Monitoring Study Group Meeting Minutes

December 18, 2014
CAL FIRE Mendocino Unit Headquarters—Howard Forest
Willits, California

The following people attended the MSG meeting: George Gentry (BOF—MSG Chair), Julie Bawcom, (CGS [retired]), Cherie Blatt (NCRWQCB), Jim Burke (NCRWQCB), Bill Condon (DFW), Kevin Faucher (Campbell Global), David Fowler (NCRWQCB), Richard Gienger (Forests Forever+), Dave Longstreth (CGS), Stormer Feiler (NCRWQCB), Colby Forrester (CAL FIRE), Craig Pedersen (CAL FIRE), Griffin Perea (CVRWQCB), Stacy Stanish (CAL FIRE), Rene Leclerc (CVRWQCB), Chris Rowney (CAL FIRE), Robert Horvat (CAL FIRE), Eric Antrim (BLM), Maggie Robinson (NCRWQCB), Mike Fuller (CGS), Dr. Bill Weaver (PWA), and Pete Cafferata (CAL FIRE).

Participants on the GoToMeeting webinar/conference call included: Anthony Toto (CVRWQCB), David Haynes (CVRWQCB), Sue Sniado (DFW), Tom Suk (Lahontan RWQCB), TO Smith (DFW), Margarita Gordus (DFW), Doug Cushman (Lahontan RWQCB), Jacqueline Matthews (CVRWQCB), Dr. Cajun James (SPI), Nick Kunz (SWRCB), Dr. Brian Dietterick (Cal Poly SLO), Drew Coe (CAL FIRE), Matt House (GDRCo), Stu Farber (BOF), and Melky Calderon (SWRCB).

[Action items are shown in bold print].

The meeting began with general monitoring-related announcements:

- The Road Rules, 2013 Rule Package Training Workshops videotaped presentations from the indoor portion of the Ione Workshop, held September 16, 2004, are posted at: http://www.bof.fire.ca.gov/regulations/
  The Question and Answer document generated from the workshops is posted at:
  http://bofdata.fire.ca.gov/hot_topics_resources/road_rules_q_and_a_document.pdf
  The presentation on the new road rules provided to the Association of California Loggers (ACL) on January 15, 2015 in Reno is posted online at:
  http://calfire.ca.gov/resource_mgt/downloads/Cafferata_RoadRules2013_ACL-talk_January2015(final).pdf

- The revised "Handbook for Forest, Ranch and Rural Roads" by Dr. Bill Weaver, Eileen Weppner, and Danny Hagans is posted on the Mendocino County Resource Conservation District website:
  http://mcrcd.org/publications/

- The Northern California and Southern California Society of American Foresters 2015 Winter Meeting will be held on January 23-24, 2015, in San Luis Obispo. The meeting is titled "Forest Management: Effects on Climate Change." Additional information and registration for the meeting is available at: http://norcalsaf.org/

- State Board of Forestry and Fire Protection meetings are scheduled for January 27-28, Sacramento, and March 3-4, Sacramento.

- The Wildlife Society, Western Section annual meeting will be held January 26-30, 2015, in Santa Rosa. The meeting is titled "Conservation Through Collaboration." See: http://tws-west.org/santarosa2015/

- Pete Cafferata announced that Clay Brandow was retiring from CAL FIRE after 24 years with the Department at the end of December. He thanked Clay for his dedication and leadership in developing and carrying out two monitoring projects for the Monitoring Study Group.

- Bill Condon announced that Brad Valentine retired from the California Department of Fish and Wildlife in December 2014. Brad was DFW's lead person on several monitoring projects, including the riparian microclimate gradient study being conducted on Jackson Demonstration State Forest.

- Dave Longstreth announced that Stephen Reynolds retired from the California Geological Survey at the end of December 2014. Steve designed and supervised construction of the Soquel Demonstration State Forest large wood enhancement project. He has been monitoring changes since construction in 2012 and 2013.

