Management, Data and Habitat

Project # 1988-120-25

Contract # 34452

Final Report

May 1, 2007 – September 30, 2007

The Confederated Tribes and Bands of

The Yakama Nation

Prepared For:

BPA

Bonneville Power Administration
Portland, Oregon

Submitted on behalf of all Project Personnel

By:

Melvin R. Sampson
Project Analyst/Project Coordinator
Yakama Nation
P.O. Box 151
Toppenish, WA 98948
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INTRODUCTION

The Yakima/Klickitat Fisheries Project (YKFP or Project) continues to be an all-stock initiative that is responding to the need for scientific and applied knowledge for rebuilding and maintaining naturally spawning anadromous fish stocks in both subbasins.

The Yakama Nation, as the Lead Agency, in coordination with the co-managers, Washington Department of Fish and Wildlife and in cooperation with the Bonneville Power Administration, the principal funding agency. We are testing the principles of supplementation as a means to rebuild fish populations through the use of locally adapted broodstock in an artificial production program. Also, the goal is to increase the numbers of naturally spawning fish, while maintaining the long term genetic fitness of the fish population being supplemented. This concept continues to be utilized on the Spring Chinook within the Yakima River Basin. Also, experiments are ongoing through this performance period to initially determine if there are any genetic concerns relative to domestication.

The coho and fall chinook programs were approved and implemented in the Yakima Basin. The coho programs principle objective is to determine if naturally spawning coho populations can be reintroduced throughout their biological range in the basin.

The objective of the fall chinook program is to determine if supplementation is a viable strategy to increase fall chinook populations in the Yakima subbasin. The coho and fall chinook programs are under the three step process that was established by the Northwest Power Planning Council and have gone through the provincial review process.

This report is formulated in the format of the contract. The respective Objectives will be addressed with the understanding that achievements were realized through the implementation of Work Elements, as referenced in the Pisces Report. There are three principal categories included: Management, Data and Habitat. With attachments that includes Sub-Contracts and YKFP Policy Group Decision Documents. Also, Table 1, which references the respective Work Elements. All other pertinent contract information has or will be submitted through the Pisces procedure.
TABLE 1. List of Work Elements – Management, Data & Habitat
Management, Data, and Habitat activities for Contract #34452 for the period of May 1, 2007 through September 30, 2007

Yakima/Klickitat Fisheries Project Management and Oversight

General Scope

The YN as the YKFP’s Lead Agency, is responsible for Project planning and design; the construction, operation and maintenance of YKFP facilities; and the monitoring and evaluation of Project research activities. The Lead Agency is also responsible to ensure adequate funding for all Project activities.

General Responsibilities of YKFP Essential Personnel

The Lead Agency is responsible for the management and implementation of all YKFP facilities. The Facilities include:
1. The Cle Elum Supplementation and Research Facilities
2. The spring chinook acclimation sites at Clark Flat, Easton and Jack Creek
3. The Marion Drain Hatchery.
4. The Prosser Hatchery
5. The coho acclimation sites in the Yakima and Naches subbasins.
7. The Roza Broodstock Collection Facility.
8. The Roza Juvenile Outmigration Trap
9. The Nelson Springs Office Complex(s).
10. The Toppenish Office Support Complex.
11. Klickitat Office Complex (Covered under Klickitat Contract)
12. Klickitat Hatchery (Primarily funded under Mitchell Act)

YKFP Management is also responsible for the operational performance of all Project research and monitoring activities, including:
1. Monitoring spring and fall chinook, coho and steelhead natural production.
2. Monitoring adult returns and survival for spring and fall chinook, coho, and steelhead;
3. Monitoring spring and fall chinook, coho and steelhead natural production.
4. Spring chinook supplementation experiments (OCT/SNT comparison, reproductive ecology, genetics).
5. Monitoring species interaction (predation, competition, etc.)
6. Coho reintroduction feasibility experiments.
7. Coho and fall chinook broodstock developments.
8. Steelhead kelt reconditioning, experiments (in cooperation with Columbia River Inter Tribal Fish Commission (CRITFC);)
9. Habitat assessments, enhancement and acquisition
10. Domestication research

The YKFP management is also responsible for Project Data/Information compilation and distribution along with coordinating all planning activities.
Objective 1. Yakima/Klickitat Project Management and Oversight Work
Elements Project Management & Oversight

Within the Scope of Work (SOW) for this contract period, reference is made to the respective key personnel that possess the immediate responsibility for implementation and oversight.

