

Meeting Summary
FISH WORKGROUP
TRRP Office, Weaverville, CA
November 6, 2013

Wednesday November 6, 9:30 AM

Participants

Core members: George Kautsky (HVT), Seth Naman (NOAA, workgroup coordinator), Joe Polos (USFWS), Tim Hayden (Yurok), Steve Cannata (DFW).
Other participants: Robin Schrock (Reclamation), Ernie Clarke (USFWS).
Notetaker: Ernie Clarke.

Summary of New Actions Items:

1. Fish workgroup will describe progress with objectives since the May workshop to the IDT on the next conference call. This report will include a recommended change in the fundamental objective to be explicit about spatial scale. Seth will finalize objectives list prior to the IDT meeting in December; propose wording in the fundamental objectives specifying numeric fish objectives are for Trinity Basin.
2. Joe will attempt to schedule a meeting with the fish production modelers in December.
3. Seth will seek direction on addressing the coho escapement discrepancy between the TRRP goal and the NOAA-Fisheries recovery goal.
4. Seth will develop adult holding habitat metric.
5. Joe to work with others to develop a redd superimposition metric.
6. Seth and Joe will talk to others regarding development of a habitat metric for the flow workgroup.

1. Agenda Review/ Action Tracker Review

Agenda Review:

- Seth reviewed the draft agenda (attached). No changes were made in the topics. To accommodate member schedules, the group decided to attempt to adjourn at 3:00 rather than 4:00 PM while addressing all topics.

Action Tracker Review (all tasks below are from the September 11, 2013 meeting):

1. Seth to define metrics of Predation & Competition
STATUS: Completed. This will be discussed during the 9:45 am topic on objectives.
2. Bill Pinnix will populate a list of outmigration monitoring synthesis topics for discussion and refinement by the Fish Workgroup
STATUS: Prior to the meeting Bill provided Tim with a proposed list. Tim will share with workgroup members via email. Ernie will compile member input.
3. Tony Heacock will put together annual graphs representing flows from Lewiston, temps in Hoopa and catch at Willow Creek outmigration monitoring site.
STATUS: In progress. This will be discussed during the 12:30 pm topic on Flow workgroup requests.
4. Tim Hayden will draft responses to the Flow WG request and send out to the Fish Workgroup for review.

STATUS: In progress. This will be discussed during the 12:30 pm topic on Flow workgroup requests.

5. Tim Hayden will draft a memo to the Science Coordinator in regards to restructuring of TRRP work groups and roles of the Fish Workgroup.

STATUS: A memo drafted and shared for member input but not finalized. Given TMC direction on workgroup restructuring this task is no longer pertinent.

6. Tim Hayden would like to discuss the topics below at a future meeting:
 - a. Overall concern of how refinement of means objectives and development of metrics are going to be applied to DSS?
 - b. How are the other TRRP workgroups approaching Means Objectives revisions and how will everyone be integrating to DSS?
 - c. Also how non-TRRP folks/actions are influencing fish. Discuss the wording of hatchery management and harvest means objectives at next meeting. Because not linked to TRRP management action.

STATUS: For items a. and b., there will be an IDT discussion following up on the tasks from the objectives workshop. The Fish workgroup will present their proposed modifications. There was limited discussion on item c., recognizing that there soon will be a separate forum (Hatchery Coordination Team). There was some discussion of how the Fish workgroup should properly interact with that group.

After reviewing action items, Joe shared that TAMWG asked him to resent stock projection / harvest management at their December meeting. He will share his draft presentation with Fish workgroup members in advance of the meeting for input.

2. Continue Means Objective tasks from Objectives Workshop

Seth opened the discussion by restating the goal of the exercise: 1. Eliminate redundancies among means objectives; 2. Identify and missing objectives; 3. Identify metrics for each objective. Prior to the meeting Joe had shared MS Word and Excel files that had been updated based on the September 11, 2013 meeting (see September 26 email message). Notes from past workgroup meetings reflect the revisions made to date.

The group agreed that item 1 (eliminate redundancies) was largely accomplished. The discussion today focused on item 3 (identify metrics), especially for objectives completely lacking metrics. Group recognizes that item 2 (identify missing objectives) would be ongoing. During the discussion on this topic, Seth edited the MS Excel file. Notes below summarize major decision points or tasks. "Tabs" refer to individual spreadsheets in the MS Excel file.