Summary of the Revised "Handbook for Forest, Ranch and Rural Roads" by Dr. Bill Weaver

Dr. Bill Weaver, Pacific Watershed Associates (PWA), provided a PowerPoint presentation titled "Handbook for Forest, Ranch and Rural Roads: Focus on Stream Crossings and Hydrologic Connectivity." The PowerPoint is posted on the Monitoring Study Group Archives website at: http://www.bof.fire.ca.gov/board_committees/monitoring_study_group/msg_archived_documents/. The revised Handbook for Forest, Ranch and Rural Roads is posted in English and Spanish at: http://mcrcd.org/publications/. Currently hard copies of the book are not available from the Mendocino County RCD, but a second printing will occur soon, with the price of a copy expected to be $30-35.

Dr. Weaver began his presentation by summarizing how the revised road handbook differs from the original 1994 edition of the book. Significant changes include: addressing rural roads; providing a version in Spanish; providing considerable new information on hydrologic disconnection; expanded discussion on stream crossing design (including culvert materials and sizing approaches, armored fill crossings); and updated information in the Construction, Reconstruction and Upgrading, Inspection and Maintenance, and Closure and Decommissioning chapters.

Part One of Dr. Weaver's presentation was titled "Road/Crossing Techniques." He stated that the Road Rules, 2013 rule package, which went into effect January 1, 2015, has several new rule requirements addressing stream crossing design and construction. These include (1) installing culverts at or close to the natural grade and alignment of the natural channel, and long enough to prevent fill erosion; (2) evaluating all logging roads, landings, appurtenant roads, including stream crossings, for significant existing or potential erosion sites; (3) removing or stabilizing significant volumes of stored sediment during crossing reconstruction or abandonment; (4) using appropriate practices for high risk crossings; and (5) including the method(s) used for determining culvert diameters in the THP. Options available for addressing problematic road/crossings include road upgrading (mitigation to reduce the current and potential impacts), or abandoning the road/crossing and relocating the road segment. Appendix 10 of the DFW California Salmonid Stream Habitat Restoration Manual provides a detailed methodology for locating high risk roads and crossings (see: https://www.dfg.ca.gov/fish/resources/habitatmanual.asp).

Dr. Weaver stated that the three main subcategories of permanent and temporary crossings are bridges and arches, fords and armored fills, and culverts. Culverts provide the greatest threat due to plugging and overtopping, washout, and stream diversion. Stream crossing design must be adequate for fish passage where appropriate, have a minimum impact on water quality, and handle 100-year flood flows, including sediment and debris. Common techniques for reducing the risk of stream crossing failures include culvert upsizing; culvert widening (width and shape); installing wingwalls, flared metal inlets/beveled inlets; installing debris barriers or deflectors; installing emergency overflow culverts (50-60% of the size of the main culvert, not less than 36 inches for large fills) or snorkels; replacing the culvert with a bridge; or abandoning the crossing. Examples of these practices were provided. To lower the risk of stream diversion, the three main approaches are: installing a critical dip (usually at the fill-native slope hingeline), lowering the entire crossing fill, and installing an emergency overflow culvert with a downspout. Measures of success include decreased culvert plugging and lower frequency of crossing washouts.

The NMFS preferred order of options for fish passage at crossings was listed: no crossing, bridge, bottomless arch-embedded culvert, non-embedded culvert with proper hydraulic design, and least preferred—baffled culvert. Additionally, methods for designing stable stream crossing fills were addressed (e.g., proper fill compaction, reduced fillslope angle), as were culvert crossing topics (culvert materials, sizing methods, debris treatments, etc.). Dr. Weaver stated that most woody material blocking pipe inlets is small (1.25 times the pipe diameter), and that using a headwater depth to pipe diameter ratio (HW/D) of 0.67 is one approach to allow for passage of small woody debris. Other approaches include installing a wider culvert (equaling active channel width), and using flared end sections, mitered inlets, trash racks, or overflow culverts/snorkels. In addition to culverts, bridges, armored fills, fords/vented fords, and temporary crossings were briefly discussed and illustrated. Lastly, when crossings are abandoned, Dr. Weaver stated that the work is typically 95% effective (i.e., excavated crossings usually produce 5% or less of erosion compared to the total erodible fill volume removed at the crossing).

