

Members present: Carmichael (via teleconference), Cooney, Hassemer, Howell, Johnson, McClure, McCullough, Petrosky, Schaller, Spruell, Utter

Non-members present: Carson, Holzer, Kozakiewicz, Piasecke

## **I. Subbasin planning**

**A. TRT interaction:** The TRT has decided not to produce another guidance document for subbasin planning in the Interior Columbia, considering the number of documents on this topic already. The TRT will:

- provide feedback on assessments produced
- select certain subbasins as “cases studies” and review their limiting factors analysis, to serve as a model for other subbasin planners
- compare current and historic population characteristics and use this to make and test hypotheses about the subbasins

## **B. Review of Puget Sound TRT subbasin assessment**

This document divided the limiting factors into four categories (habitat, harvest, hatcheries, and integrated) and made hypotheses about each. It then developed a monitoring plan to test if the hypotheses are reaching their goals. Members had the following comments:

- The hatchery category should be divided into two parts: 1) Instances where hatcheries possibly harm wild populations and recommendations for policy changes to reduce harm, and 2) Instances where hatcheries can help conservation efforts of wild populations.
- The Interior Columbia assessment should make the relative weight of the different categories more clear: i.e. include less about hatcheries if it is decided they are not as important as other factors.
- The Interior Columbia document should address hydro concerns within the basins (small dams) as well as larger, out-of-subbasin concerns.
- Emphasis on factors within the subbasin should be encouraged, to take most advantage of the local expertise of the committees. Out-of-subbasin factors can be added later.
- Since no guidance document will be produced, the case studies should include an outline of the TRT’s assumptions about how fish relate to their habitat.

## **C. Case Studies**

1) The end result of a case study could be a list of recovery actions, ranked by biological effectiveness, to act as a precursor to a recovery plan. The case studies could also be produced in periodic reports as the TRT works in parallel with a subbasin. In this way other, non-case study subbasin planners are provided with some feedback in a more timely manner. The TRT has decided to work with both Chinook and Steelhead in each case study , regardless of ESA listing, so that the conclusions apply to all subbasins.

Selecting a case study basin will be based on the following criteria:

- High availability of data
- Large variety of issues which may apply to other subbasins
- Most advanced chronologically among subbasins in state
- Preference of subbasin planners to work with the TRT

2) The following chart is a summary of the groups involved in Interior Columbia subbasin planning so far:

State	Progress (by state)	Subbasin	Planning Lead	Technical Assessment Lead	Technical Group
Oregon	3	Imnaha	Nez Perce Tribe	Nez Perce Tribe (Ecovista)	TOAST
	4	Grande Ronde	Grade Ronde Watershed Council	Mobrand	TOAST
	5	John Day	Blue Mountain Resource Conservation & Development	TOAST	TOAST
	1	Deschutes	Deschutes Coordinating Group	TOAST & local level	TOAST
	2	Umatilla	MOA & Umatilla Tribe	TOAST & local level	TOAST
Washington	2	Walla Walla	Joint Oregon / Wash.	Local technical team?	
	2	Tucannon / Asotin	S.E. Washington Recovery Board	Local technical team?	
	1	Okanogan	Upper Columbia Salmon Recovery Board	Local technical teams?	Regional Technical Team
	1	Wenatchee			
	1	Entiat			
	1	Methow			
	3	Yakima	County / Yakima Tribe		
	4	Klickitat	County / Yakima Tribe		
5	Crab Creek	WDFW to determine status			
Idaho	1	Clearwater	Clearwater Policy Advisory Committee	Clearwater Policy Advisory Committee (Ecovista)	
	2	Upper Salmon	Shoban Tribe / ?	IDFG	
	2	Lower Salmon	Nez Perce Tribe / Ecovista	IDFG	

TOAST = Technical Outreach and Assessment for Subbasin Teams

### 3) Candidate subbasins:

Idaho: The Lemhi basin has best available data in region

Oregon: The Wallowa basin has a variety of impacts

The Upper Grande Ronde basin is data rich due to previous EPA and EDT work and has a variety of impacts

The Deschutes basin has an amenable group, is not data poor, and is first in the state chronologically

Washington: The Methow basin has impacts of interest and is first chronologically

**D. Subbasin Assessment Steps:** Numerals and Letters after each line refer to pages 5 and 6 of the Technical Guide for Subbasin Planners produced by the Power Planning Council.