The technical merit of each category remains their immediate responsibility including Coordination with Project personnel.

The Project’s Policy Analyst/Project Coordinator (PAPC) has the over all responsibility for the management and oversight of all activities of the YKFP. The following activities were addressed and/or completed within the contract performance period:

- Coordinated with Program Coordinator (PC) in maintaining an updated YKFP Organizational Chart which represents the operational format.
- Continued to maintain continuity with PC on Project financial/contract matters and addressed personnel issues when appropriate including evaluations. To assure oversight accountability, directed that all Project reporting criteria be channeled through PC. This allows immediate access to status and content of reports, including financial/invoicing.
- The Senior Research Scientist (SRS) continues to have the immediate responsibility for oversight on all YKFP research and technical matters. He is also the YN’s representative on the YKFP Science Technical Advisory Committee (STAC). On a daily basis, (SRS) coordinates with PAPC, Project Biologist and Technical personnel of maintaining the proper implementation schedule and producing the designed data. This pertains to all the respective species YKFP is involved in. The SRS coordinates on a routine basis with the PAPC on financial and personnel matters.
- Since habitat remains critical to the YKFP, the Habitat Coordinator (HC) has done assessments of various areas of the Sub-basin and recommended parcel purchases as well as developing habit development projects. He continues to maintain timely communication with PAPC. He also continues to be very effective in coordinating with local and other habitat related entities.
- The YKFP with its research activities has generated vital information/data that has and will continue to be utilized in the restoration of salmon species. The Data Base Manager (DBM) has developed a web site and recording procedure for the data that has been developed. His data development is
- Coordinated with the SRS and other involved personnel. including the Washington State Fish & Wildlife Department, the co-managers of the YKFP. PAPC coordinates with DBM for status update reports presented at the monthly YKFP Policy Group meetings.

Objective 2. Policy and Planning

General Scope
The YKFP Planning and Policy tasks were cooperatively achieved in cooperation with the Washington Department of Fish and Wildlife. These were successively achieved through the implementation of the YKFP’s adaptive management policy and by maintaining and keeping current all Project planning and operations documents. The PAPC coordinated these functions with the co-managers, STAC and other agencies, as necessary.

**Purpose**

- Through the PAPC, the YN continued its’ presence in all YKFP policy and planning activities. This contractual arrangement has allowed the YN, as the Lead Agency, to fulfill its co-management responsibilities in coordination with the Washington Department of Fish and Wildlife, and BPA, the funding agency. We completed the following:
- On a monthly basis, PAPC continued to formulated/distributed the Policy Group Agenda, set up the Policy Group meetings and arranged for the recordings of the minutes. Also conducted the meetings.
- Continued to represent the YN in YKFP meetings and/or designated a representative to represent the YN or YKFP in formal meetings with outside entities.
- PAPC maintained the coordination with agencies and co managers, consistent with the Lead Agency’s responsibility.
- PAPC continued to coordinate with Program Coordinator on the development and submittal of all the funding BPA proposals.
- PAPC maintained continued communication with key Project personnel in assuring the fulfillment of the goals and objectives as contained in Project contracts.
- In coordination with Program Coordinator and key Project personnel, all reports were submitted through the Pisces process to BPA.
- PAPC exercised oversight with key Project personnel in assuring proper NEPA coverage. In most regards, they coordinated directly with BPA’s Environmental department.
- PAPC, in conjunction with Program Coordinator, completed all the active sub-contracts for the services they provide.
- The PAPC, in coordination with the Senior Research Scientist, WDF&W and other key Project personnel, the Internal Project Annual Review was held to review and develop respective plans and tasks for the forth coming contracts. Was held at CWU in Ellensburg and was well attended.

