Interior Columbia Technical Recovery Team meeting #10, October 2nd & 3rd, 2002 Portland, OR

Members present: Cooney, Carmichael, McCullough, Roper, Spruell, Utter, Hassemer, Howell, Petrosky, Johnson, Schaller

Non-members present: Carson, Holzer, Moran, Kostow, Bickford

I. Steelhead Genetics Studies:

1) Paul Moran presented the preliminary results from his study of 95 samples over 42 sites in the Interior Columbia, 2-3 years each site, and 9 loci. More analysis, assimilation and quality control is needed before main groupings can be separated. Paul will have a better idea within 2 weeks.

2) Jennifer's IDFG study of 70 – 80 sites in Idaho will be completed by March- may be able to reflect results in future update of the Pop ID document.

II. Resident vs. Anadromous O. mykiss

1) Presentation by Kathryn Kostow on her project to collect data about O. mykiss above and below natural barriers and man-made barriers, or populations where residents and migrants coexist. She has completed a survey of local experts for the Willamette / Lower Columbia and will now focus on the Interior Columbia- report to be finished in January 03. Members should contact her with any information:

Kathryn.E.Kostow@state.or.us
Office: (503) 230 – 5442, Home Office: (503) 655 – 2177

2) USFWS considers both forms of O. mykiss to be in the same ESU until proven otherwise except populations separated by long-standing natural barriers. They have created criteria for the possible separation the ESU in other cases.

3) TRT will continue to focus on anadromous forms for the Population ID exercise, and revisit the discussion during the Viability and Status projects.

III. Steelhead Population Identification Model

1) Approach used to define populations for spring/summer chinook may not directly apply to Steelhead populations in larger drainages – lack of information on geographic separations (if any) between spawning groupings. May need to consider alternative population structure 'models' for steelhead in larger drainages.
2) Abundance of genetic information for the Grand Ronde and Imnaha may provide a model to use for the rest of the basin.

IV. Upper Columbia Steelhead

Presentation by Shane Bickford from the Douglas County PUD on a wild and hatchery steelhead radio tagging study in the upper Columbia. The Study contained useful information about straying and mainstem spawners.

V. Sub basin Assessments

NMFS has requested that the TRT be used as a review mechanism for sub basin committees from the ESU perspectives. TRT will create a list of standard questions to use when reviewing assessments. One possible approach: the TRT would use the questions as a basis for reviews of a limited number of assessments (e.g., Clearwater R., draft Entiat R., the Deschutes product scheduled for Dec.), providing feedback to regional and subbasin teams. **Members should forward their questions to Tom Cooney by the middle of next week**. He will provide members with the packet of information that was given to NWPPC staff and to regional technical groups. Further discussion of the role of TRT with respect to subbasin assessments at the Nov. meeting.

Steelhead Data Availability – Within/Btwn columns answer the question: Can the data be used to differientiate between populations within major drainages / between major drainages?

	Grande Ronde				Imnaha				Umatilla				Walla Walla				John Day			
	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn
Genetic Data	High	High	Yes	Yes	High	High	Yes	Yes	Mod.	High	Yes	Yes?	Low	High	No	Yes	Mod.	High	Yes	Yes
Run Timing	None	None	No	No	Low	High	No	No	High	High	No	Yes	Low	Low	No	Yes	None	None	No	No
Spawn Timing	Low Spn.Survey	Low	No	No	Low	Low	No	No	Low	Low	No	No	Low	Low	No	No	Low	Low	No	No
Length @ Age	No Adults Some Juv.	None Low	No	No	Low	High	No	Yes?	High	High	No	Yes	None	None	No	No	None	None	No	No
Juv. Mainstem Timing	Mod.	High	Yes	No	Low	Mod	No	Yes	None	None	No	No	None	None	No	No	None	None	No	No
Juv. Within Basin Timing	Mod.	High	Yes	No	Low	Low	No	No	Mod.	High	No	Yes	None	None	No	No	Mod.	High	Yes	No
Age Structure	No Adults Some Juv.	None High	Yes	No	Low	High	No	Yes	High	High	No	Yes	None	None	No	No	None	None	No	No
Demographic Correlation	High Redd Cnt.	Low	Yes	Yes	High	Low	Yes	Yes	High	High	No	Yes	High	Low	Yes	No	High	Low	Yes	Yes
Dispersal Curve	Hatchery	High	Yes	Yes	Hatchery	High	Yes?	Yes	Hatchery	High	No	Yes	None	None	No	No	None	None	No	No
Geographic Distance	High	Low	?	Yes	High	Low	?	Yes	High	Low	?	Yes	High	Low	?	Yes	High	Mod.	Yes	Yes
Straying Data	Mod. Hatchery	Low	Yes	Yes	Mod.	Low	No	Yes	Mod.	Low	No	Yes	None	None	No	No	None	None	No	No
Landscape Characteristics	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes
Stream Order/ Basin Size	High	High Lower Boundaries?	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes
Juv. Data (presence/density)	Mod. Not Specific to 0-age	Low	No	No	Mod.	Low	No	No	Mod.	Low	No	No	Low	High	No	No	Low	High	No	No

