Coordinated Assessments Phase II Workshop

April 21st, 2011 - Portland, Oregon

Summary of Key Themes and Decisions

Introductions and Background

Jen Bayer (PNAMP) and Tom Iverson (CBFWA) provided an introduction and review of the Coordinated Assessments (CA) process. Building on the workshop held this past October, Phase II of CA will focus on the development of local agency/tribal and Columbia Basin-wide data sharing strategies and refining the Data Exchange Templates (DET) to share the three VSP indicators for salmon and steelhead. This workshop focused on the following goals:

- To review the progress of the CA effort and discuss next steps,
- To assess the progress and interim lessons learned from the data technician efforts to complete the DETs and Data Analysis Flow Diagrams (DAFD),
- Review the draft Gaps, Needs, and Priorities (GNP) assessment and the agency-level Data Sharing Strategy templates, and
- Discuss the development of the Basin-wide Data Sharing Strategy.

Staff from NOAA, BPA, and NPCC provided a brief overview of their participation in this process as regional data "consumers". Their goal continues to be the development of a more efficient process across the region to share the large amount of data requested of entities working on the ground and to better define the technical infrastructure and staffing resource needs of local agencies and tribes for data management improvements.

The CA July Workplan (Phase I) developed last year outlined the three priority VSP indicators as a starting point for these data sharing discussions. As part of Phase II, the data technicians hired over the past few months have been able to engage field biologists and begin to gather information on how data are collected and shared. This work will continue through June/July as the data technicians finalize the draft DETs and DAFDs for their agencies and tribes. These tools will be used by the agencies and tribes (with assistance from the data technicians and the CA Planning Group) to complete the GNP Assessments and develop local data sharing strategies which will help describe their agency/tribal data gaps and identify where and how to invest funds to build towards better basin-wide data sharing.

Tom Iverson's CA Background presentation:
http://www.pnamp.org/sites/default/files/datasharingsupportca_phase2_21apr2011presentation.pdf

Monitoring Methods and Other Related Efforts

Russell Scranton (BPA) provided an overview of other data management efforts in the region including the new Monitoring Methods website (http://www.monitoringmethods.org) and the Integrated Status and Trend Monitoring (ISTM) project.

- MonitoringMethods.org is a tool for field staff to document and track the methods and protocols used in collecting data across the region. The site documents the methods used to calculate metrics and does not house any of the data. The protocols available on this site can be accessed directly via URL in the DET providing a more detailed description of how the data are collected to calculate the indicators.

- The ISTM project is a pilot project focused on the Lower Columbia River to demonstrate potential approaches and utility of integrating the collection of information to address multi-scale questions about the status and trends of fish (salmon, steelhead, and potentially bull trout), and physical, chemical, and biological attributes in stream networks. Part of this process is the creation of the Master Sample Tool that enables the selection of an efficient, statistically sound sample for monitoring status and trends of environmental resources. The tool can be accessed online at: http://grays.sitkatech.com/pnamp/. More information on the ISTM project can be found at: http://www.pnamp.org/project/3132.

BPA is a funding partner for both of these efforts and will require grantees to document their protocols and methods on MonitoringMethods.org by FY2012 as a contract deliverable. The site has been pre-populated with many of the protocols that were described in funded proposals to help ease the burden on agencies and tribes. This site will help ensure that the data used by multiple entities for calculations and decision making is clearly and correctly documented and thus used in an appropriate manner.

Russell Scranton's presentation: http://www.pnamp.org/sites/default/files/bpa_ca_workshop_rws.ppt

Preliminary Results and Discussion of the DET and DAFDs

Bruce Schmidt (PSMFC) and the data technicians provided a detailed overview of the progress to date on the DETs and DAFDs and the information the data technicians have learned during this process. The data technicians expect to be able to complete DETs and DAFDs for the primary and secondary populations as identified by their agency/tribe supervisor and in some cases, will be able to start on the tertiary populations as well. As the technicians begin to wrap up the work on the DETs they will be available to their agency/tribe to assist with the development of the local Data Sharing Strategies.

