TRT Meeting: December 14-15, 2006
Portland, OR

Members in attendance: Michelle McClure, Howard Schaller, Charlie Petrosky, Paul Spruell, Rich Carmichael, Fred Utter, Pete Hassemer, Tom Cooney, Phil Howell
Non-Members in attendance: Damon Holzer, Eric Tinus, Don Matheson

1. Meeting changes
    a. January meeting changed to 23-24 in Portland
    b. February meeting in Boise 20-21
2. By February, target completion of 1) Viability Document; 2) Matrix Modeling; 3) Gaps Document (our for peer review, include ISAB)
    a. Maintain separation between Gaps analysis and Viability Document (for ISAB review) to avoid confusion (viability first)
    b. Consider sending an MPG example to demonstrate the application (perhaps one population in detail with the corresponding MPG overview)
    c. Include a cover letter explaining various components (with Pete's spreadsheet)
3. Viability Edit Topics
    a. Updates to date
        i. Intro and structure
        ii. QET & RFT
        iii. Threshold rationale
        iv. Extinction risk language
        v. Model language
            1. S/R function
            2. Writeup in attachment
    b. Remaining
        i. Blend ESU & MPG
        ii. Additional SSD Rationale
        iii. Conclusion
        iv. Population level
            1. Brief VSP paragraph
        v. Integration
            1. Why not single model
            2. Why mod SSD, low AP
            3. Summary
    c. Workgroup Tasks
        i. M&E (outline completed, need text) – Charlie, Howard, Rich
        ii. Conclusions
        iii. Hatchery implications memo
        iv. UC review
        v. Fall chinook assessment (*)
        vi. Sockeye assessment (and viability specifics)
        vii. Bob Lohn request of overview (uncertainty versus viability criteria)

viii. SSD (updated rationale) IUCN criteria, published literature – Phil, Pete, Michelle (*)
    1. need references (Howard's mammal/bird refs)
ix. Capture changes to the selectivity metric (flow chart) (*)
x. Blend ESU/MPG – Tom (*)
xi. Integration section additions – Tom

4. Fall Chinook Overview (below hell's canyon (extant), marsing reach (extirpated), salmon falls (extirpated)
    a. Completed A.1.a and A.1.b
    b. Need to decide complexity category
    c. Metric A.1.c – Is the Tucannon currently occupied? Are we concerned with connectivity to other populations in the ESUs?
    d. B.1.a-c (genetics) – completed "a," need phenotypic info (Fred)
    e. B.2 metric – have necessary info, need to complete
    f. Selectivity – workgroup to inform this metric
    g. After draft is complete, send out for input from interested parties
    h. Separating out an ESU overview (because of 2 extirpated areas)
5. QET/RFT Update
    a. Previously set RFT to QET
        i. Evaluated R/S at very low escapements—noticed many positive returns with parent escapements less than 50
        ii. Explored demographic effects of going below 50 spawners
            1. looked at multiple spawning areas and sex ratios
            2. should consider heavier weighting of females
    b. consider adding inbreeding depression paragraph
    c. Use RFT = 10
6. M&E Workgroup
    a. Section to be added after peer review
    b. Consider putting uncertainty categories up front, ESU/MPG discussion back
    c. Look at ecological basis for uncertainty (as opposed to metrics)
        i. Influence of catastrophe and dispersal rates
    d. Key information (population level) to improve criteria/increase confidence in viability assessments:
        i. intrinsic potential and population size categorization reflection of the true historic capacity distribution and relative population sizes
        ii. increased information for ESU productivity parameters (e.g., variance or autocorrelation of R/S measures) for sockeye and steelhead
        iii. approaches that will best estimate the capacity and low abundance productivity from empirical measures of abundance, recruits/spawner, and physical capacity for a population
        iv. intrinsic potential analysis reflection of the historic spatial distribution of spawners

v. which habitat based analytical approaches best inform the assessment of metrics for life-history strategies and phenotypic characteristics
vi. how well the specific hatchery fraction rules reflect risk impairment to patterns of gene flow

e. Identify key uncertainties in criteria
    i. Distribute a table with SSD and AP uncertainties
        1. TRT members to rank, email table to Don (compile)
            a. discuss at next meeting

7. Selectivity Workgroup
    a. Add guidelines for "we don't know" ratings (esp. heritability)
    b. Be clear that broad-sense and qualitative estimates are acceptable
    c. Provide proportion, fitness, heritability rating justification/walk-through
8. SSD Workgroup – focus on individual criteria and lead-in paragraph
    a. Major issue: development of rationale for SSD criteria (reliance on VSP document)
        i. Completed literature scan to bolster existing rationale
            1. Compile and add in references (Paul) (email to Don)
            2. Fred to send new information to Paul
    b. Improve consistency of justification across criteria
    c. Complete by January meeting
9. MPG/ESU Criteria Workgroup
    a. Blended language and incorporated comments
    b. Mostly used language from original sections, introduction requires more work
    c. Rearrangement
        i. Criteria for multiple-population ESU
        ii. Expanded on importance for criteria
        iii. Move up language just after criteria list (use as introduction)
        iv. End with single MPG criteria
10. All workgroups to finalize their pieces, incorporate into master document, then distribute
    a. Comments back to Tom by January 12th
11. Fall Chinook
    a. Alternative method for defining MaSAs
        i. Change language for "independent tributary" and "dependent tributary"
    b. Proportion of strays declined (hatchery practices), not abundance
    c. Add language pertaining to Mainstem from Granite to Ice Harbor within the assessment
    d. Population complexity category – most likely "C" (trellis structure)
    e. Update proportional "MaSA" bar chart to reflect 5 (not 6) "MaSAs"
    f. Check outmigration timing shift
    g. Check sex structure (high proportion jacks) 2006
    h. Indications that anthropogenic actions are favoring alternative life history; take care to protect historic life history patterns

i. Fred to offer input on phenotypic variation metric
j. Send genetic variation writeup to Michelle, Paul, Fred for comment—and identify risk rating
k. Difficulty in applying ecoregion distribution metric
    i. Presently no historic distribution data
    ii. Try using historic spawning gravel study data
    iii. Change table heading to reflect spawning lengths (from area)
l. Discuss hatchery production leading to higher risk rating in rating summary
m. Pete to distribute, TRT to discuss at January meeting

12. Tasks
    a. Finish viability document
    b. Matrix modeling writeup
    c. Review of elasticity analysis
    d. Viability interpretation memo for Bob Lohn