**Objective 3. Provide Project Financial and Administrative Support**

**General Scope**

The YKFP operates under several contracts to meet its research and production objectives as well as the data and habitat aspects of the Project. The administrative support requirements that are required to maintain compliance, both for the funding
agency and the Yakama Nation are immense. The Project Coordinator (PC) is the immediate responsible person for all financial/personnel contract compliance requirements in coordination with the PAPC.

**Purpose**

The current financial status of all the YKFP contracts is essential for effective and efficient implementation of all the contracts. Adequate support staff and structure are essential in maintaining this responsibility.

**Summary of Yakima/Klickitat Fisheries Project Management and Oversight**

The Policy Analyst/Project Coordinator, (PAPC) maintains the responsibility for Overall Project oversight/implementation and coordination within the YKFP. This is achieved on a continued basis with operational support from the Project Coordinator and an appropriate cadre of bookkeepers and support staff. They also maintain the ability to provide an updated status on the vast procedural changes from the key funding agency.

Summary of key activities:
1. Continued the level of coordination and completion of quarterly status and final reports under the Pisces procedure for all of Bonneville Power Administration contracts.
2. Continued, on a timely basis, the invoicing for each respective contract. Experienced some operational difficulty due to unassigned contract numbers for the interim contracts, which resulted in a back log of funds.
3. Coordinate the maintenance of cash position of all funds to assure reconciliation with Yakama Nation and funding agency.
4. Coordinate and submit September Accruals to BPA.
5. As the Lead Agency, coordinated the activities pursuant to each operational facility within the YKFP.
6. Assigned SRS to organize/coordinate the Yakima Basin Aquatic Science and Management Conference held at Central Washington University, Ellensburg, Washington which was completed and was very successful and well attended.
7. Scheduled, coordinated and chaired the monthly YKFP Policy Group meetings.
8. Coordinate and compile an update status with the Tribal Department of Natural Resources and Tribal Council F&W Committee.
9. Assisted and coordinated Project emergency activities on a daily basis.
10. Coordinated with PC and key personnel in finalizing sub-contracts for certain designated services.
11. Maintained the responsibility and lead for the development of proposals/budgets for all of the YKFP contracts. Maintained an equipment inventory list which is updated periodically and submitted to BPA with budget proposal and end of year close out.
12. Coordinated with PC on maintaining and updating the organizational chart for the YKFP.
14. Coordinated with the co-managers, on a continued basis on the operation of the YKFP.
15. Maintained an open cooperative policy when other entities were involved, such as the Federal Agencies, including the U.S. Fish and Wildlife Service.
16. Remained effective in meeting compliance factors with each respective contract, regardless of the funding agency, including BPA.

The YKFP remains an all stock initiative which is testing the concepts of supplementation. Through this research, we have experienced some new and unforeseen challenges. Up to this point of the operation, the Science Technical Advisory Committee (STAC) has been effective in thorough review and recommendations. As proposed considerations are recommended for a certain species, including the formulation of the Master Plans, STAC is instrumental in formulating the scientific review. The NEPA requirements are coordinated with BPA, or the funding agency for this specific activity. A majority of the challenges that are considered are addressed through the utilization of adaptive management.

In conclusion, it’s fair to say that some very challenging results have been generated up to this point. We appreciate the diversity that is evident within the YKFP.

**Objective 4. Data Processing and Information**
(Work Elements C174, D160, E159, and F161)

**General Scope**

Continue to develop an overall structure for the collection and management of YKFP data, ultimately locating it in an accessible location. The system will be consistent with YKFP and regional data management guidelines and objectives. The Data team responsible for achieving this is lead by the Programmer/Database Manager.

**Purpose**

The goal of this objective is to continue to standardize, consolidate, centralize and make accessible all data and information generated by the YKFP on a timely basis.

