1. **Introductions were made and an agenda review occurred.**

2. **Project Updates/Announcements**

   Jeff Miller said the CalTrans projects in Niles Canyon are on hold for the time being. Jeff will distribute the proposed schedule for CalTrans’ process to the Workgroup.

   Brad Ledesma announced that Zone 7 has filed an extension of time petition for the agency’s water right on Arroyo del Valle. He told the group that Zone 7 is initiating a process to study hydrologic and environmental effects of various flow potential flow regimes. More information about this process will be provided at the next Workgroup meeting, and a handout depicting key water supply facilities and aquatic resources is available for the group.

   Josh Fuller said that the National Marine Fisheries Service is trying to finalize its Central California Coast coho plan in mid-April. Shortly after this event, NMFS expects to release its multispecies plan for "co-manager" review. Josh will send a message to the group with when the schedule has been determined.

   Brian Sak said that the SFPUC hoped to begin screw trapping during this winter and spring outmigration season, but flows were insufficient.

   Leslie Koening reported that streamflow and temperature instruments will be installed shortly in Stonybrook Creek with funding through the Alameda County Resource Conservation District.

   Zone 7 announced installation of a temperature recorder at the U.S. Geological Survey gage at Arroyo Valle Near Livermore (AVNL). Data is online now.

   Evan Buckland said that the Alameda County Water District is continuing work on CEQA documents for the flood control channel fish passage facilities. Associated construction outside of the channel is expected near the end of 2013, while in-channel construction should occur in 2014.

   Josh said that the two ladders would be covered by a Biological Opinion. He also noted that NMFS had received a biological assessment from the Alameda County Flood Control and Water Conservation District for its activities in the channel and
sent back a letter requesting additional information. Krissy Atkinson noted that NMFS and the Department of Fish and Game are looking at the entirety of issues surrounding fish passage in and out of system. Tim Ramirez suggested inviting the U.S. Army Corps of Engineers to participate in discussions regarding vegetation in the channel.

3. "Number of Good Days" (NGD) analysis results

Gabe Rossi of McBain and Trush presented draft findings and results from the NGD and number of good year (NGY) analyses. The goal of these analyses is to identify viable Life History Tactics (LHTs) that may support a population of steelhead in the Alameda Creek watershed.

Gabe said that the NGD tool uses habitat mapping results to determine thresholds regarding temperature, productivity and habitat capacity. An underlying assumption is that the most important metric is the size of smolts at outmigration. Gabe cited that 170 mm individuals are seven times more likely to survive their ocean phase than fish 140 mm in length. Therefore, fork lengths of 150 and 175 mm were set as minimum desirable thresholds for smolts leaving Niles Canyon.

Using the growth model and NGD, McBain and Trush estimated the number of returning adults that a specific LHT and flow management scenario might produce. At this point, Jean Baldrige asked how "ration", or food supply, was estimated. Gabe responded that they developed flow thresholds that corresponded to differing proportions of the assumed maximum ration.

Gabe conveyed the following draft findings:

Draft Finding No. 1. The "Tailrace" LHT appears to provide good growth, year round rearing and good smolt to adult return (SAR).

Draft Finding No. 2. Habitat capacity within the reach downstream from the Calaveras Dam appears limited to production potential of about 200 individuals.

Draft Finding No. 3. Good growth and rearing capacity in downstream reaches (especially Niles Canyon and the creek mouth at the San Francisco Estuary) are necessary to achieve greater estimated adult returns.

Draft Finding No. 4. Enhancing downstream habitat would improve the viability of the watershed's population and support a number of additional LHTs.

Gabe also described their findings that upper watershed habitat for Age 1+ steelhead is much more limited than Age 0+ habitat, and habitat for Age 2+ fish is still more limited.
Gabe said that the study modeled baseline unimpaired conditions in Arroyo Hondo and San Antonio Creek, and compared habitat with that at the base of Little Yosemite and below the Calaveras Creek confluence. The study also compared modeled growth rates, smolt size and SAR just downstream from Calaveras Dam and just upstream from the Welch Creek confluence. The study also produced predicted growth rates, smolt sizes and SAR for Niles Canyon.

