



**COLUMBIA
BASIN
FISH & WILDLIFE
AUTHORITY**

DRAFT

DATE: September 10, 2004
TO: Allocation Subcommittee
FROM: Tom Iverson, staff
SUBJECT: September 9, 2004 Draft Meeting Notes and Proposed Draft Work Plan

Allocation Subcommittee Meeting

September 9, 2004

1 – 4 pm

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CBFWA office

Portland, Oregon

Draft Action Notes

Attendees: John Palensky (NOAA-F), Phil Roger and Jennifer Brainard (CRITFC), Dick Stone (WDFW), Tony Nigro (ODFW), and Tom Iverson (CBFWA)

By Phone: Mary Verner (UCUT) and Carl Scheeler (CTUIR)

Time	Objective 1. Project/Budget Recommendations	%
Allocation:	Objective 2. Fish & Wildlife Regional Issues	100%
	Objective 3. Annual Report	%
	Objective 4. RM&E	%
	Objective 5. Other Business	%

ITEM 1: CRITFC Prioritization Tool

Discussion: Phil and Jennifer gave a brief presentation of a new GIS tool available at CRITFC for reviewing and evaluating protection and restoration priorities at the subbasin and reach scale. The data base was created from the EDT data collected for subbasin plans in the state of Oregon. The interface allows presentation of biological and environmental parameters by stream reach. It also presents current projects being funded within each reach.

ITEM 2: Background and Introduction to Topic

Discussion: Excerpt from the August 24, 2004 MMG meeting notes:

“The MMG has concerns with the FY05, FY06 & FY07 budget needs and allocations, and size of the pie. The MMG formed a subcommittee of representatives from ODFW, WDFW, UCUT, Phil Roger, CRITFC and CBFWA staff. In the next month they will meet to discuss possible scenarios for

developing criteria for defining BPA's responsibilities and obligations under the Power Act, financial needs, regional allocation across the provinces and prioritization, and the size of the pie referencing the preliminary ten and twenty year estimated BPA fish and wildlife costs spreadsheets."

This conversation arose from two separate needs that have been recently identified in the regional dialogue. First, BPA is indicating that the new biological opinion will require approximately \$10-15 million in new spending. BPA expects this spending to be absorbed within the existing \$139 million fish and wildlife program and has informally asked CBFWA staff if CBFWA would be able to "re-prioritize" the projects within the program in order to fund these new needs. CBFWA's current policy is to not prioritize to reduced budgets and it is doubtful that all members would now agree to participate in such a process. A second need that has been identified relates to subbasin planning implementation. There has been no conversation related to allocating funding across the provinces or subbasins for the next project selection process. Allocation is a key element that has remained unaddressed, along with the subbasin plan rollup summary and regional context for subbasin planning.

The question for this group is: can CBFWA provide assistance to the region for addressing the need for allocating funds across the provinces or for developing project prioritization criteria for re-prioritizing the program?

ITEM 3: Discussion of the Needs

Discussion: The group discussed CBFWA's role in the regional program and in setting allocation schemes or identifying project prioritization. The unique value that CBWFA can provide is a definition of the biological goals and objectives we are trying to achieve within the fish and wildlife program and the critical factors limiting productivity and viability of populations at both the basin and subbasin scale. This information was not clearly articulated in most of the subbasin plans. There is currently no clear, concise scientific and technical rationale for prioritization of projects. Past wildlife mitigation efforts established this type of criteria in their project review process. Essentially what is missing is a risk management plan for the fish and wildlife populations in the Columbia River Basin.

The risk should consider basin wide issues such as the water budget, wildlife acquisition credits, harvest management, or other broader policies (i.e., decision making process); or at the subbasin scale where we can determine "what is the cost of NOT investing in specific actions within the subbasins." The CBFWA could specifically describe the desired future state of the resources our members are charged with managing. If we focused on the subbasin and basin wide scales, the province level goals and objectives would sort themselves out.

