

Interior Columbia TRT Meeting
May 23-25, 2005
Northwest Fisheries Science Center, Seattle, WA 98112

Members in attendance: Tom Cooney, Michelle McClure, Fred Utter, Paul Spruell,
Howard Schaller, Rich Carmichael, and Phil Howell

Non-members in attendance: Kim Engie, Don Matheson, Mike Morita, Damon Holzer

Day 1: Monday, 5/23/05

- I. General notes
 - a. PopID update memo is now posted on the web
 - b. Change August meeting location to the Minam
 - Rich work out trip logistics and conference room
 - c. RSRP report is on the web (anadromy vs. resident issues addressed)
 - d. Framing review of recovery plans
 - Get review plans posted as soon as possible
 - Possibility/utility of giving presentations to some groups on PopID, viability.
- II. Viability update
 - a. Curves shown by ESU
 - b. Includes occupancy language
 - Some concern exists about having a different density determining occupancy for different species. Consider changing size category numbers?
 - QET criteria on MSA occupancy may not be appropriate – if it brings in an abundance-related component.
 - Decision: Use “2 redds in upper half and 2 redds in lower half” (multiple redds) rule, make the halfway point of an MSA very clear ($\frac{1}{2}$ the weighted stream area).
 - i. accumulate habitat in analysis to find midpoint (50% mark)
 - ii. use the same criterion for little msas, except just 2 redds needed in the little msa overall.
 - iii. Rewrite PopID memo to reflect this.
 - c. Updated SSD criteria
 - d. Integrates A&P into diversity score
 - e. Add sentence in intro paragraph saying we don't use all in every population (historic, current potential, current realized)
- III. Spatial structure and diversity updates
 - a. Weights given to each criterion
 - Change weights to be symmetrical (and eliminate zero)
 - i. very low = +2; low = +1; mod = -1; high = -2
 - ii. anything above zero becomes viable (below is non-viable)
 - add section on composite scoring
 - b. Viability table
 - Change moderate risk to 25%
 - Should you get A&P credit for very low risk SSD?
 - i. no – even very low risk DDS doesn't compare to historical levels, so it shouldn't mediate an A&P risk above 5%
 - Darken all boxes under A&P moderate risk category
 - i. Give Pete a chance to respond to this change
 - Define super-low risk populations

- i. very low A&P x very low SSD
 - ii. very low A&P x low SSD
 - Consider adding narratives about non-viable squares (w/ examples)
- IV. Changes to the viability criteria
- a. Pete's minor changes to the criteria
 - b. Habitat selectivity and diversity
 - c. Scoring table and scoring table explanation
 - d. Surrogates for juvenile life-history
 - Review Tom's draft
 - e. Add a cover highlighting recent changes
 - Talk about juvenile life-history surrogate (Rich, Tom, Howard)
 - f. Incorporate all documents into one
- V. Update to the update tasks
- a. New viability curves
 - b. Minor changes to criteria (Michelle and Phil)
 - c. Changes to "A" category
 - d. Revisions to metrics criteria (habitat selectivity) (Michelle, Fred, Paul)
 - e. Phenotypic and genetic diversity revision
 - f. Incorporate uncertainty SSD (Rich, Tom, Howard)
 - g. Extirpated areas and super viables (must have 1 pop)
 - h. Add and explain integration table
 - i. Expand MPG and ESU criteria
 - j. Occupancy
 - What is meant by ½ of an MSA?
 - Blend in or replace Tom's integration language in December draft update (Michelle, Paul)

Day 2: Tuesday, 5/24/05

- I. Tasks for the 12/07/04 update
- a. Delete attachment B (habitat diversity index)
 - b. SSD section
 - Take SSD piece from the preliminary draft update and insert into page 12 of the 12/07/04 update
 - Table 1, p 8. Rename "size and complexity" to "size categories".
 - i. Reformat to reorganize by ESU, MPG, Population.
 - Add branch description as an attachment (and MSA description), take out of text.
 - Tighten up definitions of population categories (p. 14)
 - Occupancy paragraphs – put in Spatial Structure section, after population categories p. 16.
 - Distribution definitions (p. 15)
 - i. consider reducing prominence of "current potential distribution" since it's not actually used in viability criteria
 - Address losses in juvenile habitat as well as losses in life history strategy (i.e., anadromy) – though consider if it needs to be on the same level.
 - Flow chart – in introductory section?
 - i. overview flow diagram of decision making
 - ii. basic definitions of categories
 - iii. introduce tables
 - iv. discuss how determinations were made