**Compile, Standardize and Consolidate and Maintain Project Data and Information System**

**Summary of Data Management Major Accomplishments for May 1, 2007 through September 30, 2007.**

**Consultation, Coordination, and Data Sharing**

- Worked with project statistician to supply necessary data for re-analysis relating to the OCT/SNT experiment.
-Worked with coho biologist to develop summary of dialogue and document development that has occurred relative to the Yakima coho project in cooperation with BPA and the NPCC over the past 3 years.
-Summarized 2006 kelt reconditioning work and developed presentation for June 13-14, 2006 Project annual review.
-Assisted with development of Yakima Basin overview and coho presentations for Project annual review.
-Developed response to BPA regarding queries and comments about the Yakima kelt reconditioning program.
-Consulted with mid-Columbia staff on efficacy of kelt reconditioning – what we know and what we don’t know from Yakima study.
-Participated in conference call to discuss better coordination, collaboration and sharing of data from trial fishery programs.
-Prepared and loaded Klickitat 2006 spring Chinook spawning ground and hatchery return CWT data into regional mark information system (RMIS).
-Submitted 2006 and 2007 coded-wire tag release data for YN mid-Columbia coho releases to the regional RMIS database.
-Reviewed CWT needs for 2007-08 marking of YN program fish; responded to emails/queries from Northwest Marine Technologies about our programs.
-Produced quarterly (Apr-Jun 2007) water usage reports for Cle Elum facility and submitted to WA state dept. of Ecology.

Planning and Reporting
-Developed and edited material on sediment sampling, coho project, and bird predation work for 2006 annual report to BPA on the YKFP monitoring and evaluation contract.
-Edited appendices and finalized 2006 annual report to BPA for the YKFP monitoring and evaluation contract; posted to Pisces on 7/20/07.
-Refined manuscripts summarizing the YN kelt reconditioning and spring Chinook semi-natural and optimal conventional rearing experiments; submitted manuscripts to technical journals for peer review.
-Continued to provide support in the development of Klickitat and Yakima Fall Chinook Master Plan.
-Updated hatchery/genetic management plans (HGMPs) for Yakima coho, spring chinook, and fall Chinook.
-Reviewed and edited “executive summary / short project overview” of Yakima Basin spring Chinook work prepared by WDFDW staff.
-Participated in staff reviews and planning for 2007 long-term kelt release and reproductive success studies.

Database Development, Maintenance, and Analysis

-Worked with Cle Elum hatchery staff to input and finalize month-end rearing (growth and survival) data for 2005 and 2006 broods.
-Posted Cle Elum 2005 brood spring Chinook release data to regional mark information system.
- Continued to track 2007 spring Chinook outmigration from the acclimation sites posting data to ykfp.org web site.
- Continued tracking 2007 spring Chinook adult migration at Bonneville, Prosser, and Roza Dams, including emailing regular run updates to members of YKFP policy and technical teams.
- Begin updating spring Chinook historical trend tracking database to include 2007 harvest and dam count data.
- Continued developing queries using new PTAGIS web portal interface for tracking YN PIT releases through juvenile and adult migrations.
- Loaded 2007 tagging and recapture event data for kelt reconditioning and Roza spring Chinook monitoring to PTAGIS database.
- Implemented database for Roza Spring Chinook M&E and brood collection work in 2007; tested and modified as necessary to accommodate changes required to implement DNA sampling of every spring Chinook passing above Roza Dam.
- Worked to finalize 2006-07 steelhead run counts at Prosser including any data gaps.
- Developed analysis of adult coho return timing and “drop-out” rate through Zone 6 to look at potential differences in return timing of upper Columbia and Yakima programs.
- Prepared database, tags, and summary spreadsheet to use in 2007 brood spawning at Cle Elum.
- Prepared, updated, installed and tested database for use in monitoring and sampling activities at the Prosser Denil ladder this fall.
- Downloaded PIT recoveries from 2007 bird predation gravel surveys; entered into database for tracking these recoveries.
- Participated in 2007 brood spawning at Cle Elum; measured and photographed fish; entered spawning and fecundity data into database; prepared weekly spawning summary reports; catalogued and archived photos for morphometric studies.
- Prepared and updated database for use in radio telemetry tracking of coho, fall Chinook and steelhead this fall.

