

Interior Columbia TRT Meeting
April 20-22, 2004
NMFS Office, 10215 Emerald St, Boise ID

Members: Carmichael, Cooney, Hassemer, Howell, McClure, McCullough, Petrosky, Schaller (20-21), Spruell, Utter

Non-Members: Carmen Andonaegui, Casey Baldwin (20-21), Jennifer Carrell, Damon Holzer, Vince Kozakiewicz, Mike Morita

- Future meeting dates and locations:
 - May 17 (noon) through May 19 (noon), Portland
 - June 28-29 (all day), Seattle
 - August 2 (noon) through August 4 (noon), Portland
 - September 8-10, Missoula
 - October 5-6 (all day) Boise
 - November 8 (noon) through November 10 (noon), Portland
 - December 7-8 (all day), Boise
- BiOp Remand
 - Overview of Progress so far
- ISAB/ISRP – Joint meeting with TRT
 - April 28th, 1-5pm
 - Items for TRT to present to ISRP/ISAB before meeting (Conceptual Guidance for Subbasin Assessment)
 - a. Domain team questions
 - b. Modified Asotin Review
 - i. Distilled to the essentials the TRT is looking for in all assessments. Recovery-based look at review and feedback, with direction given to planners on improvements to pursue (as opposed to solely criticism)
- Asotin Review Draft
 - Has been released to domain teams
 - To consider life-stage specific and VSP parameters, conference call next week (Carmichael, Cooney, McClure)
- Question posed to the TRT:
 - Regarding Coho predation on juvenile chinook, and the effect of releasing more coho hatchery fish
 - a. The TRT cannot answer until a full limiting factors analysis has been completed. It can talk and help with the conceptual risk/benefit analysis, though.
- TRT-EDT memo: comments
 - Things to pursue regarding Mobrand Biometrics Inc. (MBI)
 - a. Ask MBI to provide access to intermediate results in addition to the final output. (in general: clearer explanation of model and outputs)
 - b. Ask MBI for better output/writeup that is useable in subbasin plans
 - c. Find out if life stages and other important factors are being expressed in the analysis or are they are only mathematical manipulations.
 - Sensitivity analysis (global) to find how factors affect the outcome

- a. Description (clear & universal) of key factors and attributes
 - i. Life history assumptions, habitat-survival relationships, outputs...
- b. Data to “populate” modeled habitat
 - i. Quality of data used
- c. Tributary habitat
 - i. Identify opportunities for change and potential magnitude
 - IP & possible driving assumptions (fish & habitat focused sensitivity)
 - Long-term: Evaluate plan to confirm
 - Make comparisons with multiple models
- Things for subbasin assessors to consider
 - a. Two factors that add uncertainty
 - i. Quality of the data input
 - ii. Accuracy of the model (how outputs are driven, relationships)
 - b. Determine credence given to factors providing uncertainty in quantitative and qualitative terms
- TRT setting the context for the review plan (how derived and confidence)
 - a. Not just a scientific review of EDT
 - b. Context includes:
 - i. What results mean, and how they are derived
 - ii. What responsibilities are and where they lie
 - iii. Appropriate/inappropriate uses for EDT, as it relates to subbasin plans & assessments
 - c. Highlight steps taken to go through EDT
 - i. Understand the uncertainty within each stage (independent of the model)
 - d. Scientific critique vs. use as a planning tool
 - e. Be conscious of who is affected by this advice and frame it in a way that will be useful (explain what should be extracted from this)
 - f. Conclusions section – clearly state conclusions/advice on major topics: recognizing uncertainties/need for general sensitivity analyses; advice with respect to using the model to identify habitat improvement/restoration opportunities – including the need to clearly articulate key assumptions relationships leading to specific findings, consider uncertainties; advice regarding use of the model for setting recovery objectives; etc.
- What about EDT as a recovery target?
- Model wasn’t designed as a numerical predictive tool. Too many assumptions and variables with uncertainty
- Task: McClure will pull together comments on this
- McClure handout: Timeline of tasks and deadlines (estimated), IC Domain Team
 - TRT will contribute a lot on items A through E, and a little on F&J
- TRT Analysis:
 - Summary of subbasin assessments
 - Retrospective analysis
 - a. Can relative impacts of various Hs be seen across area? Regression of factors
 - Prospective analysis:
 - a. Life cycle modes and different life stages

