Interior Columbia TRT Meeting

March 17-18, 2004 525 NE Oregon St, Portland, OR

Members Attending: McClure, Spruell (3/17), Hassemer, Cooney, Utter, Howell, Schaller, Petrosky, Carmichael (Via phone, 3/17), McCullough (3/18) Non-members attending: Mike Morita, Damon Holzer, Carmen Andonaegui, Erik Tinus (3/17), Lynn Hatcher (3/18)

- Reivew of BiOp
 - Chinook analyses written up, to be distributed soon
- Workshops coming up:
 - Jeopardy, Lambda

Viability Criteria

- Initial thoughts on options for Viability Criteria
 - Curve weighted by population size
 - Larger area populations would need more individuals, this would help avoid Allee effect
 - Adjust curve using sub-watersheds as spawning areas
 - Simple metapopulation model
- Cooney handout showing number of potential spawning kilometers in HUC-5s (subwatersheds)
- After some discussion, a summary of all options proposed
 - A: Assume distribution according to available habitat, adjust base curve upwards by some factor measured by population. Graduated rule set?
 - A': Strict proportionality per population
 - B: Some sub-unit of population must meet base curve, total population $\lambda \ge 1$ (At least one HUC meeting curve with general population viability)
 - C: Adjust curve to reflect a per-kilometer basis. (set a base population size and scale by potential spawning kms in a population)
 - D: Standardize by area express viability curve in terms of carrying capacity (or maximum carrying capacity)
 - E: Metepopulation model
 - F: Standard Viability Curve. Rely on spatial criteria and assumption of low productivity to cover dispersion at low density.
- For the abundance test, though, the ruleset should perhaps not become too concerned with how fish are distributed within a population, only with the minimum number of spawners.
 - Spatial structure, diversity, and productivity criteria would test for proper distribution
 - Assuming abundance minimum number=500
 - Spread over a large area population, this number would fail diversity criteria
 - In a large population but concentrated in one HUC, this would fail spatial structure
 - While abundance would technically fill requirements, productivity for these two examples would be low.
- Point of decision on Viability Criteria. Agree to study:

- A minimum population number based upon size and spatial structure of a population, anything above that number to fall on a viability curve.
- Single curve accompanied by clear spatial structure criteria
- Could different thresholds be used for minimum escapement levels?
 - Using size and complexity of populations
- Study truncation lines and where they should be.
- <u>*TASK*</u> work up an example of this to be reviewed and discussed

Asotin Assessment

- Discussion of subbasin plan submitted to the TRT for a general review.
 - Policy v. science, decision making process, clarity and transparency, relationships and ecosystem processes, documentation, use of models, applicability to VSP parameters, PFC, how does TRT criteria relate
 - <u>*TASK*</u> assignments made for composing sections of assessment dealing with various aspects
 - Return completed pieces by March 24th
 - By March 27th McClure and Cooney will form all pieces into a document
 - March 30-31 will be used for editing and finalizing document \
 - Complete document should be delivered by April 5
- Who is the audience for this review? Who is written for, how should it be distributed?
 - Domain team is the direct audience
 - The review, or at least relevant points, can then be passed along to other regional teams within the domain.
 - Asotin team also audience, it being a review of their work.
 - Three topics to touch upon:
 - General science review
 - Synthesis
 - Appropriateness for subbasin recovery

Current Status Assessment

- Should the Interior Columbia TRT complete a current status assessment of the ESUs and Major Population Groupings (MPGs) within the basin?
 - This would set a baseline to work from, a step in-between setting criteria and reaching those criteria
 - This is agreed to be something to work toward once all criteria for assessment are developed.
 - Types of assessments/options for use
 - Example(s) of assessment using draft criteria
 - Consistent application across the basin
 - Provide recovery planners with a starting point (Benchmark) to aim for being consistent with the recovery efforts
 - Provide baseline data/metrics for Limiting Factors Analysis (LFA) and Level II work (but at what magnitude?)

Unaffiliated Areas

- What should be done with unaffiliated areas in the PopID? Should they be combined as part of nearby MPGs?
 - Benefits: easy lumping of populations, easier analysis of MPGs.
 - Problems: potential connectivity importance at the ESU level of these areas. Lumping into populations may not recognize that diversity.
 - Within recovery criteria, they could be mandatory recovery populations
 - What populations should unaffiliated populations be added to?
 - SRLSR (Little Salmon River) merge into the South Fork Salmon River MPG
 - SRCHA (Chamberlain Creek) merge into Middle Fork Salmon River MPG
 - MCROC (Rock Creek) merge into Klickitat/Deschutes MPG
 - Rather than John Day or Yakima (the other discussed options)
 - Based on ecoregion similarity and elevation profiles

BRT Summary

- Review of maps showing populations with high number of habitat inhibitions at 30th and 50th percentiles.
- Review of populations with inhibited VSP parameters
- Chinook draft write-up will be available soon.

Small Group Tasks

- Outline of Asotin Subbasin review
- Working on Viability Curves