Interior Columbia Technical Recovery Team meeting #7
June 12 – 14, 2002, La Grande, OR

Members: Tom Cooney, Paul Spruell, Rich Carmichael, Fred Utter, Phil Howell, Charlie Petrosky, Peter Hassemer, Dale McCullough, David Johnson
Non-members: Vince Kozakiewicz, Paul McElhany, Cory Ruedebusch

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I. Business

1) Agenda modified: No PopId draft to review, will focus instead on analyses and tables.
2) Nothing to add about contracts; Tom Cooney reports everything is in the pipeline.
3) Middle Fork Salmon field trip is cancelled.
4) Next meeting: July 22nd, 23rd, and 24th - Leavenworth, WA
5) Opportunity: Review plans for the Entiat R., an early assessment basin. This will be a one-day informal session to give an initial critique of the assessment, see what they are doing, and ask questions. Tom Cooney will circulate more information via email.
6) Loose structure for next three meetings (any feedback on this?):
    a. new topics
    b. follow up sessions
    c. field trip
    d. defined time for focusing on new topics (eg. Steelhead PopID in Leavenworth)
    e. try to advertise the meetings more, give outsiders opportunity to give us feedback and attend sessions
7) Distribute "Identifying Historical Populations of Chinook and Chum Salmon and Steelhead within the Lower Columbia River and Upper Willamette River ESUs"
8) Discussion of the relationship between the TRT and other planning groups
    a. what is their role? what do they expect of us?
    b. recognition of coordination problem with other planning groups (esp. in OR)
    c. consensus that the TRT needs to let groups know what they will get from us, and what we expect from them.
9) Need to put subbasin planning on the agenda (for next meeting?)

II. Salmonid Viability Criteria Presentation – Paul McElhany from Lower Columbia/ Willamette TRT (will distribute copies of this presentation by email next week)

1) Overview of "Viable Salmonid Population" concept
    a. need to develop viability criteria for individual populations
    b. also need to develop criteria for how many and which populations need to be in what status for a viable ESU
2) Used qualitative assessment to decide how many and which populations in what status for viable ESU (other approaches decided not to use: metapopulation modeling, historical template)
3) Key factors to consider:
    a. catastrophic risk
    b. evolutionary dynamics
4) Strata approach: Partition ESU by major life history types and EPA defined ecological region
5) How many populations per stratum to restore/maintain? Recommendation: need the greater of 2 populations or 50% of the historical populations in each strata that meet or exceed all criteria for a viable population

6) Populations were selected based on:
    a. Core populations: historically most productive
    b. Genes represent an "important component in the evolutionary legacy of the species."
    c. Minimum susceptibility to a single catastrophic event.
7) For extant populations not targeted for restoration/maintenance to complete viable status, the natural origin recruits should be maintained at the current maximum or the effective population size $500 fish (provides for connectivity and uncertainty)
9) Population scale criteria:
    a. growth rate: abundance of naturally producing spawners should be stable or increasing as measured by observed median annual growth rate
    b. abundance: (minimum size target)
    c. spatial structure
    d. diversity
10) Bound this by historical abundance
    a. assume historical abundance sustainable so viability goal not greater than historical
    b. estimate historical abundance using historical surveys and habitat reconstruction

III. Discussion of Viability Presentation

1) Could we add a genetics viability criteria at the ESU level?
2) Habitat Criteria

IV. Discussion on Population Viability Criteria for Interior TRT (see handout from Tom Cooney)

V. Spawner/Recruit Handout from Charlie Petrosky

VI. Genetics subgroup update

1) Fred Utter distributes handout "Genetic differentiation within subgroups of Snake River Spring-Summer Run Chinook Salmon"
    a. Tucannon R distinctly falls out
    b. Sample results fall into three general clusters with few geographic exceptions
    c. Upper Salmon localities less genetically "tight" than other areas

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Field Trip: Visit various sites on the Upper Grande Ronde

a. juvenile fish trap
b. adult fish trap
c. McCoy Meadows Restoration Project
d. discuss road obliteration projects
e. discuss catastrophic events (eg forest fires)

VII. Population ID supporting analyses and tables

1. Cory Ruedebusch distributes and attempts to explain analyses and tables produced by NWFSC team
    1. Stray Rate and Dispersal Curve
    2. Redd count correlation
    3. Length at Age

4. Age Structure
5. Juvenile and Adult Timing
6. Watershed Capacity – revisions requested
    1. upper limits may exist in Streamnet
    2. was gradient taken into account?
    3. stream order is currently summarized working upstream from the mouth of the Columbia (e.g., first order = lower mainstem, second order = tributary to first order, etc.) To identify population attributes, it may be more meaningful to measure stream order from the headwaters (e.g., first order = smallest perennial streams, second order = below confluence of two first order streams, etc.)

2. Percent spawning completed by date (Petrosky)

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VIII. Break into smaller groups to discuss and summarize results for PopID

1) Discussion on how to best organize our summaries. Decided to include the following information for each stream and its comparison with all other streams within subgroups:
    a. for each stream:
        a. historic peak spawning population (capacity)
        b. drainage area
        c. (hatchery input?)
    b. for each comparison with all other streams:
        a. genetic distinction
        b. distance between closest spawning locations
        c. spawn timing (data not ready yet)
        d. length at age
        e. age proportion
        f. juvenile migration timing
            i. out of production areas (needs to be done) (note: Henry says data not available in PTAGIS)
            ii. to main dam; mainstem
        g. adult migration timing
        h. demographic differences
2) Decision on how to scale confidence and distinction level:
    a. Comparison Entry: no, low, mod, or high distinction
    b. Quality of Data Entry: low, mod, or high quality
3) Today focus on currently accessible areas. Will decide later where extinct population information belongs.
4) Work in two groups (Grande Ronde and South Fork/Upper Salmon) to complete matrices for the remaining time.

For next meeting:

1. **Finish matrices, write up a summary of results and an explanation of their synthesis for each population. May need to have subgroup conference call to help complete.**
2. **Target date to have this up on website: July 15. This will allow a week to read, digest, and exchange ideas.**