Part 2 of Dr. Weaver's presentation was titled "Road Drainage and Hydrologic Disconnection." He stated that while considerable research has been done on this topic in the past, only in the last five to ten years has a lot of field implementation work been completed. High standards for statewide hydrologic disconnection are included in the new Road Rules, 2013 rule package. Effective road drainage must allow for a minimum of disturbance of the natural drainage pattern, as well as draining water and subsurface water away from the roadway, dissipating it in a way that prevents excessive collection of water in unstable areas and subsequent downstream erosion. Characteristics of effective road drainage listed in Technical Rule Addendum No. 5 (TRA#5) were discussed (e.g., minimal effect on water quality and aquatic habitat).

Hydrologic connectivity refers to the length or proportion of the road or road network that drains to streams during a "design" event (range from 5-10% to 80-90%). Dr. Weaver used Furniss et al.'s (2000) definition for a design runoff event: a 1-year, 6-hour storm, with antecedent moisture conditions corresponding to the wettest month of the year. He described how "stealth" sediment is delivered to stream channels that are hydrologically connected. Turbid water with colloidal or very fine sediment is delivered without visible erosion voids. Evidence of connection below a road drainage structure or facility is provided in TRA#5 (e.g., sediment deposits that reach the high water line of a channel, indication of surface flow between the drainage structure outlet and a channel). Road surface erosion is often caused by mechanical abrasion, producing considerable amounts of fine sediment, along with poor road surface drainage. Insloped roads with an inside ditchline and ditch relief culverts are much higher risk roads for connectivity than outsloped roads with rolling dips. Delivery of sediment comes from both the road surface and the ditchline (with cutbank erosion contributing to the ditchline). Fords and bridges, as well as culvert crossings, are subject to hydrologic connectivity problems. Solutions include installing an adequate number of ditch relief culverts for insloped roads and rock armoring approaches where needed. Pot holes in roads indicate poor drainage but not connectivity.

Dr. Weaver also addressed connectivity that occurs with hillslope gullies. Large gullies are efficient delivery mechanisms and can produce both chronic and episodic erosion. Even stable gullies can be conduits for road sediment delivery to stream channels. If gullies are found below ditch relief culverts installed on insloped roads, then the spacing is too wide and needs to be improved. Several examples of gully erosion producing connectivity were displayed.

Data on hydrologic connectivity in forested watersheds were also discussed. Road-stream connectivity values reported in the literature for the Pacific Northwest and California have a mean value of 42%. The goal is to upgrade a road network in a watershed so hydrologic connectivity is reduced to 10-15%, greatly reducing sediment delivery. PWA road inventories in the California Coast Ranges have found the sediment delivery from hydrologically connected roads over the next decade amounts to 36% of total delivery (i.e., 308,600 yd^3 total road connectivity delivery divided by 859,300 yd^3 of total sediment delivery) (i.e., "stealth" sediment delivery). Amounts of sediment produced from different road-related sources were provided for Monterey County roads, the Hollow Tree Creek watershed, and the South Copper Creek basin (tributary to Redwood Creek), illustrating that watersheds behave differently.

Treatments for hydrologically connected roads and road reaches were then covered. The Road Rules, 2013 rule package requirements were stated, and TMDL requirements for fine sediment load reductions for sediment impaired North Coast watersheds were provided (e.g., mean road surface erosion reduction of 87% expected). Dr. Weaver stated that the inventory process starts by identifying all the stream crossings in the watershed and determining if they are connected (often accounting for 75-80% of connectivity problems). The procedure for a hydrologic disconnection inventory was illustrated for the South Fork Garcia River watershed. Approximately 13 miles of hydrologically connected roads (out of 30.6 miles) were identified; treatments included installing rolling dips, ditch relief culverts, outsloping roads, and selected rocking. The list of approaches available for treating connectivity provided in TRA#5 was summarized, including increasing the frequency of ditch relief culverts for roads with inside ditches, and converting insloped roads to outsloped roads with rolling dips. Connectivity is not linearly associated with sediment delivery volumes or rates (i.e., significant connectivity may or may not result in large volumes of fine sediment delivery to a watercourse, since some roads are more erodible than others). Ditch relief culvert spacing must be based on ditch erosion, cutslope erosion, and stream proximity (spacing decreases as you approach a stream). Rolling dip spacing should be performance-based; identify the best discharge sites