"Fundamental Fish Objectives" Tab

There was discussion about the need to modify the fundamental objective developed at the May 22, 2013 objectives workshop to explicitly state escapement of Trinity Basin fish. There was general agreement that the change is needed and would better define the spatial scale of the Program. However, there was reluctance to separately revise a fundamental objective developed in a broader group setting.

Task: Fish workgroup will describe progress with objectives since the May workshop to the IDT on the next conference call. This report will include a recommendation to change in the fundamental objective to be explicit about spatial scale.

Task: The fish production model was mentioned during the objectives discussion. Joe will attempt to schedule a meeting with the modelers in December.

Group discussed the eventual need to develop numeric numeric goals for green sturgeon and lamprey. Before investing time in this effort, the group recognizes there needs to be a discussion with the TMC. Group discussed the discrepancy between the Program's coho escapement metric and NOAA's recovery goal. Does the Program's metric need to be reconsidered?

Task: Seth will ask Ann for direction on addressing the coho escapement discrepancy.

Group discussed the fact that the harvest metrics lack definition. TMC voted in the past not to adopt harvest goals.

"Fish Means Objective – Habitat" Tab

The group discussed that these habitat metrics need to be articulated in the context of a dynamic river. Group also discussed that certain objectives are higher priority (i.e. rearing habitat is more of a priority than holding habitat). Group reiterated that the rearing and spawning habitat metrics are interim and need refinement. A metric needs to be developed for adult holding habitat. The metric could be calculated from escapement goals. Or it could be developed based on Gaeuman's 2013 assessment of pool depth changes.

Task: Seth will develop adult holding habitat metric.

"Fish Means Objective – Temperature" Tab

Metrics exist for all subobjectives on this tab. There was no further discussion.

"Fish Means Objective – Fish Production" Tab

This boiled down to 3 means objectives related to redd superimposition, fry stranding, and predation.

For fry stranding the group agreed to use a binary metric: meet ramping rates in EIS or not.

For predation (reduce brown trout population) the group discussed that this tool isn't within the TRRP's suite of management actions. It relies on action by others. As a metric, the group decided to use CPUE at the Junction City weir as surrogate and look for a decreasing trend in the brown trout population.

For redd superimposition the group discussed potential metrics without making a decision. They discussed the need to account for: 1. any hatchery effect that will interfere with ability to detect change and 2. escapement.

Task: Joe to work with Charlie Chamberlain and the rearing habitat assessment team to develop redd superimposition metric.

"Fish Means Objective – Hatchery" Tab

George points that hatchery operations are outside the TRRP purview, and that there is a forum emerging to discuss this under the TRH MOA. He challenges the need to spend workgroup time on this, and that he, for one can't participate further in the discussion as a TRRP fish workgroup member. Should the hatchery objectives be removed entirely? Workgroup chooses to address the objectives / metrics on the tab.

Further developing the predation sub-objective / metric was one of Seth's tasks from the September meeting. Based on the literature and considering Trinity River hatchery steelhead releases, Seth states that the current predation metric (predation < 20% within the Program area) is too high. The metric could arguably be as low as predation < 2%. Seth suggests that the metric be revised to predation < 5% within the Program area. The workgroup agrees with the suggestion.

Further developing the competition sub-objective / metric was another of Seth's tasks from the September meeting. Seth proposed that a surrogate metric could relate to releasing before or after May 1. This would be a binary metric. There was concern about how prescriptive the metric is. Group considers incorporation of volitional migration as a surrogate for residualism rates, consideration of size at release, or factoring in modification of release by water year type. Could multiple surrogates for competition be developed?

It was pointed out that "Adapt timing of hatchery release to alter distribution of avian predators and minimize predation on natural fry and smolts" was originally developed as an objective related to mergansers. Fish folks consider that it might be better addressed by the wildlife workgroup. The workgroup agrees with the suggestion and will forward to Riparian/wildlife WG for consideration.

"Fish Means Objective – Miscellaneous" Tab

No objectives remain on this tab. There was no further discussion.

"Fish Means Objective – For Other Workgroups" Tab

Four objectives remain on this tab. They will be discussed when the fish workgroup reports out to the IDT.

The fish workgroup has completed the tasks from the May objectives workshop. The spreadsheet will be cleaned up and the group will describe the results to the IDT.