1) Reach structure within populations, with attention to appropriate scale.

2) Fish distribution by life stage – 1c

Outline basic life history assumptions - 1a

3) Relevant descriptions of current habitat conditions - 1b, 2a

4) Historical conditions – 1b, 5

5) Inferences- opportunities for survival / distribution- 1d-1f, 3, 4, 6, 7

**E. Subbasin Planning Subgroup:** Members McClure, Johnson, McCullough, Howell, Schaller and Carmichael will form this subgroup. The first meeting will be in Seattle on April 10<sup>th</sup> or 21<sup>st</sup>, with La Grande members attending via teleconference. The group's objectives are:

1) Meet with other TRT's and review their analyses and reach structure / scale conclusions

2) Create a list of major attributes affecting survival by life stage (review fine-scale EDT)

3) Develop a process for describing fish movement within basins

4) Consider strategies for integrating the various factors / effects (review Bjornn paper)

5) Review candidate subbasins

## II. Chinook Population Identification: review for consistency with steelhead decisions

**A. Upper Salmon tribs in between the Lemhi and East Fork:** Including Garden, Darling, Morgan and Iron Creeks, and scattered mainstem spawners downstream to the mouth of the Pahsimeroi (historically to the mouth of the Lemhi). Options:

- 1) Extend the “Upper Salmon above Clayton” population downstream to the mouth of the Lemhi  
**pro:** Mainstem spawners probably originate from “core” spawning area in Clayton population.
- 2) List these tribbs and mainstem reaches as a separate population  
**pro:** Reflects habitat / ecoregion break at the confluence with the East fork  
**con:** Not likely to be large enough to be independent and self-sustaining
- 3) Relate these areas to their nearest upstream neighbor; from the East Fork to the Pahsimeroi would be included in the Clayton population, and the downstream portion would be included in the Pahsimeroi population.  
**pro:** Consistent with the steelhead model  
**con:** Ignores the life history differences between mainstem summer spawners and Pahsimeroi spring spawners

The TRT chooses option 1.

**B. East Fork Salmon Populations:** The Herd Creek and Upper East Fork populations are distinct from each other genetically, yet both are hard to justify separating from the Lower East Fork population. Is this genetic evidence enough to split up the basin? The genetic evidence will be reviewed for possible drift stemming from a low population size or single year sample.

- 1) Scenario A: the genetic sample is from multiple years, showing a sustained genetic difference. The Herd Creek population will remain separate, and the Upper and Lower East Fork will be combined into one population to reflect continuity of mainstem spawning.
- 2) Scenario B: the genetic sample is from one year only, or deemed otherwise less significant. All three populations will be combined into one population, with these differences reflected in population substructure.

**C. Salmon Canyon Population:** Currently a “dependent” population, a designation abandoned in the steelhead population identification process. Options:

- 1) Leave as is, a set of dependent tribbs not linked specifically to any population because of the variety of scenarios for influence from nearby dependent populations
- 2a) Apply the “steelhead rule”, associating dependent tribbs to their nearest upstream independent neighbor, as follows:
  - White Bird / Slate Creek area to the Little Salmon population
  - Wind / Sheep Creek area + Lower mainstem South Fork to the South Fork population
  - Bargamin Creek area to the Chamberlain Creek population
  - Horse Creek area to the Big Creek (Middle Fork) population
  - Squaw / Indian Creek area to the North Fork population
- 2b) Relate streams to their nearest neighbor, upstream or downstream, to reduce distances between spawning aggregates in some populations, although inconsistent with steelhead population identification
- 3) List as an independent population, although grossly violating the distances between spawning areas rule

The TRT chooses option 2a to remain consistent with the steelhead decisions, and in hopes of placing greater importance on these dependent tribbs.

**D. East Fork South Fork Salmon:** Currently separated into an Upper EFSF (extirpated) and Johnson Creek population by a moderate distance between spawning areas and the fact that both were probably historically large enough to be independent. The TRT now judges this evidence not strong enough to warrant the distinction. These two populations will be combined into one, starting at the mouth of the EFSF.