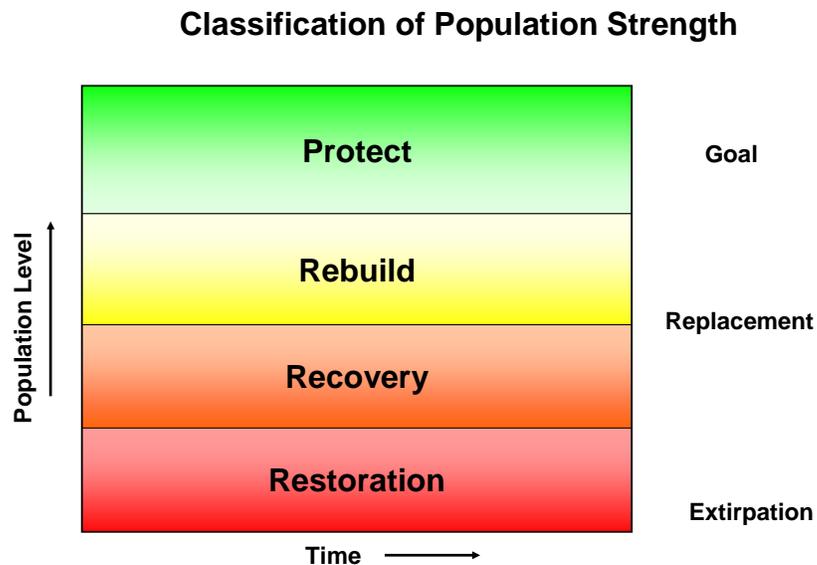
At the Basin scale, CBFWA could identify what success looks like for each focal species. The status of those species could be identified in categories (i.e., maintenance, rebuilding, recovery, restoration), which may assist the NPCC or BPA in allocation and prioritization. CBFWA could then move to the next step in evaluating what the obstacles are for each of those species to reach their desired end state, possibly assigning a likelihood of success (or risk of failure) for possible strategies. The time frame for obtaining the desired end state will weigh heavily on the magnitude of risk for each of the populations.

ITEM 4: Possible Strategies to Address the Need

Discussion: The group generally discussed possible strategies for engaging in this potentially controversial endeavor.

Step 1: Establish a foundation document that identifies the status, trends and goals/objectives for 10 and 100 year time frames for each focal population at the basin wide and subbasin scale. For anadromous fish (and possibly resident fish) the populations could be categorized in one of four “conditions” (see Figure 1). The report would then clearly and simply identify the key limiting factors (or obstacles) to achieving these goals and objectives.

Figure 1.



Step 2: CBFWA, or individual managers, would then be situated to evaluate (or create) budget allocation and project prioritization criteria based on 10 year biological goals and objectives.

Step 3: CBFWA, or individual managers, could then provide guidance to the region on choices and consequences (risk management) in allocation and prioritization decisions considered by the NPCC and BPA.

ITEM 5: Where to go from here...

Discussion: Tom will develop notes for this meeting and pass them around in order for all participants to weigh in and make sure we are all on the same page. Tom will also develop a work plan (attached) to develop a “Status of the Resource Report” that could be used to capture the status, trends, and managers’ goals/objectives for focal populations in the Columbia River Basin.

Attachment:

Work Plan for the development of a CBFWA Status of the Resource Report

Purpose: Develop a document that clearly articulates the biological goals and objectives of the fish and wildlife managers for focal species (or habitat types) being managed in the Columbia River Basin. In addition to identifying the goals and objectives, the critical factors limiting abundance and productivity will be summarized for each focal population (or habitat type).

Following Steps:

1. Describe current state and trend of key (focal) species and/or key habitat types within the region (basin-level) and within subbasins (from the subbasin plans).
2. Describe the desired future state (goals and objectives), quantified as numbers, hectares, etc. for key (focal) species and/or key habitats within the region (basin-level) and within subbasins (from the subbasin plans).
3. Describe critical problems (limiting factors) impeding progress toward achieving the desired future state (goals and objectives).
4. Describe a solution or set of solutions (problem-based strategies) for each critical problem (from the subbasin plans where available).
5. Describe an action or set of actions necessary to successfully implement each solution (strategy).
6. Assess likelihood of successfully implementing solutions (strategies) to critical problems, within specific time frames (10 years vs. 48 years vs. 100 years).
7. Describe likely responses of key (focal) species and/or key habitats to implementation of proposed solutions, in quantifiable terms (increase in numbers, survival rates, cfs, hectares, etc).
8. Rank strategies based on probability of successful implementation and probability and magnitude of biological response from highest to lowest (see Example).

Schedule: The draft document should be complete prior to the end of this calendar year in order to influence decision making during the next round of project selection and the adoption of subbasin plans (at least steps 1 through 3). CBFWA staff will work closely with our member's staff to mine all available information from existing documents. Once the outline for the document is approved, construction of the initial report should proceed quickly.

Resources: The initial draft will be developed by CBFWA staff through mining existing documents. This effort may require individual agency and tribal staff assistance to insure accuracy and reliability of the information we will include in the report. Potential sources of information could include: TAC reports from US v. Oregon, Hatchery reports, Multiyear Implementation Plan, Spirit of the Salmon Report, Wildlife loss assessments,

UCUT Technical Report #2, Anadromous Fish Loss Assessment, Subbasin Plans, Fish Passage Center reports, etc...