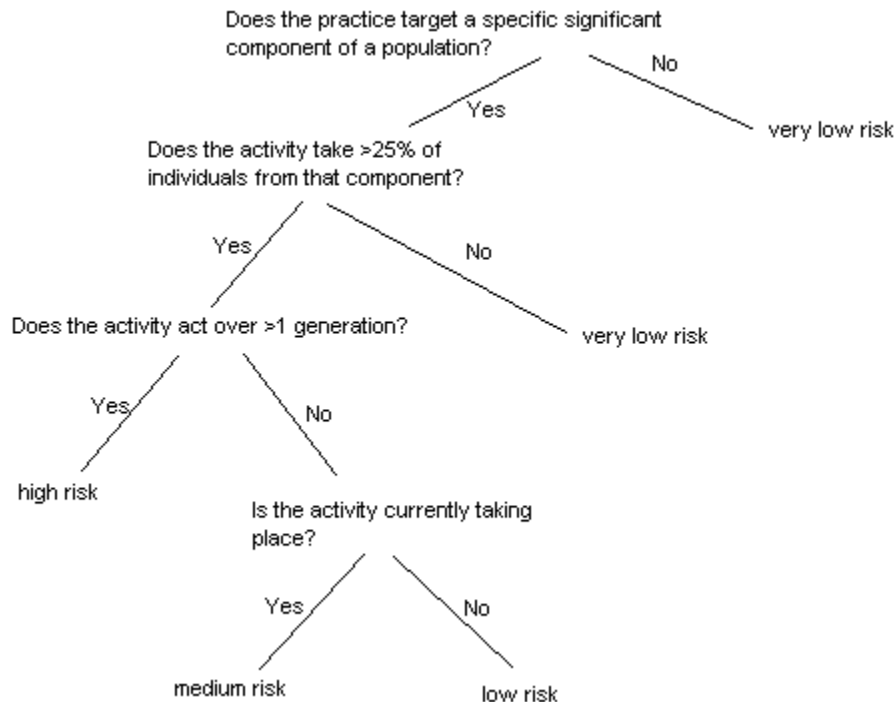
- eliminate final paragraph (p. 16)
 - i. keep this section focused on population level
 - SSD criteria (p. 17) replace with preliminary guidelines
 - i. add on all 4 integration
 - ii. consider keeping description of factor justification
 - a. orientation table for beginning
 - b. between pages 30 & 31 insert integration components
 - iii. integration group – need at least 1 population in an MPG not in the lower right square of the risk table
 - c. Intrinsic potential analysis modification
 - Utilizes confined vs. unconfined criteria (valley width is >4X bankfull width)
 - Utilizes gradient
 - Eliminate mesic forest condition
 - i. evaluating segments in high gradient with 250m forest buffers showed no gain in redds/mile
 - consider adding a soil-type layer
 - i. discount areas where soils have a high erosion factor and small grain size (e.g. silt) as these areas likely had little gravel for spawning
 - scoring of intrinsic potential
 - i. high=4.3; med=2.15; low=1.7
 - ii. add category for negligible (<0.5)- weighted accum. to zero
 - steelhead considerations
 - i. braided island channels – high spawning potential
 - ii. try <4X bankfull width criteria
 - iii. evaluate John Day data (Rich)
 - iv. Identify flow velocity range for steelhead spawning
 - v. consider a temperature screen for steelhead?
- II. Review Questions for Recovery Plans – handout.
- a. Add a bullet to p. 1 – 3rd principle – added effectiveness.
 - b. P. 2, question 4: review.
 - c. Harvest question (e) on assessing the potential selective effects on population diversity: there should be a similar question for the Hatchery and Hydro sections.
 - Alternatively, say “diversity including selectivity” in the Hatchery section.
 - d. Recognise that part of questions 9 and 10 are out of the hands of watershed planners, and also the importance of those aspects which are controllable.
 - e. Expand integration question, #3, into another section at the end to emphasize its importance.
 - f. Group all other questions under the heading of ESU/viability.
 - g. Circulate revised copy next week, get comments back by later in the week.
 - h. Ask several domain coordinators for direct feedback as well.
- III. Integration work group update
- a. Pete to write SSD piece
 - b. Population level integration
 - c. Criteria for B3 and B4
 - d. ESU and MPG level criteria
 - Requirement that all MPGs should be viable in an ESU
 - i. pragmatic approach—focus on extant MPGs (most cautious approach is to have all MPGs including the extirpated ones)
 - ii. higher requirements for situations of only 1 MPG in an ESU
 - iii. examine extirpated pops on a case by case basis to create more clarified criteria (Rich)

- a. scale to the amount of lost MPG?
- b. Look at other species where big extirpated populations have occurred (Michelle)
- 2 or half criteria
 - i. discuss situations where this will and will not work
 - a. impose conditions

IV. Uncertainty workgroup

- a. 3 major categories of uncertainty
 - have data for a particular population of interest
 - have surrogate information for a metric
 - no data = moderate risk
- b. selectivity
 - If the take is proportional to the population distribution, there is no selectivity.
 - If take is selective, there are three considerations:
 - i. How much of the distribution is being selected?
 - ii. What proportion of the selection is being taken?
 - iii. Temporal - how many years will the take occur?

V. Selectivity flow chart



- c. Factors to consider:
 - Harvest, brookstock removal, habitat modification or loss, juvenile rearing (pre-smolt, migratory, estuary), adult migration (out and in), temperature, un-natural predation selection
- d. In addition to number of generations, consider adding a window of duration
- e. How do we balance the temporal scale of the action, relative to when the assessment takes place?
- f. How do we accumulate various effects within this analysis?
 - Ex. What if you have 2 lows and a moderate?
- g. Important to go through this procedure for each selective process
- h. If one score is a high, then the overall score will be high

- i. if 3 or more factors are rated at least moderate, then the score will be high
- VI. Habitat Index: Use Ecoregions, drop use of elevation, hydrograph and stream width separately.
 - a. Ecoregions will overlap the other things.

Day 3: Wednesday, 5/25/05

- I. Diversity Metric
 - a. Add text for creation of juvenile index at a later time
 - Use tools? (EDT, etc.)
 - b. Paul, Michelle, Phil – pull together SSD (Phil to edit early next week)
 - c. Tom and Rich – A&P paragraphs
 - d. Tom – intrinsic potential analysis (sp. Chinook) – appendix
 - e. Goal – get a draft finalized by next Friday
 - f. For John Day, use empirical data for evaluation
 - g. Rich – “confined” criteria – get to Michelle for table
 - h. Distribute to the TRT, Vince, Elizabeth, and Lynn