**Equipment and Web Site Maintenance**

1. Performed routine equipment and anti-virus software maintenance (troubleshooting, hardware/software installation and maintenance) at all sites (Nelson, Cle Elum, Roza, Prosser, and GIS server system in Toppenish).
2. Developed procedures to ensure regular and complete off-site backups of all PCs hosted at the Nelson Spring site including installation of two 1.25 terabyte RAID storage systems.
3. Performed routine maintenance of the YKFP web site including assisting users with their accounts, and adding and fixing links to YKFP technical reports and publications.
4. Self-trained on PHP scripting and used this knowledge to enhance ykfp.org web site features including interfacing with Bureau of Reclamation online data to include flow and temperature data on Roza and Prosser adult count graphs and for use in juvenile passage estimation.
5. Organized and posted abstracts and presentations from the annual Science and Management Conference to the ykfp.org web site.

**GIS Mapping**
6. Worked with the Klickitat Data Manager to set up and load a spatial database engine at the Klickitat field office. This allows central management of shared geospatial data for map production and landscape modeling.
7. Produced maps and analysis in support of Klickitat “Eastern Tributary” habitat proposals and of Gorge area hatchery release numbers in support of White Salmon production proposals.
8. Completed online training classes to enhance knowledge and stay current with ESRI’s ArcGIS and other mapping and geo-database products. These courses were offered through grants to tribal organizations.

Note: The majority of Klickitat basin-specific data management activities are covered in a separate report pursuant to Klickitat contract(s).

**Objective 5. Project Annual Review (PAR)/Quarterly and Annual Reports**

**General Scope**
The Project Annual Review (PAR) is a vital part of the annual review and planning cycle that contributes to the research consideration for the YKFP. The original PAR has been expanded to include other activities conducted outside of the YKFP. The original intent of the PAR was to evaluate the ongoing science activities of the program. This component is now conducted in an ‘Internal PAR’ that was held on January 10 and 11. The original Project Annual Review has been expanded and renamed ‘the Yakima Basin Aquatic Science and Management Conference’ (YBS&MC) to include a broader range of science and management activities that impact the salmon and wildlife in the Yakima Basin. The conference is conducted over two days at the Science Building at Central Washington University. The PAR consists of a series of presentations documenting the production, monitoring and evaluation objectives and results of the previous years’ research projects in the YKFP. The PAR affords an opportunity for formal peer review and interaction with scientists who have a viable interest in supplementation and the resource.

**Purpose**
The Project Annual Review has been expanded and renamed ‘the Yakima Basin Aquatic Science and Management Conference’ to include a broader range of science and management activities that impact the salmon and wildlife in the Yakima Basin. It is the responsibility of the Senior Research Scientist to schedule and conduct the original annual PAR as well as the Yakima Basin Aquatic Science and Management Conference, which includes presentations from each of the task specific participants within the YKFP and now includes invitations to other scientists and managers that are interested in the YKFP or the health of the fish and wildlife resources in the Yakima Basin. The Internal PAR assists the Scientific
Team and the Policy Group in project planning and management activities and will be made available to regional scientists through the PDM


**General Scope**

The Science/Technical Advisory Committee (STAC) is composed of representatives from the Yakama Nation (YN) and the Washington Department of Fish and Wildlife (WDFW). STAC is responsible for the immediate oversight of all scientific aspects of the YKFP. The Senior Research Scientist of the Yakama Nation is the Chairman of the STAC.

**Purpose**

STAC will develop and review all pertinent scientific and technical information, develop a Decision Document, and present the information to the Policy Group for action. STAC is also responsible for the planning, review and development of recommendations from the information/data that is presented at the annual PAR.

**Summary of Senior Research Scientist Major Accomplishments**

**Consultation and Coordination**

Coordinated all of the ongoing Monitoring and Research Activities of the YKFP.

Coordinated the development of YKFP projects and FY07-09 proposals for the NPCC and BPA three year program.

Coordinated the presentation of YKFP projects and FY07-09 proposals to the Yakima Subbasin Planning and Recovery Board as part of the local review of these proposals.

Represented the Yakama Nation on the Hatchery Scientific Reform Group (HSRG) in their evaluation and reform recommendation of all hatchery programs in the Columbia Basin.

Participated in NOAA/Critic sponsored Supplementation Workshops to develop monitoring and Evaluation programs for hatchery research in the Columbia Basin.

Continued coordination of the development of a kelt reconditioning program for the Upper Columbia. Developing a Reproductive Success evaluation of the program.