Bruce Schmidt's Presentation on Preliminary Results:
http://www.pnamp.org/sites/default/files/ca_preliminary_results.ppt

Data Technician Report Out Presentation:
http://www.pnamp.org/sites/default/files/datatech_reportouts_042111v2.ppt

The data technicians described their activities to date and highlighted the following items:

- The populations under review by the data technicians were selected by agency and tribe supervisors.
- While the data technicians are collecting information on the availability of indicator data, they are not assessing the quality of those data. This step would be appropriate for the agencies and tribes to consider as they are completing the Gaps, Needs and Priorities Assessment – do these data meet your own agency needs? If they do not, it may be an identified gap that needs to be addressed.
- This process is looking at the ability to share data outside each agency and tribe but internal data sharing issues have been identified by the data technicians and should be included in the local data sharing strategies.
- Some TRT populations have detailed notes on how data were collected for the five-year status review. There were indications in some assessments that uncertainty in the data was a concern

and a priority for improvement. This process is helping to document data and provide information that will help inform judgments on data uncertainty.

- While the DAFDs have proven to be helpful, some agencies and tribes are also interested in developing data management flow diagrams to show how actual data move between agencies and tribes during calculations.

Workshop participants expressed an interest in seeing the complete list of "lessons learned" thus far by the data technicians. The following list includes items that were brought up during the workshop and items that were discussed during the Data Technician Workshop on the previous day. This list is considered draft and will not be exhaustive until the technicians have completed their work.

Lessons Learned from Preliminary Efforts of Data Technicians:

- In many places the data are reported but what happens between the raw data collection and the reported indicator number is not captured anywhere.
- Smolt to Adult Ratios (SAR) often are not calculated for an entire population – they may represent a population but are calculated from a single fork or tributary or other subset.
- The DETs will need revisions prior to using as a common platform for sharing data – these revisions are being documented by the technicians and will be reported out to the group during the next workshop.
- Population (as defined by NOAA) is not a standard unit used for data collection across the region (*see further discussion on this topic below*).
    - A "population responsibility directory" is not available within agencies and questions remain around: population & population scale, agency/tribe responsibility for indicator calculations, overlap of co-manager responsibility, when overlap exists what is the official database of record?, etc.
    - Granularity of population lists conflict with some agency/tribe management objectives.
    - Some VSP indicators are only available for population aggregates, rather than by CBFWA/TRT populations
- There are issues with terminology within the DET including items like smolt, natural spawner vs. natural origin spawner, and recruit/spawner vs. progeny/parent.
- The current DET version does not accommodate all agency/tribe specific indicator calculations.
    - Complex calculations are not captured
    - Complexity will need to be addressed in the next version of the DET
- The DAFD are generally well received and have been useful when discussing indicator derivations with biologists.
- The desired level of detail within the DAFDs is inconsistent across entities (e.g., programmer vs. biologist vs. supervisor needs) and depending on the audience, the diagram may not show all gaps.
- Indicators are sometimes reported but the supporting metadata is not included.
- Not all agencies calculate all 3 of the chosen VSP indicators for a population.
    - Natural Spawner Abundance (NSA) is the most commonly available
    - Spawner to Adult Ratio (SAR) the least and the most variable
- The data components of each indicator are highly variable.
- Entities employ many different ways to store data and there are inconsistencies even within a given entity.
    - E.g., sometimes the entire process is done in Excel while other agencies use a local or regional database

    - Data can be stored in published papers and reports, internal documents, and websites
- Changing methodology impacts and complicates data availability.
- There is a lack of management priority for specific indicators among agencies/tribes.

