



FISHERIES RESOURCE MANAGEMENT

P.O. BOX 151 ■ TOPPENISH, WA 98948 ■ 509-865-5121 ■ FAX: 509-865-6293

November 16, 2009

Mr. Tony Grover, Director
Fish and Wildlife Division
Northwest Power and Conservation Council
851 SW Sixth Avenue, Suite 1100
Portland, OR 97204

Re: Revised narrative for ISRP review

Dear Mr. Grover,

Yakama Nation Fisheries Resource Management Program is pleased to submit a revised narrative for the Status and Trend Annual Report (STAR) project. At the Council's request on July 31, 2009, the ISRP completed its first review of this project narrative and returned their comments to your office on August 26, 2009. We now request that you forward the revised narrative to the ISRP for its final review.

We are encouraged that the ISRP seems generally supportive of the STAR project, stating that, "*The production of an annual report on RM&E is a very worthwhile endeavor, and the use of a coordinator dedicated to producing this report annually may be a very reasonable approach.*" The ISRP went on to request a revised proposal that:

- *Clearly documents agreement among the stakeholders that this is a reasonable approach;*
- *Describes the procedures for coordination with other agencies and organizations doing similar work (regional coordination of anadromous salmon RME for the BiOp, FWP, High Level Indicators, PNAMP implementation monitoring);*
- *Has objectives and timelines clarified and altered to better reflect what could be accomplished during the initial phase of this project; justifies why only a table of contents will be generated in the first year, or describes additional anticipated progress;*
- *Describes procedures for encouraging and documenting stakeholder input and feedback as part of monitoring and evaluation of STAR.*

Below we have provided a general response to the ISRP comments, followed by specific responses to each. Also, please find attached a revised narrative, per the ISRP request. In some cases we have been able to address ISRP comments, but in other cases it is not possible or appropriate to do so at this early stage of project implementation. We have highlighted in blue important changes and additions to the narrative as a result of the ISRP review.

General Comment

The Yakama Nation Fisheries Resource Management Program (FRMP) appreciates the ISRP review and finds some of their comments helpful while respectfully disagreeing with others. We agree that additional and more detailed information should be included in the narrative, and have done so to the degree this is possible at this stage of project development. However, we simply do not have the staff resources to address the ISRP comments that 1) *“all subbasin stakeholders should be of the same opinion before this effort is initiated”* 2) *describes the procedures for coordination with other agencies and organizations doing similar work...* and 3) *describes procedures for encouraging and documenting stakeholder input and feedback...*. The Yakama Nation is engaged in essentially all key salmonid management and recovery processes in the Columbia Basin, and gaining broad regional consensus on a scientifically based, stakeholder-friendly, well-coordinated, annually-produced Status and Trend Report is no small undertaking. In our view, these ISRP recommendations are reasonable products of the project, but they are not reasonable expectations at the outset. Simply stated, we intend this project to deliver the outcomes described in the ISRP recommendations above, but this cannot be done without the additional resources that are provided by this project.

We also believe the ISRP does not fully understand the intent of the initial product. We take responsibility for this as, admittedly, the proposal is vague on some details. Two points:

1) To be clear, the Yakama Nation does not intend to use considerable time and resources to *“simply generate an outline of what the report contains”*. This is a misunderstanding of our intent. The “Table of Contents” described in the narrative is our short-hand notation for a framework that both defines the contents of the STAR and guides the work efforts that will be necessary to compile, organize, and format the information in it. At this stage in the development of basin-wide status and trend monitoring and reporting, it is imperative that STAR content and formats integrate fully with other, evolving reporting protocols. As this is a work in progress, the early products of this project must focus on the development of databases and reporting protocols that are consistent with those to which we will upload information. The results of this basin-wide coordination are captured in a “Table of Contents” that serves as a point of reference as we add resolution to project tasks and products. The narrative must necessarily be relatively vague at this point pending the outcome of regional coordination and development of reporting formats. Nevertheless, we agree with the ISRP’s interest in better defining the intended product and have added language to the narrative that provides sufficient guidance and detail for the document framework and intention.

2) We are reluctant to produce the first STAR without the meaningful engagement of partners and stakeholders. Producing in isolation a framework for the STAR and presenting it as a finished product to the stakeholders with whom we must collaborate risks alienating our many partners. This could discourage stakeholder participation and almost certainly would reduce the efficiency of information transfer between the many entities with whom we intend to share

information. Over time, we have learned that stakeholder engagement and coordination is a bit like herding cattle - if you go a little slower, you'll get there a lot faster.