Outline: Following is an initial effort at creating a draft outline.

Status of Resource Report Draft Outline

Focal Species

Anadromous Fish

- Spring Chinook Salmon
 - Upper Columbia
 - Lower Columbia
- Fall Chinook Salmon
 - Snake River
 - Mid Columbia
- Summer Chinook Salmon
- Sockeye Salmon
 - Snake River
 - Wenatchee
 - Lake Osyoos
- Coho Salmon
- Chum Salmon
- Winter Steelhead
- Summer Steelhead

Resident Fish Substitution

- Bass
- Kokanee
- Rainbow Trout (put and take)

Resident Fish

- White Sturgeon
 - Lower Columbia
 - Kootenai
- Bull Trout
 - Core areas
- Cutthroat Trout
- Rainbow/Redband Trout
- Burbot

Wildlife Habitats

- Shrubsteppe
- Ponderosa Pine
- Interior Grasslands
- Riparian Wetlands

Programmatic Goals and Objectives

For anadromous fish, measure the population of adult fish at the mouth of Columbia River for each ESU then present allocation by disposition (harvest, subbasin level escapement, etc.).

- 1) Adult fish are population of interest for harvest
- 2) River mouth is best measure of escapement prior to in river fisheries and other variable impacts
- 3) Currently collect population estimates of adult fish at river mouth

For resident fish, population metrics are less specific than absolute numbers. Need a better definition. Possibly the number of core population units.

For wildlife habitat, measure Habitat Units across basin against goals established in BPA wildlife program ledgers.

Strategic Goals and Objectives

For anadromous fish:

- 1) General health (geographic distribution) - track population of adults entering each subbasin (or nearest project where counts are currently made) or subpopulation against subbasin goals.
- 2) Harvest goals - track harvest levels for Zone 1-5, Zone 6, Sport Catch, and total harvest (currently collected) against annual goals.
- 3) Hydro impacts – track Smolt to Adult Return rates against stated goals (SARs), depends on existing studies.
- 4) Habitat impacts – track productivity or viability.
- 5) Hatchery impacts –track adult returns.
- 6) Overall habitat management guidance – track subbasin estimated capacity versus actual productivity.
- 7) Resident fish substitution – track harvest rates of hatchery resident fish in blocked areas and stated goals, angler hours and stated goals, etc.

For resident fish:

- 1) General health – track number and health of core population areas.
- 2) Harvest – track angler hours or harvest rates for core populations.

For wildlife:

- 1) Track HU's against each hydro project ledger,.
- 2) Health of populations?

Summary of Information

Information will be provided primarily in the form of figures and tables (tracking status, trends and objectives). Narrative will be restricted where ever possible to keep the report

short and concise. Initial effort will focus on the presentation of biological goals and objectives. Once the initial data base is completed for all focal species, criteria can be established for evaluating critical limiting factors and population status indicators.

Example:

1. Yummyfish densities in Notanufish Reservoir are currently 0.10 kg per hectare.
2. Yummyfish densities 10 years from now should be 0.50 kg per hectare.
3. A critical problem (key limiting factor) that must be solved is lower than expected survival of fish from age-0 to age-1. Survival is only 30%, and must average at least 50%.
4. One solution (strategy) to the problem of low survival of age-0 fish is to increase their average weight in November from 250 g to 300 g. This ensures they are large enough to survive the harsh winter conditions and to avoid predation by older fish the next spring. To increase their average size in November, individual growth rates must be increased for an average of 20 g to 25 g per month from April through November.
5. Bioenergetics studies indicate that poor growth is a function of colder than normal water temperatures and less than average prey densities. As a result, two actions can be implemented to increase growth rate. One is to warm water temperatures in the lake earlier in the growing season. The other is to augment the food source for age-0 fish.
6. Water temperature is a function of operations of a dam at the headwaters of the reservoir. By releasing water from the upper ten feet instead of the middle ten feet, as in currently done, hydro logics modeling indicates the water temperature in the reservoir can be increased. This requires installation of water-release control structures that cost \$10 million and would take 10 years to design and install. Initial studies indicate that the structures can be successfully installed and that the likelihood of achieving the desired temperature range is high.
7. Prey densities appear highly variable and it is highly uncertain whether numbers and size of prey can be manipulated in a way that would make more prey available to age-0 fish. More needs to be learned about what age-0 fish eat relative to what is available to them. A study of food habits would take 5 years and it is unknown whether results would be conclusive.
8. Although installation of the temperature control structures is much more expensive than the study, the likelihood of success is high.