

Interior Columbia Technical Recovery Team Meeting Minutes
October 15 – 16, 2003
CRITFC Office, 709 Oregon St. Portland, OR

Members Present: Fred Utter, Dale McCullough, Paul Spruell (10/15), Phil Howell, Howard Schaller, Tom Cooney, Michelle McClure, Rich Carmichael, Charlie Petrosky, Pete Hassemer-10/16 (by phone)

Non-Members Present: Mike Morita, Aaron Maxwell (10/16), Damon Holzer, Jessica Piasecke, Vince Kozakiewicz, Willy Aldrich (10/15), Phil Rogers (10/16), Jeff (10/16), Eric Tinus (10/16)

PopID Draft Comments

Discussion of important issues brought up in comments on the Draft.

Defining Populations and use of genetic data:

- Decision made to standardize all genetic data in the document.
- Explain use of genetic data more clearly
 - Clarify systematic questions used and justification for non-use of genetic data
 - Make decision making process more transparent
 - Explain process in Genetic Appendix, generically explain in intro
- Add pairwise matrices (genetics, linear dist, life history, connectivity, etc) to appendix
 - For weighted rankings *define* High, Medium, and Low

Addressing Comments on the Draft

- In the Intro: acknowledge that comments were taken into account for this version. Address comments in text where appropriate, otherwise acknowledge comments in a new Appendix.

Historic Population Size Estimates:

- Clarify when expert judgment is made, or how population size has been determined

Inclusion of Hatchery Fish in ESUs

- Explain NOAA policy (or lack there of) on hatchery stocks in text
- Include table of hatchery stocks distinctly derived from populations for *each* ESU(from BRT)

Hells Canyon Population

- Decided that Hells Canyon cannot contain a self-sustaining population due to lack of spawning area.
- Add a sentence stating that Rapid River may represent a genetic legacy from above Hells Canyon Dam.

Umatilla: Differences in Fork habitats

- Decided that other information (including genetics) outweighs Habitat differences between North and South forks, and it will remain a single population. Spawning areas contiguous.

Satus and Toppenish

- Description of Hydrology should be re-worded to be accurate (including proximity of mouths to each other)
- Look further into:
 - Spawning Distribution in either stream
 - Radio Tags
 - New WDFW report

Asotin Basin

- Look further into these features:
 - Elevation, stream miles < 1% grade, total basin drainage, spawning km, temperature
- Compare features to those in:
 - Tucannon, Wenaha, Big Sheep
- Gather information from historical records in the basin (newspapers, etc)
 - Tom will call biologist there and see if this info is likely to exist
 - Damon will check 1930s stream surveys

Okanagan

- Questions: was there a historic population? If so, how far up did it reach?
- Enloe Falls: Compile more information on...
 - Better # of stream miles suitable habitat above and below the falls
 - Call Don Chapman, see how he reached his conclusion
 - Ask David who might know about Steelhead
 - Get info from FERC Relicensing
 - Changes within the last 10 years to access

Dispersal Curve

- Discussed problems of dispersal and strays and accounting for them in populations.
 - Decision was made to acknowledge the problems and explain it's the best that can be done.

Tucannon Population

- Discussed upstream Snake tribs currently lumped in to the Tucannon population.
- Decided to follow the current rule and associate these tribs with Asotin creek (upstream)
- Did not lump with Clearwater b/c the tribs genetically similar to Asotin and with similar distances to either mouth

50/500/5000 Discussion

- discussed and explained issues surrounding genetic variance and inbreeding depression as well as assumptions that result in the differing numbers for population viability

ESU Viability and Scoring Methods

- Discussed criteria for ESU viability, including the role that historical structure and condition of the ESU should play in assessing current viability. Issues discussed included:
 -
 - Weighting of different VSP attributes
 - dispersal rates
 - Risk and rate of catastrophic failure
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Summary of ESU Viability from 10/15

Specific risks to ESU should be considered

Catastrophes and catastrophic risk

- Decided to define catastrophe by Effect rather than Event
- Split into natural and anthropogenic sources of catastrophic risk
- Be sure to define risk factors correctly
 - Do not include normal risk which is better done in LFA
- Michelle & Howard: catastrophic risk model

- Pete, Rich, Phil, and Dale: Catastrophic Risk Assessment: Driving factors *specific* to ESUs
- Tom: Look up definition of Catastrophic risk and how it has been applied by others

Steps: Abundance and Productivity Criteria – Viability Curve

Determine appropriate S/R model

Estimate Variance

Establish Threshold abundance

Set acceptable Risk

Calculate viability surface or curve

Basic Questions: Abundance/Productivity Criteria

What info is available to characterize abundance & productivity for pops in ESU?

How do alternative S/R models fit available data? Is there a single best-fit model?

What are productivity variance levels for interior basin populations

How sensitive are variability curves to:

- Age Structure (yearly variation)
- Temporal survival patterns

Should lower thresholds to be used to reflect historic population size or complexity

Next Step

Finish sensitivity analysis

Find a way to express Abundance and Productivity criteria

Determine a way to express status of individual populations with respect to A&P criteria

Assess status of individual populations against A&P criteria

The Big Question:

How should we aggregate across the 4 VSP parameters in –

- 1- establishing persistent criteria for individual populations and
- 2- scoring of population status against criteria now or in the future

Handout from Tom – Discussion of Model Comparisons

Hockey Stick versus B.H. model, hockey stick being more conservative

What is the intrinsic rate of increase at low levels?

Variance of various models and best fit models

Process for Establishing & Evaluating Viability Criteria - Options

- One measure for each viability component
 - Variation – rules for particular situations
 - Weighting system for generating overall population persistence score
 - Could be ESU or species specific or generic
 - Number - driven
 - expert judgement reflected in methods, etc by which measure, score, and weight
- Point System – Femat

Viability Curves – Grande Ronde

Rich will work on examples of differing structural complexity affecting thresholds

Assessment

Discussion on how we can estimate historical density – spawners, redd counts, hatch/rearing

Grande Ronde Habitat Approaches – EDT & QHA

- Level 3 attributes can be extracted from EDT to be used in QHA analysis
 - Generated values
- Discussion of QHA Outputs (1- Restoration Potential, 2- Protection Rating)
 - Taking into account the habitat and how it is used

- Phil and Jeff (CRITFC) will share QHA Habitat ratings after they generate the numbers for resident fish in the Grande Ronde
- TRT will run QHA on anadromous populations using those habitat ratings and share that analysis with CRITFC

Snake River

Charlie and Eric will produce SAR series for Snake R Spring Chinook

Temporal patterns in Survival

Tom will make a sensitivity curve for age and temporal correlations in survival

Next Meetings

- TRT will try to have at least one phone conference before the next meeting
- Next meeting in November from the twelfth to the fourteenth in Boise, ID
 - Nov. 12 11:00am – 5:00pm
 - Nov. 13 8:30am – 5:00pm
 - Nov. 14 8:00am – 12:00pm