Specific Comments:

The ISRP requested a revised narrative that:

- ***Clearly documents that there is agreement among the stakeholders that this is a reasonable approach***

The Yakama Nation is one of five members of the Upper Columbia Salmon Recovery Board (UCSRB). One of the primary purposes of the UCSRB is coordination and communication between stakeholders. The UCSRB is advised on technical issues by the local Regional Technical Team (RTT), whose main tasks are ranking proposals for habitat protection and restoration projects and providing oversight for monitoring salmonid habitat and habitat restoration actions. The Yakama Nation has representatives on the RTT as well. As described in Appendix Q (Adaptive Management Strategy) of the Upper Columbia Salmon Recovery Plan, the UCSRB clearly anticipates applying adaptive management in project selection and implementation, but how this will occur is still being discussed by both the UCSRB and the RTT. Clearly, some form of status and trend documentation is required to facilitate this interest.

The revised narrative does not and cannot clearly document agreement among stakeholders about what constitutes a *reasonable approach*. The UCSRB is one of many stakeholders involved in salmon recovery. In fact, a well-established canon within the UCSRB is, "If you think you are a stakeholder – you are." Multiple federal, state and local governments participate as well as special interest groups and individuals, all closely involved. Without a significant investment of time, it is impossible to document a reasonable approach from each of these entities, as requested by the ISRP. Additionally, the interests of the Yakama Nation with respect to the Fish Accords and the 2008 FCRPS BiOp are unique and potentially unrelated to the needs of many of the other stakeholders, including the UCSRB. The STAR must first satisfy the needs of the resource stewards and those accountable for progress toward recovery. To the extent that the interests of other stakeholders overlap these priorities they can be addressed as resources are made available. The Yakama Nation will collaborate with the UCSRB, the RTT, and associated stakeholders to gain as much consensus on this approach as is practical.

- ***Describes the procedures for coordination with other agencies and organizations doing similar work (regional coordination of anadromous salmon RME for the BiOp, FWP, High Level Indicators, PNAMP implementation monitoring)***

Other than setting up meetings to discuss the structure of the STAR framework, objectives, and anticipated products, it is unclear what is meant by "*describe the procedures for coordination*". With the initiation of the STAR project, Task 1 includes initiating meetings with the UCSRB, BPA, NOAA-Fisheries, PNAMP and other relevant stakeholders to understand how this project most efficiently integrates with and supports their information needs, and to identify available information that is germane to the STAR. Again, this cannot be described in detail until

resources are available to take these meetings, follow through with associated tasks, and apply this effort towards development of the annotated Table of Contents.

- ***Has objectives and timelines clarified and altered to better reflect what could be accomplished during the initial phase of this project; justifies why only a table of contents will be generated in the first year or describes additional anticipated progress***

Please refer to Section A and Section F of the narrative to review revised project scope, project description and work elements.

The Yakama Nation fully intends to produce the first Status and Trend Report in 2011. The objective of this first contract period is to gain as much insight and consensus as is practical on 1) the scope of the document, 2) the overall framework for how the document will contribute to local and regional adaptive management processes, and 3) documentation of contents, information formats, and analytical methods for drawing conclusions about both habitat functionality and population responses. The sum total of these three components embodies the “annotated Table of Contents”. Much of this information is available, but not put together in a clear, logical manner within the context of annual status and trend reports. Certainly, there is little consensus at either local or regional levels on how this is best done. This project reflects the Yakama Nation’s strong belief that the best manner to proceed is to develop a simple, yet specific and comprehensive, template for the STAR document such that local and regional stakeholders can clearly understand the scope, framework, contents, and relevance to adaptive management. Once this understanding and consensus is gained, we believe future compilation and use of the STAR will be greatly accelerated and future discussions of its improvement and refinement will be focused and efficient. This process will require time and staffing well beyond the level currently available in the FRMP. With the implementation of this Fish Accord project, necessary resources will be provided to initiate this important work.

- ***Describes procedures for encouraging and documenting stakeholder input and feedback as part of monitoring and evaluation of STAR.***

Although we understand the ISRP’s interest in a “monitoring plan” for this project, we regard this recommendation as the cart going before the horse in terms of project sequencing. As we have described above, framing the STAR is intended to be collaborative, transparent, and flexible, and we are reluctant to impose at the outset a heavily-structured process that constrains potential partners and stakeholders who may have useful ideas about its final form. When the document framework is established, relevant stakeholders are identified, and the document contents have been described and developed, then it will be timely to describe the process for stakeholder input and feedback relative to the STAR document itself. In other words, we will be better able to describe procedures for encouraging stakeholder input to, and use of, the STAR after we have developed them with relevant stakeholders.

