>	4,500	
<b>Female requirement</b>		<b>1,711</b>
<i>Sex ratio</i>	1:1	
<i>Pre-Spawn Survival</i>	88%	
<b>Broodstock Required</b>		<b>3,888</b>



## Reference

- Snow et al. 2007. Snow, C., c. Frady, A. Fowler, A. Murdoch, M. Small, K. Warheit, and C. Dean. Monitoring and evaluation of the Wells and Methow programs in 2006. Prepared for Douglas County Public Utility District and Wells Habitat Conservation Plan Hatchery Committee. Washington Dept. of Fish and Wildlife, Supplementation Research Office, Twisp, WA., and Washington Dept. Fish and Wildlife, Conservation Unit, Genetics Lab, Olympia, WA.
- USFWS 2009. Hatchery and Genetics Management Plan (HGMP), Leavenworth National Fish Hatchery. U.S. Fish and Wildlife Service, Leavenworth, WA.

## Appendix A



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

# Fishing & Shellfishing

## 2009 Forecasts: Spring Chinook, Summer Chinook and Sockeye

2009 Forecasts For Columbia River Spring Chinook, Summer Chinook, Sockeye and Steelhead			
	2008 Forecast	2008 Return	2009 Forecast
<b>Total Spring Chinook</b>	<b>326,300</b>	<b>223,330</b>	<b>353,700</b>
Lower River Stocks	<b>57,000</b>	<b>44,730</b>	<b>54,800</b>
Willamette River <sup>1/</sup>	34,100	27,000	37,600
Cowlitz River <sup>2/</sup>	5,200	2,700	4,100
Kalama River <sup>2/</sup>	3,700	1,600	900
Lewis River <sup>2/</sup>	3,500	2,400	2,200
Sandy River <sup>2/</sup>	6,800	6800	5,200
<b>Select Areas</b>			
Youngs Bay	2,000	3,200	2,850
Tongue Point	1,400	1,000	1,450
Blind Slough	270	2,60	470
Deep River	30	30	30
<b>Upriver <sup>3/</sup></b>	<b>269,300</b>	<b>178,600</b>	<b>298,900</b>
Snake River <sup>4/</sup>	145,400	99,200	
Snake River Wild <sup>5/</sup>	21,100	23,600	
Upper Columbia <sup>4/</sup>	23,300	19,800	
Upper Columbia Wild <sup>6/</sup>	2,900	2,000	
Wind River <sup>2/ 4/</sup>	10,000		
Little White Salmon <sup>2/ 4/</sup>	36,800		
Klickitat River <sup>2/ 4/</sup>	1,100	1,000	2,000
Yakima River <sup>2/ 4/</sup>	10,100	6,600	15,900

<b>Upper Columbia Summer Chinook</b>	<b>52,000</b>	<b>55,500</b>	<b>70,700</b>
<b>Sockeye</b>	75,600	214,500	183,800
<i>Wenatchee Stock</i>	13,700	26,300	18,300
<i>Okanogan Stock</i>	61,200	187,200	164,900
<i>Snake River Sockeye</i>	700	1,000	600
<b>Steelhead</b>			
Wild Winter Steelhead	15,300		
<b>Summer Steelhead <sup>7/</sup></b>	<b>326,400</b>	<b>355,100</b>	
<i>Skamania Hatchery</i>	8,200	11,300	
Skamania Wild	2,200	4,500	
<i>Group A-Index Hatchery</i>	196,900	164,200	
<i>Group A-Index Wild</i>	69,400	81,600	
<i>Group B-Index Hatchery</i>	41,200	74,900	
<i>Group B Index Wild</i>	8,500	18,500	
<p><sup>1/</sup> Includes age-3 jacks.</p> <p><sup>2/</sup> To mouth of tributary.</p> <p><sup>3/</sup> Includes Snake Summer Chinook.</p> <p><sup>4/</sup> Included in Upriver Spring Chinook number.</p> <p><sup>5/</sup> Included in Snake River Spring Chinook number.</p> <p><sup>6/</sup> Included in Upper Columbia Spring Chinook number.</p> <p><sup>7/</sup> To Bonneville Dam.</p> <p>Prepared by U.S. v Oregon Technical Advisor Committee January 28, 2009</p>			

Find a bug or error in the system? [Let us know about it!](#) [WHAT'S NEW](#) | [EMPLOYMENT](#) | [PRIVACY STATEMENT](#) | [MAILING LISTS](#) | [CONTACT](#)  
 © 1997- 2009 [Washington Department of Fish and Wildlife](#)  
 E-mail: [webmaster@dfw.wa.gov](mailto:webmaster@dfw.wa.gov)



## APPENDIX I

### 2009 ACTION PLAN: WELLS HCP

---

## **2009 ACTION PLAN WELLS HCP**

### **HCP COORDINATING COMMITTEE**

#### **1. BYPASS OPERATING PLAN**

- a. Draft to Committee: January 2009.
- b. Approval Deadline: March 2009.
- c. Period Covered: April to August 2009.
- d. Report Deadline: October 2009.

#### **2. BULL TROUT MONITORING AND MANAGEMENT PLAN**

- a. Period Covered: July 2008 – December 2009.
- b. Report Deadline: March 2010

#### **3. PREDATOR CONTROL PROGRAMS**

- a. Northern Pikeminnow removal program in Wells reservoir (March – July 2009)
- b. Avian Predator Hazing at Wells Dam (April – May 2009)

#### **4. SURVIVAL STUDY PLANNING**

- a. Draft Study Presentation to the HCP-CC (April 2009)
- b. Approval of Study methods and equipment (July 2009)
- c. Procurement of release vessels and detection equipment (October 2009).