LUNCH

2. Technical feedback to Flow Workgroup questions (12:40 – 2:00)

The group addressed four questions that arose during the August 2013 flow workgroup meeting. The questions and rough responses are below.

1. Do we need a Normal Year hydrograph with a spring habitat bench?

RESPONSE: Not at this time. The actual Chinook salmon run size for 2013 does not appear to be large enough to warrant a spring bench in 2014. The fish work group will consider adding a hydrograph for a normal water year with a spring bench in the future. However, in a normal year, sufficient tributary flow may provide enough flow and habitat for rearing juveniles in the mainstem. The dry year hydrograph with a spring bench should remain in the portfolio.

2. Outmigration timing; need an evaluation metric to apply in November.

RESPONSE: Members of the fish workgroup are working on this data request.

Discussion: Tim and Tony Heacock have done a cumulative catch analysis with the Willow Creek data. They are considering how to convert it into a metric (plot of RT80 v. size or condition; risk to benefit scale; accumulated thermal units model). Some discussion of the origin and significance of the RT80.

3. Flow / rearing habitat metric

RESPONSE: Members of the fish workgroup will start working on this data request.

Discussion: Charlie Chamberlain has developed a habitat metric for the channel rehabilitation design team. It might be useful for this. Days over a certain flow level is one idea. How do you capture geomorphic benefits to habitat in this metric? Might need to be time period specific. Metric needs to be developed no later than end of November. Aaron did an evaluation for the habitat bench last year.

Task: Seth to talk to Aaron Martin; Joe to talk with Charlie Chamberlain. Determine who will develop the habitat metric for the flow workgroup.

4. Degree days requirement / juvenile outmigration.

RESPONSE: Will be addressed by the fish workgroup for future water years.

Discussion: Sean and Paul working on this based on the Sykes paper which uses accumulated thermal units as a metric. Assumes temperature related to onset of physical changes (smoltification) then uses to predict outmigration. There are degree day models used for release dates and other considerations that are used in the PNW.

A request from the physical workgroup to develop a map of high quality and low quality reaches (between Lewiston dam and Indian Creek) from a fish habitat perspective was briefly discussed. The request may be revisited based on the direction of the newly formed gravel augmentation workgroup.

3. Direction of future fish workgroup efforts/goals

Developing goals for FWG 2014-

1. Get rid of languishing sub groups
2. Identify data needs or analysis needs
3. Make list of analyses or technical feedback which can be accomplished in FY 2014 by FWG
4. Prioritize top 3 on list
5. Structure new groups around this top 3

Ideas for top 3 2014 FWG tasks-

1. Model support- (juvenile fish production)
2. Trend/multiyear analysis of trap data, habitat data (performed by ISAB??), redd data, escapement, harvest, etc.
3. Report writing (e.g. for annual monitoring reports) to ensure timely dissemination

Other tasks for 2014-

- Technical feedback for other work groups
- Collective FWG review of reports and papers
- Degree days requirement/juvenile outmigration
- Work plan
- Update performance measures/annual report writing

DRAFT VERSION DATE 11/5/13November 6, 2013: 9:30
AM**FISH WORKGROUP MEETING AGENDA**TRRP conference room,
Weaverville**Coordinator:** Seth Naman

- Desired Outcome:**
- Finalize consolidation of means objectives
 - Finalize linkages between objectives and management actions
 - Finalize quantitative metrics for each revised means objective
 - Discuss and prioritize subgroup activities and relevancy
 - Develop FWG goals for FY 2014

- Please read/review:**
- Revised Objectives Hierarchy Worksheet
 - Questions from Flow and Physical WG (see previous emails)

Please bring: Lunch, concepts to increase relevancy and effectiveness of Fish Workgroup

Agenda Items

Time	Topic	Presenter
2013 Fish Workgroup		
9:30	Agenda Review/ Action Tracker Review	Seth/Tim
9:45	Continue Means Objective tasks from Objectives Workshop	Fish WG
11:00	Break	
11:10	Continue Means Objective tasks from Objectives Workshop	Fish WG
12:00	Lunch	
12:30	Technical feedback to Flow Workgroup questions	Fish WG
2:00	Break	
2:10	Technical feedback to Flow Workgroup questions	Fish WG
3:00	Direction of future FWG efforts/Goals	Seth/Tim
4:00	Adjourn	