Again, the Yakama Nation appreciates the review and comments from the ISRP. We look forward to the first Status and Trend Annual Report in 2011. We anticipate that this product will provide ample opportunity for substantive comments which will refine and improve subsequent versions. We very much appreciate and support the ISRP comment, “*The ultimate objective of this proposal – to generate an annual report on RM&E efforts in the Upper Columbia Subbasin*

that the authors term a Status and Trends Annual Report (STAR) – is certainly worthwhile. In fact, it is the type of product the ISRP has recommended that all the subbasins generate on a regular basis.” In view of the many salmon management and recovery processes and countless stakeholders with which the Yakama Nation is engaged, we trust the ISRP understands the importance of providing sufficient time for meaningful engagement to get lasting products. We hope the revised narrative and this letter sufficiently address the ISRP comments and interests.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Parker". The signature is fluid and cursive, with a large initial "S" and "P".

Steven S. Parker, Technical Services Coordinator
Fisheries Resource Management Program
Yakama Nation

cc: Phil Rigdon – Yakama Nation DNR
Paul Ward – Yakama Nation FRMP
Greg Delwiche – BPA
Roy Beaty – BPA
Christine Golightly – CRITFC

FY 2008-2009 F&W Program Accords (MOA) Proposal Review

Narrative

Table 1. Proposal Metadata

Project Number	2009-002-00
Proposer	Bob Rose; Yakama Nation Fisheries Resources Program
Short Description	A Status and Trend Annual Report (STAR) Coordinator will use this contract period to develop a long-term framework for annually reporting habitat protection, restoration and monitoring actions and results associated with the 3-Treaty Tribes-BPA Fish Accords, 2008 FCRPS BiOp and the NPCC Fish and Wildlife Program. The Yakama Nation will work closely and in collaboration with the Upper Columbia Salmon Recovery Board, BPA, Washington State Salmon Recovery Office, NOAA Fisheries and other fisheries resource managers.
Province(s)	Columbia Cascade Province
Subbasin(s)	Wenatchee, Entiat, Methow
Contact Name	Bob Rose
Contact email	brose@yakama.com

A. Abstract

Goal: The long-term goal of the Status and Trend Annual Report project is to support mitigation described in the 2008 FCRPS Biological Opinion, 3-Treaty Tribes-BPA Fish Accords, and the obligations of the NPCC Fish and Wildlife Program by annually reporting progress towards salmon recovery efforts relevant to the Columbia Cascade Province. This work will be in coordination with, and will support other local and regional efforts including but not limited to the Upper Columbia Salmon Recovery Board, BPA, the State of Washington, NOAA Fisheries and the NPCC Columbia Basin Fish and Wildlife Program. In time, this initial effort will expand to the entire Ceded Lands of the Yakama Nation.

During this contract period the primary activities will involve planning, coordination and development of an efficient and collaborative framework associated with local and regional interests and entities listed above. The product will include a recommended and comprehensive annotated "Table of Contents" for the future Status and Trends Annual Reports (STAR), a detailed technical report describing the ways and means for producing the STAR and a recommended work statement for the year following completion of this contract period. The annotated Table of Contents will focus on the Wenatchee Subbasin, which will be used as a template from which a comprehensive framework can be developed and other subbasin reports will follow. This product will clearly demonstrate the connections (analysis framework) between 1) key and relevant decisions to be made → information needed and available to support these decisions → data analysis procedures → existing data collection procedures. This will also included a description of available data sources and recommended formats for data presentation. Final products will also identify where significant gaps exist within the analysis framework.

The Yakama Nation fully intends to produce the first Status and Trend Report in 2011. The object of this first contract period is to gain as much insight and consensus as is practical in 1) the scope of the document, 2) the overall framework in how the document will contribute to local and

regional Adaptive Management processes, 3) document contents, 4) information formats and 5) analytical methods for drawing conclusions for both habitat functionality and population responses. The sum total of these five components embodies the “annotated Table of Contents”. Much of this information is available, but not put together in a clear, logical manner within the context of annual status and trend reports. And certainly, there is not wide spread consensus at either local or regional levels how this is to be done. This Project Proposal reflects strongly the Yakama Nations believe that the best manner to proceed is to develop a simple, yet specific and comprehensive template for the STAR document such that local and regional stakeholders can clearly understand the scope, framework, contents and relevance to Adaptive Management. Once this understanding and consensus is gained, we believe future compilation and use of the STAR will be greatly accelerated and future discussions towards its improvements and refinements will be more focused and efficient. This process will require substantial time; well beyond the current staffing levels of Yakama Nation Fishery Resource Management Program (YNFRMP). With the implementation of this Fish Accord Project Proposal, necessary resources will be provided to initiate this important work.