Continued working with BOR and other agencies on the Yakima Dams Fish Passage Study. Gave presentation on results of research from this project at YBSMC.
Gave presentations summarizing Yakima Basin YKFP activities at the Western Division American Fisheries Society Conference in May ‘06, the Northwest Hydropower Conference in February ’07, the Northwest Steelhead Conference Jan ’07.

Participated in the Collaborative Systemwide Monitoring and Evaluation Project (CSMEP).

Planning and Reporting
Coordinated the Yakima and Klickitat project proposals through the FY2007-2009 NPCC and BPA budget and review cycle. Coordinated responses to ISRP, NPCC, and BPA queries and review of these proposals including responses to ISRP programmatic comments.

Planned the internal Project Annual Review (PAR, Jan 07) and the Yakima Basin Aquatic Science and Management Conference (YBS&MC, June 07).

Attended monthly YKFP policy group meetings and reported activities for STAC. Developed and presented Decision Documents to Policy Team for Adaptive Management revisions to ongoing activities within the YKFP.

Participated in meetings to review status of steelhead kelt work and evaluation of reproductive success. Presented summary of 2001-2005 results from Yakima Basin kelt reconditioning at the Northwest Steelhead Conference and to the Yakima Basin Fish and Wildlife Recovery Board.

Assisted with modifications / changes in the Klickitat Master Plan with emphasis on expected review and recommendation from the Hatchery Scientific Reform Group.

Assisted and reviewed the re-write, internal review, analysis, and finalization of CESRF OCT / SNT juvenile and adult survival paper. This paper will be re-submitted to a technical journal in June or early July of 2007.

Assisted with re-write and review of a manuscript summarizing 2001-2005 steelhead kelt reconditioning research. The manuscript has been submitted for publication and is in peer review.

Assisted with the review of manuscripts on reproductive success, comparisons of morphology between wild and hatchery salmon, and homing performance of hatchery salmon to acclimation sites. These papers are published in scientific journals.

Objective 7. Habitat, Water and Passage
General Scope

The YKFP will improve and protect habitat deemed necessary to further Project objectives. The Habitat Coordinator (HC) will coordinate with the respective agencies, committees and groups on matters pertaining to habitat, water resources and fish passage matters within the Yakima subbasin.

Purpose

The YKFP’s Ecosystem Diagnostic and Treatment (EDT) analysis will provide information related to habitat projects that will improve salmonid production in the Yakima subbasin.

Summary of Yakima/Klickitat Fisheries Project Habitat.

The Habitat Coordinator and staff are responsible for:
- providing input to the regional salmon recovery board;
- prioritizing and implementing passage, screening, restoration, protection and assessment projects;
- providing technical input to governmental entities on salmonid habitat management; and,
- developing and implementing management plans for protected habitat parcels.

During this time period primary activities and accomplishments include the following:

1. Continuing with restoration activities at the Holmes habitat parcel.
2. Developing plans for weed control, revegetation and other management activities for the Fortune, Harris, Henne, Dixon and Scatter Creek habitat parcels.
3. Continuing with environmental education activities via field trips to the Holmes, habitat parcel, involving eight primary grade classrooms.
4. Participation in a variety of governmental natural resource regulatory forums, including the city of Ellensburg Critical Areas Committee (activities completed in June) and the Union Gap floodplain restoration planning group (the group is now named the “Gap to Gap”).
5. Participation in voluntary natural resource planning and restoration groups, including the Yakima Tributary Access and Habitat Program and the Yakima Fish and Wildlife Recovery Board.
6. Coordination with Washington Department of Fish and Wildlife and the Kittitas Conservation Trust (a local non-profit Land Trust) on watershed restoration projects, including lower Reecer Creek, Swauk Creek and Taneum Creek passage and instream flow improvement and a Cle Elum River Engineered Log Jam design/construction proposal.
7. Participation in Conservation Easement planning and tributary passage restoration at a habitat parcel of 400+ acres in the Easton/Cle Elum Reach of the mainstem Yakima River.
8. Promoting and implementing passage improvements in the Taneum, Swauk, Reecer and Manastash tributaries, through involvement in planning groups and data collection.
9. Securing funding and beginning permitting for instream habitat restoration in Swauk Creek.

