

TRRP Fish Workgroup Meeting Summary

FWS Office, Arcata, CA

Tuesday, March 15, 2016

Participants

Core members: Todd Buxton (FWS), George Kautsky (HVT), Kyle De Juilio (YT),

Others in attendance: Shane Quinn (YT), Joe Polos (FWS), Billy Matildon (HVT), Josh Boyce (FWS), Steve Cannata (self), James Lee (HVT)

Note taker: Todd Buxton

New Actions Items

- Shane Quinn will investigate potential disease concerns regarding use of salmon carcasses from Trinity River Hatchery (TRH) for nutrient enhancement in riparian areas of the mainstem Trinity River.
- Mary Claire-Kier will compare age structures for Fall Chinook that were determined by coded wire tags and scale reads at TRH for all years these data are available.
- George Kautsky will submit a revised draft report on Trinity River cohort reconstructions for review by FWG members by May 1, 2016.
- FWG members will review Bradford and Hankin spreadsheet and identify items to propose for implementation in specific program areas in the next FWG meeting.

Work Group recommendations/decisions

- None

Notes

James Lee gave a short presentation on the influence of marine derived nutrients derived from salmon carcasses on various components of river ecosystems, including riparian tree growth, macroinvertebrate populations, and terrestrial scavengers. The FWG recognized the scientific literature reports strong benefits to river ecosystem from marine nutrients derived from salmon carcasses. FWG members then discussed benefits and challenges of carcass placements in riparian areas either by hand or elevated stream flows. A potential concern that was raised is the ability to obtain carcasses for planting from Trinity River Hatchery (TRH), which has an agreement to supply a portion of carcasses at the hatchery to a Canadian firm for filleting in exchange for excess roe at the hatchery. The carcass filets are then provided to needy members of society, so the impact of obtaining carcasses for riparian planting on this program would need to be assessed. It was mentioned that carcass availability decreases with distance downstream from TRH, so that measurements of ratios of marine nitrogen to terrestrial nitrogen may be used to determine the current influence of marine nutrients on riparian plant growth can be assessed at least in this portion of the river.

Steve Cannata presented his recollection of results of a comparison of Fall Chinook ages obtained with coded wire tags at TRH to scale ages read at TRH. Steve's presentation was a recollection of results since his analysis was lost after he retired from CDFW and the agency "cleaned" his computer. Results were that ages from both methods closely compared for 4 of 7 years, and for the remaining three years that comparisons were made, ages differed by less than 10%. It was unclear, however, which ages differed by 10%, or if all ages differed by 10%, or whether the differences were statistically significant or related to the number of wild Chinook entering the hatchery. Mary Clair-Kier was volunteered by Steve to complete the analysis of comparisons, and Wade Sinnen verified in a phone call on March 17th that Mary would be able to complete this analysis for the FWG.

Updates on synthesis analysis of fish habitat and fry population in the Trinity River were given by Kyle DeJuilio and Bill Pinnix, respectively. Kyle referenced the habitat groups outline for habitat synthesis reporting, and the FWG requested that comparisons of modeled habitat areas between reaches and fish habitat model evaluation be included in their reporting. Bill explained that Chinook fry population modeling has been completed for the Willow Creek and Pear Tree trapping sites, except modeling for 2015 is yet in progress for Pear Tree. A request was made for fry synthesis reporting to include analysis that attempts to explain variation in population estimates, including effects of channel restoration, river hydrology, and sediment transport, to name a few. The lead for synthesis reporting of Chinook production metrics, Joe Polos explained that he has been tied up with other work demands, but hopes to work on this synthesis report soon.

George Kautsky and Eric Logan gave a presentation that explained calculations used to reconstruct wild Fall Chinook cohorts for the Trinity River. The component of the wild Fall Chinook intercepted by sport fishermen in the lower Klamath River was provided as an example. Other examples of analysis performed in the HVT draft report on "Trinity River Natural Fall Chinook Cohort Reconstruction" will be made at subsequent FWG meetings. It was briefly mentioned that this draft report requires significant revisions to be accepted by the TRRP; specifically, justifications for the analyses undertaken need to be made. George agreed with this assessment and committed to providing a revised draft report to the FWG for review by May 1, 2016, or close thereabouts.

The FWG chose to withhold discussion of elements of the Bradford and Hankin and SAB reviews of the adult salmon monitoring program until all program managers are present. Therefore, a special meeting of this group will be scheduled at a later date to complete this undertaking.