rather than using firm spacing table specifications. Dr. Weaver also stressed that it is very important to inspect and maintain connectivity treatments. Examples of road drainage treatments, including road shaping (insloped to outsloped with rolling dips), and road drainage facilities and structures (rolling dips, rolling grade, ditch relief culverts, and leadout ditches) were provided. Other approaches to reduce or eliminate roads as a source of fine sediment were illustrated, including minimizing ditch grading, constructing properly designed and sized sediment basins, and use of culvert outlet end caps with perforated pipes. A final example showed that storm proofing along 15.2 miles of forest roads reduced pre-treatment connectivity of 76.2% in 1998 to 7.5% in 2005 (an order of magnitude reduction).

Forest Practice Rules Implementation and Effectiveness Monitoring Final Report Results

Clay Brandow, CAL FIRE, provided a PowerPoint presentation summarizing the Forest Practice Rules Implementation and Effectiveness Monitoring (FORPRIEM) Final Report. The PowerPoint is posted at: http://www.bof.fire.ca.gov/board_committees/monitoring_study_group/msg_archived_documents/. The final report will be posted soon on the Monitoring Study Group Monitoring Reports website at: http://bofdata.fire.ca.gov/board_committees/monitoring_study_group/msg_monitoring_reports/. Mr. Brandow summarized the report's contents and stated that FORPRIEM is the third in a series of monitoring programs documenting the implementation and effectiveness of California's Forest Practice Rules (FPRs) related to water quality (earlier programs and reports were the Hillslope Monitoring Program (HMP-1999, 2002), and the Modified Completion Report Monitoring Program (MCR-2006). Monitoring data were collected for both FORPRIEM and MCR by trained CAL FIRE Forest Practice Inspectors, while data for the HMP were collected by qualified contractors. FORPRIEM data were entered into a Citrix database.

FORPRIEM monitoring was performed on a random sample of completed THPs between 2008 and 2013. The target sample was 10% of completed THPs, with approximately 75% of the selected plans evaluated. There were 126 THPs in the sample: 66 from CAL FIRE's Coast Region, 43 from the Cascade Region, and 17 from the Sierra Region. Additionally, a target sample of 20% of NTMP-NTOs located in the North Coast Hydrologic Basin and submitted between 2007 and 2011 was identified, with 96% of the selected NTOs evaluated. The NTMP-NTO evaluation was expanded to a statewide sample in 2012, with two additional plans evaluated in the Cascade and Sierra Regions. Overall, approximately 90% of the total number of NTMP-NTOs evaluated (24) were from the Coast Region. Four randomly located sites (one 200 ft Class I or II WLPZ, one 660 ft road segment, and two watercourse crossings) were evaluated (where available) for each plan after logging was completed. Rule implementation was assessed after the Work Completion Report was submitted; effectiveness evaluations took place after at least one overwintering period.