The study compared Arroyo Hondo, below Calaveras Creek and above Welch Creek rearing locations with variable migration rates and produced the following results:

Age 1+ LHT, Tailrace below Calaveras Creek. Over nine modeled years, almost all years produced threshold smolt sizes.

Age 1+ LHT, Tailrace above Welch Creek. The analysis found lower capacity for growth here, with only two years achieving target smolt size thresholds. High temperature appears to account for a large portion of the lower production. Downstream reaches have substantially higher temperature stress.

Age 0+ LHT, Tailrace below Calaveras Creek to Niles Canyon. In this analysis, four of the modeled years produced smolt of the 150 mm size threshold, but adult returns were reasonable because extensive habitat area was available.

Gabe said that potential next steps would involve reviewing how different management actions can improve downstream rearing. Additional effort would refine our capacity to quantify effects of management actions on downstream water temperature.

Another next step would be to rerun the growth model for various LHTs, including Arroyo de la Laguna information to quantify corresponding NGDs. This step would estimate the effects of proposed improvements in downstream rearing habitat on SAR and estimate adult return.

Josh asked about reporting on Niles Canyon habitat work that was performed. Bill Trush responded that habitat polygons are mapped and can be viewed. He also noted that there may be some limited opportunities for physical habitat improvements in Niles Canyon.

Scott McBain said that the draft report is complete and is being reviewed. Finalizing will be coordinated with the Review Advisory Committee (RAC) process.

5. Break
6. RAC discussion with Dr. Johnnie Moore

Dr. Moore said that an important part of the RAC process is developing a clear charge. He identified three procedural steps: 1) Review of written documents; 2) Presentations by authors to panel and exchange of information; and 3) Assessment/review. Dr. Moore foresees convening the panel in the period May 15-30. The panel will consist of 3-4 individuals.

Dr. Moore outlined the RAC analytical approach as follows:

A. Physical Foundation
The Habitat Conservation Plan (HCP) includes hydrology (flows, flow scenarios, data, constraints, limitations), hydraulics (HEC-RAS; channel, morphology), temperature modeling (temperature, flows, flow scenarios), and a biological framework.

B. Steelhead Life History
Pertinent information includes both: general characteristics and strategies (migration, etc.); and specific aspects for Alameda Creek (qualitative)

C. Estimation of Response (prediction)
This step involves the Ecosystem Diagnostic and Treatment model (EDT) (quantitative). Dr. Moore noted that the Review Panel members should have experience with model scaling (temporal and spatial), and that understanding the model also requires experience with assumptions and validation.

Josh asked the panel to consider the NGD analysis, noting that the reporting should be available in time.

Dr. Moore then outlined the Review Panel’s meeting structure. Josh suggested adding a watershed introduction element. Jean suggested having a conference call before the Panel convenes to bring the panelists up to speed on the issues and allow for a round of initial questions.

Dr. Moore said the goal was to convene a two-day meeting ending with a “completed” review. He suggested that the Panel report its finding within two to three weeks of completing the review.

7. Lunch Break

8. Continuation of RAC discussion with Dr. Moore
After lunch, Dr. Moore talked about panel expertise. He said that at least one member should have experience with field work, modeling, geomorphology, hydrogeology, Mediterranean climate streams and fish. This position is associated with the Physical Foundation element of the approach.
The Steelhead Life History and EDT elements of the approach should be represented by two or three panel members. Workgroup members noted particular areas of expertise including "arroyo" type stream ecology and habitat, similar scale watersheds, quantitative analyses, fish physiology, native fish interactions, and species re-introduction.

Tim noted that EDT has been used to support HCPs, but on large streams. He believes the Alameda Creek process could be the first application on an arroyo type system.

Scott mentioned that someone with EDT experience would be valuable. Other members suggested that general familiarity with population growth models would be sufficient.

Dr. Moore recommended that panel be taken on a field trip. He then asked for information from the Workgroup by March 15. He stated the need to determine the Review Panel schedule soon. The weeks of May 14 and May 21 were put forth as leading candidates.

Lastly, Barbara circulated a draft of the HCP process by the SFPUC’s consultant ICF.