It is envisioned the STAR will initially emphasize reporting on progress towards tributary habitat implementation and monitoring at the stream reach (2-15 kilometers) and watershed scale (approximately HUC 4 or 5) and population characteristics at the subbasin scale within the Methow, Entiat and Wenatchee subbasins. This work is designed to complement the 2008 FCRPS BiOp and 3-Treaty Tribes-BPA Fish Accords, in describing habitat conditions, using Primary Limiting Factors identified in the NPCC Subbasin Plans and the Upper Columbia Salmon Recovery Plan, in terms of improvements towards habitat functionality. Within the FCRPS BiOp, changes in habitat functionality correlate directly to assumed changes to juvenile salmonid productivity. At this time, there is not a concise resource available to technicians or decision makers that clearly illustrate what activities have occurred and are envisioned to occur within these geographic scales, including a comprehensive set of specific metrics for which changes are intended to be measured. The STAR documents are intended to provide this information so as to support the FCRPS BiOp process in providing these estimates in a trackable, defensible manner. The intended primary audience for this Status and Trend Annual Report is the Yakama Nation Tribal Council, the Upper Columbia Salmon Recovery Board and the Bonneville Power Administration, however the distribution and collaboration of this work is intended go well beyond these interests. The Yakama Nation will coordinate closely with the Colville Confederated Tribes through the existing Upper Columbia Salmon Recovery Board with an interest in including restoration and monitoring progress in the Okanogan subbasin as well.

B. Problem statement: technical and/or scientific background

With the 2004 Subbasin Plans, the Columbia Cascade Province has clearly provided up-to-date Assessments, Visions for habitat improvements, watershed specific objectives and associated strategies and defined many needed projects and activities to achieve these stated objectives. At this time, comprehensive monitoring and evaluation strategies are being developed within each of the Columbia Cascade Province subbasins for both habitat actions and artificial production programs to measure how activities singularly and synergistically are contributing towards long-term salmon restoration. However, beyond the inherent needs of a comprehensive monitoring and evaluation strategy is the need to adequately and appropriately report this information in a manner that is accessible and useful to the general lay public, to decision makers and the scientific community. Such a report will be invaluable to support local and regional interests in both adaptive management and in documenting progress and accountability of obligations. Without a well defined and periodic reporting tool, one is left wondering what information would be used to drive an effective adaptive management process. The STAR Table of Contents will specifically

describe the Primary Limiting Factors at the watershed scale, specific actions that are being implemented and are intended to be implemented that will address those limiting factors, expected (and measured) habitat changes at the stream-reach scale, describe available data for measuring these changes, and suggest analysis process for drawing conclusions. Through this initial contracting period we will concentrate efforts on the Wenatchee subbasins. Our purpose is to make the process more efficient and accessible to stakeholders interested in reviewing and providing input into the project. In the past, YNFRMP staffs have found that if the scope of a new project is too great, the work is often diluted and stakeholder review and input becomes overly complex, cumbersome and frustrating.

Development of a Status and Trend will not be an easy undertaking. There are many habitat and biologic characteristics to be considered and the manner in which this information is presented (formats and consistency, for example) will be important. Description of these details will be the responsibility of the Yakama Nation during this contract period. However the foundation of the STAR documents within the subbasins will be the Primary Limiting Factors (PLFs), identified in the 2004 NPCC Subbasin Plans, at the watershed scale. It is reasonable to expect that at this scale, cumulative changes in PLFs would provide the basis for estimating potential or observable changes in habitat function (as estimated in the 2008 FCRPS BiOp).

Trends in biologic attributes are better described at a larger geographic scale, say for example at the subbasin (or population scale in the case of the Upper Columbia populations). In this case, different monitoring tools (screw trap and redd count information, for example) would be used to address a different set of questions. A third geographic scale should also be considered, that of the entire Province – or Evolutionary Significant Unit (spring Chinook) and Distinct Population Segment (steelhead). Identifying key and appropriate questions for each of these scales, the appropriate timeframes when specific questions could realistically be addressed and how these questions are integrated into making management decisions will be a primary function of the STAR and will require considerable time and coordination to be successfully accomplished.

To be clear, the Yakama Nation is aware of and appreciates efforts by the Columbia Basin Fish and Wildlife Authority, State of Washington and the Pacific Coast Salmon Recovery Fund (for example) for providing reports of actions and progress in salmon recovery. However, these reports are very broad in nature and do not address the need to track activities and report on progress on a smaller scale in a manner that is useful for local adaptive management. Once these more locally oriented reports are available (through the STAR), and through careful collaboration with these regional reporting efforts, resource managers will have greater ability to relate large scale trends to local actions funded through the NPCC Fish and Wildlife Program, the FCRPS BiOp and Fish Accords.