There was a detailed discussion around population names and standard terminology for population. For this process the data technicians used the CBFWA list of populations (developed for the 2009 Fish and Wildlife Program amendment recommendations) as a primary source and cross-walked these to TRT, SaSI and other population names as currently listed in the DET. These lists do not capture the same names that some agencies and tribes are using during day-to-day management activities. For example, some entities are only monitoring a sub-set of a population (e.g., one tributary of a river) while others are aggregating multiple populations into one name (common with steelhead). This has provided uncertainty and confusion over what the population unit in the DET actually captures. The following points where highlighted during the discussion:

- The term “population” can be used in a number of different ways – each with an important meaning (e.g., recovery planning, ESA listing, etc.).
- There are times when a derived indicator is developed but is not meant to define an entire population – this is captured by the DET but the technicians were told originally to only complete the DET if the indicator is available for the entire population.
- Systems used by agencies and tribes can have populations defined at a different scale than the populations as defined by NOAA.
- During the TRT process this was discussed and for some of the listed populations (Interior Columbia) guidelines were developed for how to extrapolate sub-sets of a population to the population scale. It may be helpful to look at this guidance and see if it can be applied to the non-listed species.
- The Salmonid Stock Inventory (SaSI) list does not match the TRT population list – something to discuss in the future.
    - The inconsistencies between these two lists may be smaller than it currently appears.
- We do not want to wire a process to any particular “population list”; however, adequate metadata must be provided to understand an indicators relationship to any defined population.
- Sharing the data used to derive the indicators at any scale with detailed metadata will allow data consumers to generate whatever population level indicator is necessary.
- In some cases different agencies and tribes are collecting/analyzing different pieces of a particular indicator that could to be pulled together.

This process will serve the reporting needs of agencies and tribes and should also identify the specific actions necessary to meet current data reporting obligations. The ability to provide data each year (or other timeframe) will require building up individual entity infrastructure and would benefit from automating reporting when possible. Both of these needs are important and are being addressed concurrently through the data technician work. The data collected by the end of their term will help the agencies/tribes develop systems that serve a broader need. We need to ensure that upper management at the agencies and tribes are on board with this effort. As the process moves forward into the development of local agency and tribal Data Sharing Strategies, there will be a natural engagement of management staff as the plan is vetted prior to submitting.

Decision: The data technicians will describe in as much detail as possible how the term population is used for each DET. When the DETs are collated, this information will help identify those areas where the term is being used for sub-populations and/or aggregates of multiple populations and inform discussions at a broader level. Agencies and tribes know that this is an issue and it may turn out that some of the funding at the regional level could be used to help address the problem.

Action: The CA Planning Group will document the lessons learned thus far from the data technician work, including information collected about population names, for workshop participants to review. This information could be useful for agencies and tribes during decision making discussions – especially at the policy staff level.

Gaps, Needs, and Priorities (GNP) Assessment Template & Data Sharing Strategy Outline

Tom Iverson reviewed the GNP Assessment template as a tool for agencies and tribes to fully describe the resources or technology necessary to share the three VSP indicators and improve internal data management. The technicians provided a review of the gaps and needs they have identified so far by population, but they were initial general observations that need further discussion with agency biologists and IT staff who know the agencies' data procedures better. The technicians will be available to help fill out this template based on their experiences. Once vetted by agency/tribe staff, the assessment can be used to develop their local Data Sharing Strategies.

The GNP Assessment template: http://www.pnamp.org/sites/default/files/ca-gnp_assessment-draft_-_2011-04-18.xls

The Agency/Tribe Data Sharing Strategy outline is a template that pulls together all of the information gleaned from the DETs, DAFDs, and the GNP Assessment. Each agency/tribe should be looking at how they want to approach sharing the indicators and possibly building data systems or approaches that make data sharing routine and efficient, with the automated conversion of the three VSP indicators into the standard DET format as a potential long-term goal. This document should include the possible projects an entity needs to improve data management and a general schedule for how to implement those projects. This information will be synthesized by the CA Planning Group into a Columbia Basin Data Sharing Strategy that provides funders with priority ideas and projects and identifies areas where resources may be combined to meet multiple needs.