	Deschutes				Salmon				Clearwater				Snake River Small Tribs			
	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn	Quan.	Qual.	Within	Btwn
Genetic Data	Mod.	High	Yes	Yes	Low	High	Yes limited	Yes	Low	High	Yes limited	Yes	None? Jennifer's data			
Run Timing	High	High	No	Yes	Low	Low	No	No	Low	Low	No	No	None			
Spawn Timing	Mod.	Mod.	No	Yes	Low Peak Cnt.	Low	No	No	Low Peak Cnt.	Low	No	No	None			
Length @ Age	?	?			Non Specific	A vs. B			Non Specific	A vs. B			None			
Juv. Mainstem Timing	None	None	No	No	Mod.	Mod.	Yes	Yes?	Mod.	Mod.	Yes	Yes?	None			
Juv. Within Basin Timing	Mod.	High	Yes?	Yes	Mod.	Mod.	Yes	Yes?	Mod.	Mod.	Yes	Yes?	None			
Age Structure	?	?			**Low** juv. data	**Low** also	No	No	**Low** juv. data	**Low** also	No	No	None			
Demographic Correlation	High	High	Yes?	Yes	**Low** Juv. trends	Low Mod.	?	?	**Low** Juv. trends	Low Mod.	?	?	None			
Dispersal Curve	Hatchery	High	Yes	Yes	High	High	No?	Yes	High	High	No?	Yes	None			
Geographic Distance	High	Mod.	Yes	Yes	High	Mod.	Yes	Yes	High	Mod.	Yes	Yes	None			
Straying Data	High Hatchery	Mod.	Yes	Yes	Mod.	Mod.	Yes	Yes	Mod.	Mod.	Yes	Yes	None			
Landscape Characteristics	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes
Stream Order/ Basin Size	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes	High	High	Yes	Yes
Juv. Data (presence/density)	Low?	High?	No?	No?	High	Mod.	Yes	Yes	High	Mod.	Yes	Yes	Low	Mod.	Yes?	Yes?

VI. Next Meetings

- November 4, 5, and 6 at NMFS office in Pasco, WA
- December 11 and 12 at NMFS office in Portland, OR

1) Steelhead Dispersal/Straying:

- Pull together straying information from across the basin using Tom's references:
  - Oregon Coast hatchery paper and Mid-80's paper, Mendel et al - Grande Ronde (Cottonwood Cr) study. **Brett Roper**
- Analyze data from PSMFC database on Coded-wire tag recovery at hatcheries. **Cory Ruedebusch.** Hatcheries must have released fish on-site, or used acclimation, and there must be some quantification of escapement at the facility and at neighboring facilities or spawning areas. Hatchery programs with highesst potential for yielding information include:
  - Dworshak, Little Sheep, Wallowa, Sawtooth, Pahsimeroi, Umatilla, Deschutes (releases, not Deschutes recoveries), Clearwater, Tucannon, and Wells.
- Team should also consider the possible differences between stray rates and actual gene flow among populations when using the dispersal curve.

2) Collect Life History Data vs stream sections (e.g., Satus Cr. , Toppenish Cr., Naches R., Upper Yakima) from WDFW (Phelps) 2000 report on Yakima Steelhead. **David Johnson**

3) Meet with Washington experts on steelhead spawning distribution in Washington (emphasis on Yakima, Klickitat, Asotin Cr.). **David Johnson**

4) Generate Distance Matrix in between spawning areas after maps have been double-checked. **Damon Holzer**

5) Look for with-in ESU patterns in Genetic data. Report to the TRT at the Nov meeting on implications for among drainage within drainage structure/relationships. **Paul Spruell** and **Fred Utter. Pete Hassemer** will check on the possibility of getting access to at least a portion of the Idaho steelhead genetics analysis.

6) Investigate A-run vs. B-run issue:

- Potential genetic split between A-run and B-run fish (Winans allozyme data)
- Scale Analyses collected at Lower Granite and Bonneville
- Search for documentation on B-Run Steelhead at Bonneville – do those fish return to B-run designated streams in Idaho- **Charlie Petrosky** and **Howard Schaller**

7) Compile available data relative to steelhead spawning distributions in the John Day and Deschutes – **Rich Carmichael's** assistant

8) Compile data relative to steelhead spawning distribution on the Warm Springs River – **Howard Schaller**

9) **Damon Holzer** will create a list of index areas for which he has no start and end points, and give them to **David Johnson** (WA) and **Rich Carmichael** (OR) or Tim Unterwegner (John Day District Biologist)

10) **Damon Holzer** and **Henry Carson** will start on a project to relate Abundance, or presence vs. absence, of steelhead in index areas and randomly selected reaches in the John Day and Grande Ronde to various environmental variables