C. Rationale and significance to regional programs

With the recent Columbia Basin Fish Accords, approximately six million dollars per year are allocated to the Yakama Nation Fisheries Resources Management Program (YNFRMP) towards habitat protection and restoration of salmonid tributary habitat in the Methow, Entiat and Wenatchee subbasins of the Columbia Cascade Province. These allocations are in addition to, and are expected to be cost-shared with other funding sources from the State, federal and tribal resources as well as from the Mid-Columbia Public Utility Districts (Douglas, Chelan and Grant County PUDs). Measurable changes to habitat conditions are expected to occur which are expected to boost productivity and spatial structure of ESA listed salmonids as well as other salmonid species. In addition, other important activities benefiting salmonid passage through hydroelectric projects and reservoirs are planned within Federal Columbia River Power System and Mid-Columbia PUD hydro-electric Projects as well as improvements associated with artificial production methods and facilities within these subbasins.

Within the **3 Treaty Tribes – Action Agency Agreement (April 4, 2008)** *“The Action Agencies acknowledge that the Tribes' ability to monitor and verify performance of the FCRPS under the BiOps is essential to their participation in this MOA, and the Action Agencies support such monitoring and verification and will so state in any forum”* (Section D, Page 5). This Agreement also states in **Section C. General Provisions For All Projects:**

- **C.2.** For BPA funded commitments, the Tribes will report results annually (including ongoing agreed upon monitoring and evaluation) via PISCES and/or other appropriate databases.
- **C.3.** For non-hatchery projects identified as providing benefits to listed ESA fish, the Tribes shall:
 - Provide estimated habitat quality improvement and survival benefits from the project (or suite of projects) to a population or populations of listed salmon and steelhead based on key limiting factors;
 - Refine the estimates during the course of the Agreement if it appears benefits may significantly deviate from the original estimates; and
 - Support these estimates of habitat improvement and survival benefits in appropriate forums.
- **C.5.** The Parties will coordinate their RM&E projects with each other and with regional RM&E processes (particularly those needed to ensure consistency with the FCRPS BiOp RM&E framework), as appropriate and agreed to among the Parties.

The language in the Fish Accords clearly recognizes and establishes the need for periodic reporting of habitat actions and monitoring results. Under Section C3, the Yakama Nations requirement for estimating habitat benefits and associated biological responses will be a substantial undertaking and clear documentation supporting these estimates is self-evident. The Yakama Nation is responsible for assuring allocated resources will result in on-the-ground changes, as envisioned in the 2008 FCRPS BiOp. Therefore, we also have an interest in tracking other factors, such as institutional barriers (permitting, for example) so that through the adaptive management process the Yakama Nation can bring to the BPA, the Upper Columbia Salmon Recovery Board and other relevant entities clear documentation of problems in implementation so as to be remedied in a timely manner. These and other considerations are fundamental in the development of the STAR.

Each of the 2004 Wenatchee, Entiat and Methow Subbasin Plans recognize as a part of the overarching Management Plan vision the need for adaptive management and citizen involvement.

Working at the local level with established citizen groups and employing well defined monitoring strategies and long-term adaptive management is a central theme found in these subbasin plans. But since 2004, tremendous progress has been made both scientifically and with public involvement through the Upper Columbia Salmon Recovery Board (UCSRB). With the recent development and adoption of the Upper Columbia Salmon Recovery Plan (located on the web at <http://www.ucsrb.com/>) substantial progress has been made in this Province in refining organizational roles, responsibilities, citizen and scientific workgroups, implementation schedules, monitoring strategies and adaptive management practices. The Yakama Nation is one of five members on this Board (including the Colville Tribes and Chelan, Okanogan and Douglas Counties). It is evident resources from the Fish Accords will substantially advance the interests of the Upper Columbia associated with the FCRPS BiOp and both the NPCC Subbasin Plans and the Salmon Recovery Plan. The STAR is intended to be the primary reporting instrument for progress towards objectives outlined in the Fish Accords and the Subbasin Plans and will strongly compliment other efforts, especially those pertaining to the Upper Columbia Salmon Recovery Plan.

D. Relationships to other projects

Considerable NPCC Fish and Wildlife Program habitat restoration investments (in addition to future Fish Accord funding) have been or are currently being implemented in the Columbia Cascade Province. There are other significant funding sources available and routinely used in the Columbia Cascade Province, including but not limited to the Mid-Columbia PUD Settlement Agreements / HCPs, Washington State Salmon Recovery Funding Board, USFWS Community Salmon Funding Board, Pacific Coast Salmon Recovery Funds and others. Project development and funding is becoming closely coordinated through the UCSRB, local subbasin citizen groups, the Upper Columbia Regional Technical Team and extensive efforts provided by the State, Federal and Tribal fisheries agencies. Projects funded through BPA and identified in the BPA PISCES database are listed below in Table 2. At this time there is not a comprehensive list of other recent and/or ongoing actions within the Columbia Basin Province although it is envisioned with the STAR, this information and related technical details will be readily available.