#### **5. WELLS DAM FOREBAY DEBRIS BOOM CONSTRUCTION**

- a. Completion of construction (February 2009).
- b. Evaluation of Avian Predators during juvenile migration (March – August 2009)
- c. Draft report on Predators (November 2009)

### **HCP HATCHERY COMMITTEE**

#### **1. 5-YEAR HATCHERY MONITORING AND EVALUATION PLAN**

- a. Implementation: 2006 to 2010.
- b. Draft Annual Report for 2008: March 2009
- c. Final Annual Report April 2009

#### **2. HCP ANNUAL HATCHERY PRODUCTION COMPLIANCE REPORT**

- a. Period Covered: January 2009 to December 2009.
- b. Draft to Committee: November 2009.
- c. Approval Deadline: December 2009.
- d. Submission Deadline: December 2009.

#### **3. 2009 BROOD STOCK PROTOCOL**

- a. Draft to Committee: February 2009.
- b. Approval Deadline: April 2009.
- c. Implementation: May 2009 to October 2009.

4. ANNUAL IMPLEMENTION REPORT - SOCKEYE FLOW MANAGEMENT
  - a. Period Covered: Linked to Brood Years (incubation through emergence).
  - b. Draft to Committee: One report per year.
  - c. Final Reports Due: 60-days after comments received from Hatchery Committee.
5. HATCHERY GENETIC MANAGEMENT PLAN
  - a. Revision of the Methow and Wells HGMP's (February – May 2009)
  - b. Draft to the HCP- Hatchery Committee (May 2009).
  - c. Final HGMPs submitted to NMFS (July 2009).

#### **HCP TRIBUTARY COMMITTEE**

1. ANNUAL REPORT - PLAN SPECIES ACCOUNT STATUS
  - a. Draft to Committee: February 2009.
  - b. Approval Deadline: March 2009.
  - c. Period Covered: January to December 2009
2. 2009 FUNDING-ROUND REVIEW AND FUNDING DECISIONS
  - a. RFP: *To be determined* (typically in March)
  - b. Approval Deadline: *To be determined* (typically in December)

APPENDIX J  
ANNUAL REPORT OF WELLS PLAN  
SPECIES ACCOUNT FINANCIAL ACTIVITY  
FOR THE YEAR ENDED DECEMBER 31,  
2009

---

**Annual Report of Wells Plan Species Account Financial Activity  
For the Year Ended December 31, 2009**

As required by Section 7.3.7.2 of the Wells Hydroelectric Project HCP

Beginning cash and investment balance 01/01/2009 \$ 1,111,129.33

Sources:

Interest earnings 8,922.68

Uses:

Project #	Description		
0701	Lower Beaver Creek Livestock Exclusion	\$ 4,005.42	
0801	Okanagon River Restoration Phase IV	375,654.92	
0802	Riparian Regeneration and Restoration	5,034.27	
0901	Twisp River Riparian Conservation Easement	127,642.00	
0902	Poorman Creek Barrier Removal	53,748.00	
	Total for Projects	<u>566,084.61</u>	
0699	Paid to Chelan PUD	2,420.86	
0699	Paid to Douglas PUD	2,340.14	
	Total for Administration	<u>\$ 4,761.00</u>	
	Total Uses		<u>570,845.61</u>

Ending cash and investment balance 12/31/2009 \$ 549,206.40

 1/27/10

Wyatt W. Scheibner, Treasurer  
PUD No. 1 of Douglas County



# APPENDIX K

## MONITORING AND EVALUATION OF WELLS AND METHOW HATCHERY PROGRAMS IN 2008

---

(At the time of publishing for this report, this appendix was not yet finalized. Thus, it will be included in the 2010 Annual Report. In the interim, this appendix will be available from Douglas PUD upon request.)

## APPENDIX L

### 2009 LETTER INVITING NON-SIGNATORY PARTIES TO A MID-COLUMBIA FORUM

---



1423 Third Avenue, Suite 300  
Seattle, Washington 98101  
Phone 206.287.9130  
Fax 206.287.9131

---

February 16, 2009

Mr. Gary James  
Confederated Tribes of the Umatilla Indian Reservation  
P.O. Box 638  
Pendleton, Oregon 97801

Dear Gary:

You may recall that I periodically contact you on behalf of the Parties to the Wells, Rocky Reach, and Rock Island Habitat Conservation Plans (HCPs). This letter follows a similar letter sent in 2006-2008 inquiring about your interest in participating in a meeting with members of the HCP Coordinating, Hatchery, and Tributary Committees. As parties who were involved in negotiating the HCPs, but elected to not sign the HCPs, the Committees would like to again provide you with a progress report on implementation, as well as give you an opportunity to ask questions of Committee members.

If held, the meeting would be limited to your representatives as well as those from American Rivers, and invited representatives of Grant County PUD. The meeting would likely be a half-day session with a majority of the time available to address your questions and concerns; however, I would plan to work with you to shape an agenda and timeline beforehand.

Because the HCP Parties formally notified FERC of their intent to provide for continuing dialogue with the non signatories in this type of periodic meeting, I would appreciate it if you could provide a formal response to this letter by March 31. Should you have any questions, please feel free to contact me at 206-287-9130 or mschiewe@anchorqea.com.

Sincerely,

Michael H. Schiewe  
Chair, HCP Coordinating Committees  
Anchor QEA, L.L.C.

cc: Keith Truscott, Chelan PUD  
Rick Klinge, Douglas PUD  
Jim Craig, USFWS  
Jerry Marco, Colville Tribes  
Steve Parker, Yakama Nation  
Bryan Nordlund, NMFS  
Bill Tweit, WDFW  
Tracy Hillman, Chair, HCP Tributary Committees