**Objective 8. Sub-Contracts for Needed Services.**

**General Scope**

The YKFP is a diverse Project and requires services that are best served through a contractual arrangement. It has proven to be very beneficial to employ the services of personnel who not only have a specialized area of expertise but are also distinctly familiar with the YKFP.

The YN will contract with qualified personnel, agencies or firms that possess the abilities to meet specific service requirements of the YKFP. The YN will negotiate and execute a personal services contract and/or agreement and monitor the services, once implemented.
Attachment A

Legal/Policy Analyst Contract Activities

The Legal/Policy Analyst (L/PA) responsibilities are to advise management on the benefits and risks associated with actions considered by the decision-makers. Through this contract performance period, the L/PA maintained a close working relationship by attending/participating in meetings that pertain to the Project, reviewing and reporting on legislation, laws, administrative actions and regulations that affect the YKFP and participating in the planning/development process for the Project.

In summary, during the performance period for the L/PA contract ending September 30, 2007, the L/PA provided the following services to the YKFP:

1. Assisted the PAPC and the YKFP Policy Group in project administration and management.
2. Analyzed applicable laws, rules and regulations pertaining to Project funding, water rights, NEPA, SEPA, ESA, and other environmental compliance requirements.
3. Advised PAPC and Policy Group as to the matters identified above.
5. Assisted in the development of regulatory permit applications.
6. Supported the development and maintenance of intergovernmental relationships between the Yakama Nation, BPA, WDFW, NPPC, and local governments.
7. Reviewed, negotiated and prepared project contracts and agreements.
8. Attended Policy Group meetings and other key YKFP meetings, as requested, and advised PAPC and Policy Group regarding issues discussed.
9. Attended regional meetings wherein the topics discussed could affect YKFP activities.
10. Advised and assisted the PAPC with regard to issues of concern related to YKFP.
Specifically, the L/PA performed tasks in the following major areas:

1. **Water Rights Issues**

   *Cle Elum Supplementation and Research Facility (CESRF).* Water right permits issued in 2007 for the CESRF are temporary, tied to the operating life of the CESRF. The LPA worked with Bonneville consultants and CESRF staff to address issues necessary for the issuance of the 2007 permits, both surface and groundwater.

   Because of uncertainty regarding the productive capacity of the aquifer providing groundwater for fish propagation activities, the groundwater permits are conditioned on the development of a contingency plan for reduction of authorized groundwater use in the event that aquifer yield declines below current levels. The L/PA worked with CESRF and YKFP management to evaluate permit conditions and develop a contingency plan consistent with the conditions.

2. **Long Term YKFP Funding**

   BPA has continued negotiations with tribal governments in the region regarding long term funding of fish and wildlife mitigation activities in the context of litigation over the adequacy of endangered species protections for anadromous fish. The L/PA assisted YN staff in compiling funding information to support the negotiations and participated in the development of YKFP positions on long term funding approaches, associated government to government interactions with BPA managers and the development of interim funding approaches for YKFP projects affected by NPCC budget recommendations.

3. **Fall Chinook Master Plan Development**

   The L/PA participated in initial meetings on the development of a Master Plan for Yakima Basin Fall Chinook. He assisted YKFP staff in the review of criteria for development of master plans under the NPCC three step review process, and prepared a partial first draft of the fall Chinook plan.

4. **Coho Reintroduction Activities.** The YKFP is studying the feasibility of reintroducing coho in the Yakima River Basin and has completed initial studies. The L/PA assisted the YKFP in developing permitting strategies for in-basin coho rearing and education facilities. In addition, the L/PA conducted appropriate legal research and
advised the YKFP regarding NEPA and ESA reviews of tributary-focused additional feasibility studies.

5. **Columbia River Basin Legislation, Regulation and Litigation Activities.** The YKFP operates in a context of federal, state and tribal decision-making at both the legislative and regulatory levels. The YKFP is obliged to monitor legislative, regulatory and litigation activities in order to anticipate changes in project environments and to allow effective participation in future funding and policy decisions. The L/PA monitored such activities and made appropriate reports to YKFP managers in order to allow such effective participation.