Table 2. Relationship to existing projects

Funding Source	Project #	Project Title	Relationship (brief)
BPA	2007-283-00	UPA Wenatchee Subbasin Access	Each of these projects, objectives, monitoring results and estimated contributions to changes in Primary Limiting Factors and habitat conditions, as well as others implemented through the Fish Accords, will be included in future Status and Trend Annual Reports.
BPA	2007-400-00	Wenatchee Basinwide Passage	
BPA	2007-325-00	UPA Wenatchee Complexity	
BPA	2007-085-00	UPA Nason Creek Oxbow	
BPA	2007-042-00	UPA Wenatchee Program	
BPA	2007-086-00	UPA Wenatchee Riparian	
BPA	2007-318-00	UPA Knapp-Wham Hanan Detwiler	
BPA	2007-231-00	Entiat Riparian	
BPA	2000-002-00	Remove Barriers/Restore Habitat	
BPA	2005-004-00	Whitehall Wells	
BPA	2005-003-00	Entiat Four-Mile Wells	

Funding Source	Project #	Project Title	Relationship (brief)
BPA	2007-054-00	Entiat River-UPA-Stillwater	
BPA	2005-007-00	Fulton Diversion	
BPA	2005-008-00	Chewuch Diversion	
BPA	2007-172-00	UPA Project – MVID West Canal	
BPA	2007-214-00	UPA Fender Mill Floodplain	
BPA	2007-264-00	UPA Methow Complexity	
BPA	2007-251-00	UPA MVID East	
BPA	2007-035-00	UPA Methow Riparian Enhancement	
BPA	2007-037-00	Elbow Coulee Restoration	
BPA	2005-009-00	Twisp Side Channel	
BPA	2005-010-00	Macpherson Side Channel	

In addition to the activities mentioned above, it is useful to mention ongoing and significant monitoring efforts that will be integral with the STAR, which includes the Integrated Status and Effectiveness Monitoring Program (ISEMP) and the Intensively Monitored Watershed (IMW) program. In addition, the Colville Tribes are currently implementing the Okanogan Basin Monitoring and Evaluation Program. It is important to note that the Yakama Nation and Colville Tribes have not yet discussed a collaborative approach in the development of the STAR, but these discussions are intended over the 10 months of this proposal-period.

The Integrated Status and Effectiveness Monitoring Program (ISEMP, Bonneville Power Administration project #2003-0017) was created as a cost effective means of developing protocols and new technologies, novel indicators, sample designs, analytical, data management and communication tools and skills, and restoration experiments. In addition to monitoring salmon and steelhead populations and habitat within pilot basins, ISEMP is designed to test the robustness of monitoring protocols, indicator metrics, and sampling designs currently used in monitoring programs. ISEMP plans to develop tools to facilitate effective data analysis, management and communication. ISEMP is active in the Wenatchee and Entiat Subbasins and is currently being developed and proposed for the Methow subbasin as well. The STAR is intended to support and to be a logical extension of the ISEM Program.

The Intensively Monitored Watershed project is a joint effort of the Washington Departments of Fish and Wildlife and Ecology, NOAA Fisheries, EPA, Lower Elwha Klallam Tribe and Weyerhaeuser Company and is financially supported by the Washington Salmon Recovery Funding Board. The premise of the IMW project is that the complex relationships controlling salmon response to habitat conditions can best be understood by concentrating monitoring and research efforts at a few locations. In the Upper Columbia the IMWs include the Nason, Peshastin and Chiwawa watersheds in the Wenatchee Subbasin, the lower Entiat River, and Libby, Gold and Beaver watersheds in the Methow Subbasin.

The Upper Columbia Regional Technical Team and Upper Columbia Salmon Recovery Board have designed a monitoring effort for the Upper Columbia Basin. The plan described here addresses the following basic questions:

1. What are the current habitat conditions and abundance, distribution, life-stage survival, and age-composition of fish in the Upper Columbia Basin (status monitoring)?
2. How do these factors change over time (trend monitoring)?
3. What effects do tributary habitat actions have on fish populations and habitat conditions (effectiveness monitoring)?

The plan is designed to address these questions and at the same time eliminate duplication of work, reduce costs, and increase monitoring efficiency by coordinating current monitoring efforts conducted by the U.S. Forest Service, U.S. Fish & Wildlife Service, Washington Departments of Fish and Wildlife, and Ecology, Chelan County, and Chelan County Public Utility District. The coordination is overseen by NOAA Fisheries. The Wenatchee River is represented on the IMW Scientific Oversight Committee to ensure close cooperation and information flow among the various IMW efforts.