**E. Grande Ronde:** This basin currently contains large areas not designated under any chinook populations, most notably the lower mainstem. Suggestions:

- Leave the blanks as they are, with some of the lower mainstem included in the fall chinook ESU

- Extend the Catherine / Indian Creek population down the mouth of the Wallowa
- Combine Catherine / Indian population with the Upper Grande Ronde population due to the historical connectivity of spawning areas
- Add Joseph Creek as a separate, extirpated population

**F. Snake River Miscellaneous:** Some small tributaries are listed as containing chinook spawning and rearing grounds but are not yet included in populations:

- Deep Creek, Lower Salmon and Captain John's Creek, Snake River: Charlie Petrosky will investigate the existence of chinook spawning in these streams
- Sheep and Granite Creeks, Hell's Canyon: Could be remnants of a historical population above the dam or dependent on the hatchery releases. Charlie will investigate these streams as well.

### **III. Steelhead Population Identification:** remaining questions

#### **A. Upper Columbia:**

- 1) There is purported spawning in some small tributaries not yet accounted for such as Moses Coulee, Crab, Sand Hollow and Tarpiscan Creeks. David Johnson will investigate the existence of fish in these streams.
- 2) David Johnson will also look into the historic spawning distribution in the Okanogan Basin during his upcoming meeting at the Colville Reservation.

#### **B. Mid Columbia:**

- 1) Rich Carmichael will double check the existence of steelhead spawning in the Columbia tributaries Frank Fulton Canyon, Spanish Hollow and Rowena and Mosier Creeks.
- 2) Rock Creek: This Columbia tributary on the Washington side has about 53 km of spawning designated by SASSI and is isolated geographically. This will be listed as an independent population while David Johnson investigates what is known about it.

### **IV. Other Population Identification Issues**

#### **A. Clarification of Criteria**

- 1) Minimum population size of 500 spawners: This number is consistent with the Viable Salmonid Populations document (NMFS), the other two TRT's, and previous work by ODFW.
- 2) Minimum watershed area: is developed from a comparison with other identified populations that have a documented population size >500 spawners.

#### **B. Extirpated Populations**

Two categories: Those that were historically an independent population or set of populations (i.e. above Pelton Dam) and those that form part of another population (i.e. Stibnite Mine area in the East Fork South Fork population). Some can be addressed in population write-ups, such as now inaccessible areas of the Umatilla basin, but others will warrant separate sections, such as above Chief Joseph Dam. Members will assemble a list of areas / populations potentially extirpated by anthropogenic causes for consideration at the next meeting. Special cases for consideration:

- 1) Clearwater Chinook: Are not listed under the ESA, but would have been if not extirpated.
- 2) Above Hell's Canyon: May have been a separate ESU
  - Idaho Power funded a report on potential production in this area.
  - Tom Cooney will distribute a link to the Pratt Reports, a summary of historical literature by basin.

#### **C. Sockeye**

- Pete Hassemer, Fred Utter, and Rich Carmichael will summarize known information about Snake River Sockeye into a draft document for review at the next meeting
- Robin Waples and Rick Gustafson will be invited to the next meeting to discuss Sockeye.
- Does the TRT need to consider Deschutes River Sockeye?

#### D. Fall Chinook

Fred Utter and Tom Cooney will review the Chapman report series and draft a report for the next meeting.

**V. Viability Criteria** – Tom Cooney presented a review of Viability Criteria methods used by previous organizations:

Categories	Q.A.R. (Mar. 2001)	WLC TRT (Dec. 2002)	PS TRT (Apr. 2002)
<b>Abundance</b>	Flow Chart → Target 2,000 – 4,000 spawners over a minimum of 8 years	1. Pop. change criteria 2. Juv. Production criteria 3. PS approach 4. $\alpha$ / cc	<u>Planning Range Approach</u> 1. Pop. viability analysis 2. HPVA 3. Historical
<b>Productivity</b>	Net return = 1.0 or greater		
<b>Spatial Structure</b>	Rules based on historical distribution	<u>Population Specific</u> based on: quality, quantity, and risk	<u>Historical Template</u> Consider current conditions in light of historical opportunities for diversification
<b>Diversity (within populations)</b>	Protect opportunities for diversification, Minimize gene flow from outside stocks	Protect opportunities for diversification, Rank diversity by pop.	

Tom Cooney, Rich Carmichael, Howard Schaller and Charlie Petrosky will work as a subgroup with Interior Columbia datasets and run through different methods as a sample to show the entire TRT. Tom Cooney will distribute the citations and page numbers for the above methods

#### VI. Future Meetings

May 12<sup>th</sup> and 13<sup>th</sup>, 2003 – Portland, OR

June 3<sup>rd</sup> and 4<sup>th</sup>, 2003 – Location TBA