

FINAL Meeting Minutes

Alameda Creek Fisheries Restoration Workgroup meeting
Meeting Date: September 8, 2011

1. Introductions and agenda review

2. Announcements

Elke Rank announced that October 27 is the date of the annual Alameda Creek Watershed Council conference.

Jeff Miller said that the Alameda Creek Alliance membership dinner is September 25th. Jeff suggested that the group take a watershed tour soon.

Stuart Mook reminded the group that the State of the Estuary conference is September 20 and 21.

3. Hydrology working group update

Scott McBain led the discussion of the Hydrology Microgroup's progress. Scott noted that the effort involves establishing 12 analytical nodes.

Amod Dhakal took the group through the ASDHM model (or "Daily Model") and how it moves from node to node accounting for accretion, water supply operations, channel loss, and urban inflow. The model processes unimpaired, impaired, and future impaired hydrology scenarios. Various model scenarios may then be applied to EDT and NGD modeling efforts.

Amod noted that future cutoff walls along the Sunol quarry reach and the perennial quality of the stream in the future (due to bypass flows) make loss projection challenging between Nodes 4 and 5.

The model was used to indicate the number of days with discharge of 10 and 20 cubic feet per second (cfs) under future water management scenarios. The analysis indicates that the frequency will approach that of the unimpaired scenario.

Evan Buckland described Alameda County Water District (ACWD) projections of future conditions in the flood control channel. Their analysis provides the number of days when discharge will equal or exceed 25 cfs, a threshold based on fish passage criteria. The ACWD proposed flow schedule also incorporates a 25 cfs during the period Jan 1st to Mar 31st of every year (the majority of the in-migration season).

Ahmad next described model results showing greater discharge during dry years in the period October through end of December than under the unimpaired scenario.

He indicated that flows for the period January through March approaches the levels projected under the unimpaired scenario.

Scott mentioned that Arroyo de la Laguna (ADLL) is being treated as an input to the model. In the future, ADLL hydrology could be adjusted in the model to reflect various management scenarios.

The microgroup noted that Sunol Valley channel loss is assumed to be 17 cfs based on one year's measurements. Return flows from the quarry are provided via two principal discharge points.

Evan next provided an overview of HEC-RAS hydraulic analysis being carried out, including model uses for steady state analysis, unsteady state analysis, and temperature analysis. He reiterated that model outputs are used in the Ecosystem Diagnosis and Treatment (EDT) and NGD (Number Good Days) models.

Evan reviewed the water temperature model development. He said that the key step was determining boundary conditions at nine locations using observed data or other assumptions. In some instances, the sparse data set led to formulation of air temperature-water temperature relationships to populate the model. Impaired and future condition scenarios rely on information from the Calaveras Reservoir model.

Evan told the group that the calibration and validation steps for the Niles gage node has the model within +/- 1 degree C. He also noted that Arroyo de la Laguna inflow dominates the temperature regime downstream of the ADLL/Alameda Creek confluence.

Scott reviewed the microgroup work schedule. The team has mostly completed the hydraulic and temperature models. The next step is applying the EDT model to scenarios 1, 5, and 6. Scott foresees having review of the team's technical memo by Thanksgiving, and having the memo completed by the end of the calendar year.

Tim Ramirez reviewed the Habitat Conservation Plan (HCP) process that is leading to review of a draft HCP in May. He said he would advise the Workgroup regarding the environmental review schedule as soon as possible.

4. Number of Good Days, Spawner Risk Assessment updates

Gabe Rossi next reviewed the NGD analysis. He stated that considered elements include the number of good days for steelhead to complete spawning and early rearing, growth rates, and Spawner Risk Assessment (SRA). The NGD analysis focuses on four reaches: below the Alameda Creek Diversion Dam (ACDD), downstream from the base of Little Yosemite, downstream from the Sunol Water Treatment Plant and Niles Canyon.

Gabe said the team has defined parameters for “good days” for each reach. They used the growth, temperature, and ration relationships to derive the Arroyo Hondo data to quantify a smolt size class distribution. He noted that the SRA was built to inform the growth model.

Tim announced the Calaveras Dam groundbreaking on September 16. He also said that the SFPUC is undertaking erosion control projects in the Arroyo de la Laguna basin. Lastly, he said that the PUC will be doing smolt trapping this spring.

5. Break

6. Kevan Urquhart

Kevan Urquhart, Senior Fisheries Biologist at the Monterey Peninsula Water Management District, addressed the group regarding steelhead restoration in the Carmel River basin. Kevan said that this long-term mitigation program has existed in its current form since about 2000.

The water supply agencies have been pursuing alternative water supply projects due in part to decision “9510” from the State Water Board, which called for an immediate 20 percent decrease in diversion quantity. Kevan mentioned that the local golf courses now use recycled water. Another program involves aquifer storage and retrieval using diverted winter streamflow in conjunction with summer repumping out of the Seaside basin.

Kevan noted that Monterey Peninsula may have the most aggressive conservation program in California and possibly the country. Water diversion from the Carmel River has gone from about 14,000 acre-feet (AF) to about 8,000 AF. Water diversion is ramping down to legal amount.

Kevan said that his agency spends about \$3 million per year on mitigation programs. His group consists of about ten staff.

He characterized the upper Carmel River watershed as having narrow riparian areas with chaparral immediately upslope. He cited the Old Carmel Dam, about one mile downstream from San Clemente Dam, as a fish passage barrier to be removed.

Kevan said that the reservoir behind the 86-year old San Clemente Dam is mostly filled with sediment and is scheduled for abandonment. Another major management concern is the sandbar at the river mouth, which the County breaches for flood protection. He noted that during the last several years, artificial lagoon closure has been conducted.

Kevan said that major flood management and erosion impacts have been addressed by establishing regulations for unauthorized riparian projects/clearing. Riparian vegetation is supported by irrigation during drought periods.

Other restoration projects involve installing grade control structures to create pools and channel/riparian enhancement work. It is estimated that 75-80 percent of the riparian zone has been restored to historical vegetation levels.

The Carmel River dams have fishways, Kevan said, but the efficiency of the ladders is unknown. Fish rescues occur regularly, and fish are reared in a specially designed facility. Swamp coolers are used to keep rearing facility water cool. Over time, the rearing facility has developed new procedures to improve its efficiency. For example, fish are segregated by size to prevent intraspecific predation. Within the facility, cover was added to lower predation rates, and a high food ration has been adopted to increase growth rates.

In response to a question about monitoring, Kevan noted that currently his team can not recover coded wire tags. He added that PIT or RFID tags are either ineffective or expensive. Kevan concluded by saying that the San Clemente Dam removal project is estimated to cost about \$80 million.

7. Break

8. Project Updates

Jeff Miller said that the Alameda Creek Alliance (ACA) is in discussions with CalTrans regarding the "Niles 1" project. His organization also submitted comments on the "Niles 2" project. CalTrans has informed the ACA that design changes to "Niles 2" are unlikely to occur.

Evan said the BART weir fish passage project is the subject of a draft mitigated negative declaration by the Alameda County Water District. The project is on track to be constructed in 2014.

Joe Sullivan, new staff at the East Bay Regional Park District, introduced himself.

9. Next Steps

Elke Rank gave a reminder that the next meeting of the Workgroup will be December 8 at Zone 7's offices.