- Do another habitat analysis (SHIRAZ if appropriate)
- Comparative analysis:
 - a. Different habitat analyses, Directed case studies, All-H,
- Deal conceptually with major areas (i.e. hatcheries)
 - a. Comparative or examples of high/low, etc
- Cooney Handout: Delisting Criteria, Summary of Approach and preliminary results
 - Estimates of Variance
 - Generic Viability Curves
 - Calculating population-specific viability curves- options
 - a. Calculate weighted area (weighting based on relative parr production potential) for pop
 - b. Calculate avg area for pops with 1-2 HUCs
 - c. Multiply base curve for larger areas
- Production
 - Should curve adjusted for size/complexity?
 - a. Is rearing area an appropriate index relative to spawning?
 - i. What about populations with offsite rearing? (lookingglass)
 - ii. Juvenile rearing capacity may not be a good indicator of spawning capacity in all circumstances (particularly for extensive downstream broad valley habitats)
 - iii. Check screens: temp, GR Dam, holding/spawning
 - b. Should a direct multiplier be used, or is there an alternative expansion?
 - c. Setting objective: what is the role of historic vs. current, is there something in-between?
 - i. Extreme examples of hist. vs current distribution (CRNFC)
 - Measured productivity: may not reflect longer term eroding because of distribution/abundance
 - Minimum population size: is it demographic or genetic concerns that set the limit
 - a. Minimum effective pop size set to ensure adequate genetic variation within a population
 - b. Minimum number of spawners might need increase to reach the minimum effective pop size in large area due to allee effect – demographic issue
- Abundance and Productivity
 - Ideas for calculating curve:
 - a. Base * Spatial criteria
 - b. Base * square meter criteria
 - c. Base * multiplier for multiple HUCs
 - d. Base * Stream kms
 - e. Bands around curve for risk level dependant upon structure
 - Adjust the curve based upon risk level?
 - a. No, risk level relative for different population historic distribution/spatial crit
 - Should requirements reflect productivity, structure, and general genetic reqs rather than altering the curve?
 - Truncate the standard curve based upon minimum effective population size?
 - a. Base curve translates into low densities for larger populations
- Depensation/Compensation

- Lit search for papers relevant to this?
- Cooney Handout: Draft abundance language. Comments on conditional spatial structure criteria
 - Abundance and productivity: make a distinction between the two
 - Viability for smaller pops (i.e. Asotin)
 - a. Would it have “high” risk structure even if returned to historic levels?
 - Abundance-Spatial structure - % occupancy minimum? 50% is used by other TRTs
- Spatial Structure: Grande Ronde upper mainstem example
 - Rating scale for structure from 0 (extinct) to 5
 - Branches or HUCs as unit to count towards structure?
 - Close vs. far groupings, how would they be scored, both are important
 - “Patch insurance” & Future survival
 - General agreement that abundance criteria should reflect spatial structure/diversity considerations for a given population
 - Ideas on structure will be shared via email.
 - Workgroup meeting on spatial structure criteria will meet 9am April 28, 2004 in Portland before ISRP/ISAB meeting.
 - Cooney will update old draft with connectivity
 - Spruell will work on catastrophe
 - Howell will work on Patchiness
 - Holzer will create maps of potential spawning area/HUCs in populations: CRLOC-s, SRLSR-s, SNASO, GRUMA
- For potential HUC analysis more ground-truthing will be needed.
 - If potential analysis will be heavily used, it needs work to insure accuracy
 - a. Possibly add stream order screen, bank width/low flow correlation, etc
 - May 5th conference call, 1.30pm to work on Intrinsic Potential analysis.