The draft Data Sharing Strategy outline: http://www.pnamp.org/sites/default/files/ca-columbia_river_basin_collaborative_data_sharing_strategy_outline_-_draft_-_2011-04-11.pdf

Workshop participants discussed both documents and highlighted the following:

- Agencies still need to convince their upper management that this process is worthwhile, work with biologists to confirm their commitment to share data, and determine how much money and staff resources are necessary to implement the DET as a business practice. This is a lot of work scheduled for a very short period of time.
    - This process has to help each agency and tribe first – if it does not help field biologists improve how they provide data then they are not going to participate.
    - Sharing data more efficiently and with detailed supporting information will help each agency and tribe have more control over how data are used, presented, and ideally speed up the process of calculating the indicators and supporting metrics.
    - The goal is to help entities meet their own mission and the associated data demands – spend less time managing data and more time sampling or analyzing.

- The GNP Assessment is not "required" – it is merely a tool to help agencies and tribes, along with the DAFDs and DETs, to identify common missing elements and resources that would make data sharing more efficient.
- Agencies and tribes that do not collect data for all three indicators are not required to start collecting those data. Agreeing to use the DET only means agencies/tribes will use a standard format to share those data they do collect and intend to report.
- The agencies and tribes should consider sub-region level issues in development of their agency/tribal Data Sharing Strategies.
- There is not a huge amount of money available from outside funders so clearly articulating the timing for implementation of projects will be helpful. Also, federal funding may not fully support activities so discussion of other funding sources will be helpful.
- The CA Planning group will be available to agencies and tribes as they develop their individual agency/tribe Data Sharing Strategies to answer any questions or review text as requested. The data technicians will also be available until mid July to help complete this task.
- The local agency/tribe Data Sharing Strategies are not designed to be long documents – they should be fairly short with enough background text to inform the NPCC Data Management Category Review (or other funding processes) but still be possible to complete in a short timeframe.

Timelines and Workplan

Nancy Leonard (NPCC) provided a brief overview of the NPCC Category Review Process which included an updated timeline pushing their review of potential projects out to September 2011 at the earliest. The group discussed the draft timeline and adjusted the timing for developing the draft local data sharing strategies.

Nancy Leonard's presentation:
http://www.pnamp.org/sites/default/files/update_on_the_councils_dm_category_review_process.ppt

The updated draft timeline for Phase II is available online at:
http://www.pnamp.org/document/3402

Given the new timing for the NPCC, the Phase II timeline was adjusted to the following:

- By June 1st agencies and tribes should have a rough draft of their local Data Sharing Strategies completed and submitted to the CA Planning Group.
- By the end of July the local Data Sharing Strategies should be complete.
- By August 26th the CA Planning group will synthesize the local Strategies into a Basin-wide Data Sharing Strategy and circulate it back to agency and tribal staff for review.
- Mid-September the group will come back together for a final workshop to discuss the Basin-wide Data Sharing Strategy and next steps for the DET.
- Post-workshop, the agencies and tribes should have approximately 6-8 weeks to submit project proposals.

The group discussed the process of moving from the Basin-wide Data Sharing Strategy to potential project proposals to BPA. Once regional priorities are identified it may also be possible to get funding through other projects like the Pacific Coast Salmon Recovery Fund (PCSRF) as part of their 2012 grant proposals.

Decision: Workshop participants generally agreed this was a good approach and that the documents were in good shape (i.e., no "red flags"). They also expressed a need to review the documents and timeline with their staff prior to committing to this process. The group reaffirmed their commitment to sharing the three VSP indicators and that the DET content provides an appropriate amount of metadata regarding the indicators. A formal "approval" of the DET will not occur until after the data technicians have completed the pilot process and required changes are made to the current version (i.e., the development of version 1.0 following the September workshop).