Okanogan Basin Monitoring and Evaluation Program, Colville Tribes. This program began in 2003 and provides comprehensive research by collecting and evaluating data on a system-wide basis in support of salmon recovery. This monitoring plan requires a long-term commitment as most outcomes will not be realized for 7 to 20+ years. This project is designed to ultimately answer these questions:

1. What are the current habitat conditions and abundance, distribution, life-stage survival, and age-composition of anadromous fish in the Okanogan River Basin (status monitoring)?
2. How do the above factors change over time (trend monitoring)?
3. Are tributary habitat actions effective for increasing fish populations and improving habitat conditions (baseline effectiveness monitoring)?
4. What is the cumulative effect of watershed management actions on fish populations (effectiveness monitoring)?

The plan is designed to address these questions and at the same time eliminate duplication of work, reduce costs, and increase monitoring efficiency. The implementation of valid statistical designs, probabilistic sampling, standardized data collection protocols, consistent data reporting methods, and selection of sensitive indicators will increase monitoring efficiency.

Additionally, the Yakama Nation recognizes the Columbia Basin Fish and Wildlife Authority; *State of the Resources Report* and the State of Washington; *State of the Salmon Watersheds Report*. We envision close coordination with these entities as well in the development of the STAR to support each others efforts, to find ways to gain efficiencies and increase accuracy and to reduce potential for redundancies.

E. Project history (for ongoing projects)

This is a new project under the Fish Accords.

F. Proposal biological/physical objectives, work elements, methods, and metrics

The Yakama Nation will be responsible for producing the annual status and trend report in close collaboration with regional and local interests. These interest will include (but are not limited to) the the Yakama Nation Tribal Council, Upper Columbia Salmon Recovery Board, BPA, Washington State Salmon Recovery Office, NOAA Fisheries and other fisheries resource managers. It is envisioned that a Draft Status and Trend Annual Report would be produced and made available to the public for comments in January of each year, with the intent to produce a Final report the following April.

Objectives: Over this initial contract period, the primary objectives for work to be initiated include:

- Establish a professional network at both regional and local levels designed to initiate discussions focused on development of an annual status and trend report. The Yakama Nation will inventory and identify data resources and data gaps, coordination of efforts to increase efficiency and reduce potential redundancy, and identify ways and means for long-term sharing of information. Much of this work is ongoing through the Upper Columbia Salmon Recovery Board but is not yet described in context of producing annual status and trend reports that support the adaptive management process envisioned by this Board.
- Provide a clear and specific description and rationale of the proposed document contents (annotated Table of Contents), presentation formats and analysis methods relevant to the the 3-Tribes – BPA Fish Accords, 2008 FCRPS BiOp and NPCC Fish and Wildlife Program. Describe how these materials provide useful information to various local and regional decision makers and stakeholders and develop and participate in processes to allow for stakeholder input.
- Identify entities and/or data portals where information contained in the annual report will come from and where it will be stored and publicly accessible.

- Develop a work Plan for the STAR Coordinator for the next years activities that will include production of the first Status and Trend Report for the Wenatchee, Entiat and Methow Subbasins.

In 2011 the Yakama Nation intends to produce the first Status and Trend Annual Report. Throughout the following years, as we develop experience and infrastructure, the Yakama Nation intends to expand this reporting effort to the entire Yakama Nation Ceded Lands. These later reports will address and integrate all four “H’s (habitat, hydro, hatchery and harvest) as is practicable. Continued coordination and concentrated work towards this end will be a key function for the Yakama Nations’ STAR Coordinator.

Work elements (tasks), methods, and metrics:

