

**Supplementation Subgroup
Alameda Creek Fisheries Restoration Workgroup**

**Minutes of Meeting on
May 17, 2004**

Attendees:

Pete Alexander, EBRPD
Kristine Atkinson, DFG
Gordon Becker, CEMAR
Eric Cartwright, ACWD
Andy Gunther, CEMAR
Jeff Hagar, Hagar Environmental Science
Craig Hill, ACWD
Laura Kilgour, ACFCWCD
Jane Lavelle, SFPUC
Brian Sak, SFPUC
Gary Stern, NOAA Fisheries
Kevan Urquhart, DFG

Discussion Items

Gordon Becker reviewed the status of planning for the proposed In-Migrant Study. As currently configured, the study will use only adult in-migrants detected at the BART weir or in other locations. Fish will be tagged and tracked, and monitoring will be conducted to determine if successful reproduction occurs. A smolt trap will be installed to verify out-migration and to help characterize the natural history traits of a Stonybrook population, such as migration timing and age at out-migration.

Laura Kilgour said that the costs of the study had not been determined. The group noted, however, that agency and volunteer labor would be used and would help to constrain the budget. Brian Sak stated that it is desirable to have a crew of about six for trap installation, and that maintenance can be performed by two or three individuals. Trap design will mimic that previously employed by the Santa Clara Valley Water District and SFPUC to the extent possible. Cost savings are expected from constructing the trap “in house” rather than employing a contractor.

To begin the discussion of supplementation alternatives, Gordon asked the group if a program would be conducted if the 1,600 to 1,700 smolts believed to be capable of producing a viable Alameda Creek steelhead run could not be obtained. Brian responded that SFPUC is taking steps to increase the reservoir population size, including studying bass control and installing oxygenation equipment. Brian estimates that as many as 2,700-3,300 smolts may be produced in Indian Creek alone based on electrofishing data and habitat studies. While production from the reservoir populations may limit the number of juveniles used in a future supplementation program, it appears to be sufficient to continue with supplementation planning.

Kristine Atkinson re-iterated her concern that due to smolt trapping inefficiencies, it may be difficult or impossible to properly weigh various supplementation alternatives. Kristine recommended taking additional steps to improve trapping efficiency in hopes of most accurately characterizing the reservoir population. Brian Sak stated his opinion that density estimates combined with additional habitat studies were more likely than trapping to produce reliable population estimates. He suggested that concerns regarding trapping efficiency were worth exploring, but that population estimation did not depend on achieving such efficiency.

Brian requested opinions regarding the proportion of the population that could be “safely” removed for use in a supplementation program. Jeff Hagar responded that is important to have reliable population estimates that suggest populations in good condition. Jeff said that with these conditions satisfied, he believed sufficient production would be available to pursue a supplementation program. Gary Stern noted that it was important to introduce fish into the lower watershed over a period of several years in a row to account for stochastic effects on the population.

Jeff Hagar asked Brian what SFPUC studies showed about the longevity of individuals in the population and the presence of repeat spawners. Brian indicated that data are being developed, but that fish typically return to spawn at age 2+. He also noted the presence of resident trout in Arroyo Hondo.

Gordon Becker asked about using various life history stages in a supplementation program. Brian said that typical conditions in reservoir tributaries lead to seasonal drying and the death of thousands of young of the year (YOY) fish through desiccation. The group agreed that collecting YOY seasonally and transporting them to downstream locations should be part of the supplementation strategy. The group also agreed that moving adult fish downstream of reservoirs did not appear desirable in the near term.

Pete Alexander asked about likely release points when supplementation activities are pursued. Brian responded that appropriate habitat areas were rare, in part because restricted Calaveras Reservoir operations did not allow for “fish flows.” Kevan Urquhart mentioned that a temporary aquaculture facility could be established to rear fish prior to release, and that necessary equipment possibly could be loaned by DFG if it is found to be in good condition. According to Kevan, volunteer labor could largely be used in such an effort, although a trained aquaculturist would need to supervise efforts. Also, Pete mentioned the possibility of bringing back a previous aquaculture operation formerly housed near Coyote Hills.

The aquaculture facility topic led the group to a discussion of permitting issues. Gary Stern noted that reservoir fish currently are not included under Endangered Species Act provisions. Gary said that NOAA Fisheries was in the process of reviewing the status of about 25 population groups, including the populations in Alameda Creek watershed reservoirs. Gary speculated that full “listing” would not occur for at least a year, if at all. He referred to a “4(d)” provision that allows for fish rescue, saying that the proposed collection and rearing efforts likely could be covered for “take.” Kevan Urquhart suggested using program designs that did not entail Section 10 provisions and a Hatchery Genetics Plan due to the burdensome nature of these requirements.

Kevan stated his opinion that lowering ACWD’s inflatable dams during a one-week period could allow for successful out-migration. Gary asked about the availability of under-utilized habitat areas downstream of the reservoirs as possible release locations. Brian responded that habitat would only exist with reservoir discharge, and that discharge quantities had not been proposed. He also said that installing an inflatable dam near the Sunol WTP would allow for such releases to occur.

Gary suggested the possibility of a 5-7 cfs release for recreating a mixed coldwater/warmwater fishery in Alameda Creek. Kevan added that enhanced riparian canopy would be needed to maintain coldwater habitat. Gary inquired about trying a pilot program in summer 2005 wherein YOY were transported and supported with small dam releases. Brian responded that the current valve configuration could not produce low levels of discharge. He said that he would investigate the possibility of using filter plant diversions to support supplementation. Gary stated that monitoring should accompany a fish release program. Gary closed this conversation by saying he would encourage a program of using SFPUC diversion facilities to create fish habitat flows.

Pete Alexander reiterated that the key component of a supplementation program is providing rearing flows. Brian said that consistency of supply also constitutes a major challenge to supplementation,

noting that the Calaveras population appears to be reduced at present. Brian mentioned proposed detailed habitat assessments for La Costa and Indian creeks, and Arroyo Hondo that could inform habitat planning and flows.

Next Steps

The flood control and water conservation district will prepare application materials to conduct the proposed research program, including installing a smolt trap in Stonybrook Creek. Staff from ACFCWCD or CEMAR will contact ACWD and SFPUC representatives to discuss coordination issues related to the In-migrant Study.