Action: The CA Planning Group will email participants after the workshop with the GNP Assessment template and the local agency/tribe Data Sharing Strategy outline to confirm the timeline for development of the first draft of the these Data Sharing Strategies (rough draft due June 1^{st} and final draft due July 29^{th}).

Participants

Name	Organization	Email
Jim Geiselman	BPA	jrgeiselman@bpa.gov
Russell Scranton	BPA	rwscranton@bpa.gov
Tom Iverson	CBFWA	tom.iverson@cbfwa.org
Stacy Schumacher	Confederated Tribes of the Umatilla Reservation	stacyschumacher@ctuir.com
Jens Lovtang	Confederated Tribes of the Warm Springs Reservation	jlovtang@wstribes.org
Henry Franzoni	CRITFC	frah@critfc.org
Denise Kelsey	CRITFC	keld@critfc.org
Isaac Cadiente	Data Technician - Confederate Colville Tribes & Shoshone-Bannock Tribes	icadiente@psmfc.org
Peter Markoes	Data Technician - Confederated Tribes of the Umatilla Indian Reservation	pmarkoes@psmfc.org
Joanna Miles	Data Technician - Confederated Tribes of Warm Springs Reservation	Jmiles@psmfc.org
Martha Brabec	Data Technician - IDFG	MBrabec@psmfc.org
John Walrath	Data Technician - Nez Perce Tribe	jwalrath@psmfc.org
Beth Timmons	Data Technician - ODFW	ETimmons@psmfc.org
Matt Bartley	Data Technician - ODFW	MBartley@psmfc.org
Jamie Hallman	Data Technician - WDFW	jhallman@psmfc.org
Danny Warren	Data Technician - WDFW	DWarren@psmfc.org
Michelle Steg-Geltner	Data Technician - Yakama Nation	MStegGeltner@psmfc.org
Bart Butterfield	IDFG	bbutterfield@idfg.idaho.gov
Peter Hassemer	IDFG	phassemer@idfg.idaho.gov
Lance Hebdon	IDFG	lance.hebdon@idfg.idaho.gov
Evan Brown	IDFG	evan.brown@idfg.idaho.gov
Richard Alldredge	ISRP	alldredg@wsu.edu
Bernadette Graham Hudson	Lower Columbia River Recovery Board	bghudson@lcfrb.gen.wa.us
Jay Hesse	Nez Perce Tribe	jayh@nezperce.org
Tom Cooney	NOAA Fisheries	tom.cooney@noaa.gov
Scott Rumsey	NOAA Fisheries	scott.rumsey@noaa.gov
Mari Brick	NOAA Fisheries	mari.brick@noaa.gov
Nancy Leonard	NPCC	nleonard@nwcouncil.org
Kasey Bliesner	ODFW	kasey.bliesner@state.or.us
Tom Rien	ODFW	Tom.A.Rien@state.org.us
Jeff Rodgers	ODFW	jeff.rodgers@oregonstate.edu
Chuck Peven	Peven Consulting	ckpeven@charter.net
Bruce Schmidt	PSMFC	bruce_schmidt@psmfc.org

Name	Organization	Email
Doug Taki	Shoshone-Bannock Tribes	dtaki@sbtribes.com
James White	Upper Columbia Salmon Recovery Board	james.white@ucsrb.com
Jen Bayer	USGS	jbayer@usgs.gov
Kathryn Thomas	USGS	kathryn_a_thomas@usgs.gov
Chris Van Holmes	UW	cvh@u.washington.edu
Brodie Cox	WDFW	coxpbc@dfw.wa.gov
Andrew Murdoch	WDFW	murdoarm@dfw.wa.gov
Erik Neatherlin	WDFW	erik.neatherlin@dfw.wa.gov
Bill Bosch	Yakama Nation	bbosch@yakama.com
Michael Babcock	Yakama Nation	mbabcock@ykfp.org
Kristen Durance	Ross & Associates	kristen.durance@ross-assoc.com