Milestone Title	Milestone Description
1. Organizing Framework for STAR	Building on previous work (e.g. Adaptive Management strategy, Appendix Q, in the UC Salmon Recovery Plan) and considering the needs of the primary clients for STARs (NOAA, BPA, Yakama Nation, UCSRB), develop a structured hierarchy of example decisions for different scales and entities. This will include key inputs / questions to inform those decisions and example decision rules (e.g. viability criteria developed by the Interior Columbia Technical Recovery Team (ICTRT)). Meet with Upper Columbia Salmon Recovery Board and Regional Technical Team to develop strategy for understanding STAR proposal and obtaining input. Coordinate with NOAA, BPA and PNAMP to develop regional understanding of STAR proposal and develop strategy for obtaining input. Note future work needs to be addressed by the STAR Coordinator over time.
2. Identify performance metrics directly and indirectly associated with identified Primary Limiting Factors	Using Appendix G of the 2008 Fish Accords as the primary organizing framework (but also consulting NPCC Subbasin Plans, Upper Columbia Salmon Recovery Plans and other relevant documents), identify specific metrics to measure progress in addressing identified and key PLFs that will be tracked for the watersheds in the Columbia Cascade province for the purposes of the Fish Accords, FCRPS BiOp and NPCC Fish and Wildlife Program.. Note the consistency (or lack of) in PLF definitions among different documents, and from these, recommend PLF definitions and performance metrics consistent with definitions currently being used by BPA and PCSRF. Note future work needs to be addressed by the STAR Coordinator over time.
3. Prioritize key information needs relative to identified PLFs for the Methow, Entiat and Wenatchee Subbasins	Use the Tribal data base, developed for the 2008 Fish Accords by the CRITFC Tribes (and maintained by CRITFC), to rank and prioritize Columbia Cascade watersheds (and PLFs within these watersheds) according to their expected contributions to egg:smolt survival increases. Basic assumption here is that STAR should emphasis analysis in watersheds and PLFs where the largest changes are expected to occur (with some reference locations). Task 3 will operate in parallel with Tasks 1 and 2. Identify important gaps in restoration projects (i.e. critical PLFs in important watersheds that are not being addressed by BPA funded projects). If possible, rank populations based on ESU-scale decision rules developed by the ICTRT. Note future work needs to be addressed by the STAR Coordinator over time.
4. Identify existing data sets and monitoring efforts for key information needs within <u>one</u> example subbasin	Focusing on the priority locations and PLFs identified by Task 3 for the Wenatchee Subbasin: <ul style="list-style-type: none"> a) Identify information sources for performance measures that can be used to characterize priority PLFs, priority populations and other information required for the STAR (e.g. implementation monitoring); b) propose examples (formats) of how these performance measures could

Milestone Title	Milestone Description
(Wenatchee)	be summarized in the STARS (i.e. maps, graphs, tables) to address the questions and decisions described under Task 1; and c) note challenges in moving information from the databases identified in a) into the formats required in b), and tasks which need to be addressed by the STAR Coordinator.
5. Identify existing data gaps in monitoring PLFs	Concurrent with Task 4, identify PLFs in the Wenatchee subbasin for which information is either not being collected at all, is of low quality, or is not spatially representative of the watershed. Where time is available, Task 4 will also extend to the Entiat and Methow subbasins particularly in key watersheds where significant restoration activities are planned or are likely.
6. Develop annotated STAR outline version 1.0	Annotated outline will reflect information needs of the primary audiences (i.e. YNFRMP, UCSRB, BPA). It will have a Table of Contents for the entire Columbia Cascade province but will provide example graphs and tables (with either real or “mock” data) for the Wenatchee Subbasin only. This will serve as a template for discussion with the primary audiences, with the intention to expand the template to the Upper Columbia subbasins. YNFRMP will distribute Version 1 to primary audiences, for their review two weeks prior to Task 7.
7. Meet with primary audiences; develop Draft annotated Table of Contents (version 2.0)	Attend a 2-day meeting with primary audiences to review Version 1, and respond to input to develop Draft annotated Table of Contents (Version 2). Summarize comments in a form to be addressed by the STAR Coordinator. Version 2 will clearly demonstrate the connections (analysis framework) between 1) key and relevant decisions to be made → information needed and available to support these decisions → data analysis procedures → existing data collection procedures. Additionally, Version 2 will also identify where significant gaps exist within the analysis framework.
8. Work Plan for STAR Coordinator	Summarize all tasks identified under the above milestones as a Work Plan for the STAR Coordinator over the next year.
9. Periodic Status Reports to BPA	The Contractor shall report on the status of milestones and deliverables in Pisces. Reports shall be completed either monthly or quarterly as determined by the BPA COTR. Additionally, when indicating a deliverable milestone as COMPLETE, the contractor shall provide metrics and the final location (latitude and longitude) prior to submitting the report to the BPA COTR.
10. Monthly Budget, Balance and Forecast: General Program Administration	Update and maintain budget balance and summaries and other budgetary needs. Daily and weekly administration of travel, timesheets, vehicle safety and maintenance, etc.
11. Hire Staff	Full Time Equivalent professional staff: STAR Coordinator.

G. Monitoring and evaluation

No monitoring and evaluation for this project is planned.

H. Facilities and equipment

The Status and Trend Annual Report Coordinator will likely be staffed at the main Yakama Nation Fisheries Resource Program facilities in Toppenish, Washington. Beyond routine office equipment and transportation, no special facilities or equipment is envisioned for this contract period.

I. References

No references cited.

J. Key personnel

Steve Parker: Yakama Nation Fisheries Resource Technical Coordinator / Star Project Manager

Lee Carlson: Yakama Nation Fisheries Resource Habitat Coordinator

Bob Rose: Yakama Nation Fisheries Resource Hydro Coordinator

Debbie Azure: Yakama Nation Fisheries Resource Administrative Director