6. **Procurement Contract Reviews.** The Yakama Nation enters numerous subcontracts in implementing its intergovernmental contracts with BPA. The L/PA worked with Yakama Nation administrative staff to update standardized subcontract terms in order to assure the implementation of the IGCs and protection of Yakama Nation interests in the contracting process.
Attachment C

YKFP Organizational Chart

May 1, 2007 – September 30, 2007
POLICY GROUP DECISION DOCUMENTS
MAY 1, 2006 – SEPTEMBER 30, 2007
Yakima Klickitat Fisheries Project
Policy Group Decision 2007 - 04
(August 16, 2007)

Short Description of Subject: Due to low adult returns in 2007 this year’s Hatchery Control (HC) adults will likely be just sufficient to fill the needs of the HC male broodstock. Over the period 2003-2006 we have averaged 47 HC females and 31 males for HC broodstock. This year we have approximately 54 HC females and 23 males age 4 or older as of July 27th with an additional 39 age 3 jacks. This means that all adult males and nearly all females will be needed for broodstock and there will be no excess adult males for use in the spawning channel. We need 18 female and 18 male HC adults age 4 or older to run the spawning channel study at full capacity. The study cannot be conducted with just Supplementation Hatchery adults because, without HC adults present, we will not be able to control for year-to-year variation in our comparisons. Thus, we do not have the required number of HC adults, particularly males, necessary to conduct the spawning channel Reproductive Success study in 2007.

MIPT/STAC Recommendation: Based on our understanding of the number HC adult males on hand at CESRF, MIPT recommends that we suspend the Reproductive Success Study utilizing the spawning channel in 2007. However, if our assumptions prove to be wrong and we find after the first broodstock sort that there are more age 4+ adults then are needed for broodstock, we recommend running the channel, likely at a reduced population size, using the excess HC age 4+ males.

Proposed Action: Based on current information on the number of HC broodstock on hand plan on suspending the Reproductive Success spawning channel study for just 2007. Reassess the plan subject to the results of the first broodstock sort. Suspended tasks would include work associated with monitoring spawning adults, maintaining fry traps, and sampling fry production.

Final Action: Approved

Signed on 08/17/07 at ____________________________ Nelson Springs (signed copy on file)
x ____________________________ Policy Representative, Yakama Nation
x ____________________________ Policy Representative, Wash. Dept. of Fish and Wildlife

Attachments:
1) Reproductive Success study design from the 2006 Natural Production and Domestication Monitoring Plan of the Yakima Spring Chinook Supplementation Program.
2) Table 1: The number of HC fish at CESRF as of July 27, 2007.
3) Table 2: The number of HC fish needed for the Spawning Channel study as well as Gamete Quality research.

Table 1. The number of Hatchery Control fish on hand at CESRF as of July 27, 2007. Data provided by from Bill Bosch corrected for sexing errors by C. Knudsen.

<table>
<thead>
<tr>
<th>As of 27 July 2007</th>
<th>Hatchery Control (Roza sexes)</th>
<th>After correcting for Roza sexing errors (females 90% correct, males 70%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>Females</td>
<td>Jacks</td>
</tr>
<tr>
<td>Roza Collections:</td>
<td>26</td>
<td>51</td>
</tr>
</tbody>
</table>
Table 2. The number of HC, SH, and SN fish needed for the spawning channel Reproductive Success study and Gamete Quality study. (Taken from: Roza Collection Needs For Reproductive Success.doc (CK 3/22/07 e-mail to Bosch)).

<table>
<thead>
<tr>
<th>Observation channel</th>
<th>Phenotypic Traits/Gamete Quality</th>
<th>Mort./Sex ID buffer</th>
<th>Total from Roza</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC adult female</td>
<td>18</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>HC adult male</td>
<td>18</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>SH adult female</td>
<td>18</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>SH adult male</td>
<td>18</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>HC jack</td>
<td>0</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>SH jack</td>
<td>0</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>SH age 1+ precocial</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>HC age 1+ precocial</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>SN age 1+ precocial</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>