WLPZ canopy results were presented first. There were 103 THP WLPZs (23 Class I, 80 Class II watercourses) and 20 NTMP-NTO WLPZs (4 Class I and 16 Class II watercourses) sampled for total canopy with a sighting tube. A 50-point systematic grid pattern was used for canopy measurement. Of the 103 THP WLPZs, 53 had no harvesting with the current entry. The mean THP WLPZ total canopy was 82%, with a median value of 84%. The Class I mean was 81% and the Class II mean was 82%. The overall mean for the ASP rules and non-ASP rules areas was 86% and 73%, respectively. The mean total canopy value for Class I and II watercourses was 89% in the Coast Region, 80% in the Sierra Region, and 68% in the Cascade Region. THP WLPZ percent total canopy data for Class I watercourses suggests that it may be improving over time, based on results from the HMP, MCR, and FORPRIEM monitoring programs (1999-2013). For the 20 NTMP-NTO WLPZs sampled, all were in the North Coast Hydrologic Basin/ASP rules area and 12 had no harvesting in the current entry. The mean WLPZ percent total canopy was 91%. Class I and Class II means were 93% and 91%, respectively. In the ASP rules area, WLPZ percent total canopy was slightly higher on average for NTMP-NTOs compared to THPs. Groundcover requirements were met in almost all cases for both THPs and NTMP-NTOs, and similarly WLPZ erosion related to the current harvest entry was very rare. QA/QC re-measurements of total canopy for five randomly selected plans (four with WLPZs) were similar for both site visits in all cases.

Mr. Brandow presented the FORPRIEM road results next. There were 125 THP random road segments in the sample (all with implementation monitoring and 122 with effectiveness monitoring), and 24 NTMP-NTO random road segments (all with implementation monitoring and 23 with effectiveness monitoring). Three key road FPRs were rated for implementation: (1) waterbreak (WB) construction (waterbreak refers to

rolling dips and other drainage structures/facilities for this study), (2) FPRs requiring drainage structures/facilities discharge into cover, and (3) waterbreak spacing (FPR spacing requirements for WBs were applied to rolling dips and other drainage structures/facilities for this study). Waterbreak construction was rated as acceptable or exceeding requirements 90% of the time for THPs, with 7% of the ratings being marginally acceptable and 3% rule departures. Rules requiring drainage structure/facilities to discharge into cover were rated for THPs as acceptable or exceeding requirements 94% of the time. Marginally acceptable and rule departures were assigned 4% and 2% of the time, respectively. Similar results were found for NTMP-NTOs for both the construction and discharge into cover rule requirements. WB spacing was found to be correct for THPs 88% of the time, and 90% for NTMP-NTOs. Road rule effectiveness for THPs showed that road erosion features were documented on 9% of the road surface, 4% of the cutslopes, and 1% of the fillslopes in the sample. Similar values were found for the NTMP-NTO road segments. For THP roads with correct WB spacing, 86% of the waterbreak intervals (the road surface between waterbreaks) had no surface erosion, with 14% having spacing-related erosion. In contrast for THP roads with incorrect spacing, 63% of the waterbreak intervals had no related erosion and 37% had related erosion. THP WBs with incorrect spacing were found to have erosion approximately 2.5 times as often as waterbreaks with correct spacing. For NTMP-NTO roads with correct spacing, 90% of the waterbreak intervals had no related erosion and 10% had related erosion. Fifty percent of the waterbreak intervals had no related erosion for NTMP-NTO roads with incorrect spacing and 50% had related erosion. Incidents of observable road-related sediment transport beyond the toe of the fillslope and sediment transport to channel were infrequent. Documentation of fine sediment delivery to watercourses during winter storms was not undertaken with this monitoring program. QA/QC re-measurements for road rule implementation and effectiveness for the five randomly selected THPs were generally similar to those recorded during the first site visits.

Watercourse crossing results were covered last. There were 208 THP watercourse crossings in the sample (all with implementation monitoring and 194 with effectiveness monitoring) and 39 NTMP-NTO crossings (37 with implementation monitoring and 39 with effectiveness monitoring). For both THP and NTMP-NTO crossings, over 60% were culverts, 50-60% of the culverts were $\leq$24 inches, all crossing types were mostly located in Class II and III watercourses, and approximately 60% of the crossings were installed prior to the current entry. For THPs, 64% of crossings had all of the applicable 30 crossing FPRs rated as meeting or exceeding FPR requirements; 24% had one or more marginally acceptable ratings, but no rule departures; and 12% of the crossings had one or more rule departure ratings. For the 27 effectiveness categories rated, 13% of the THP crossings evaluated had one or more major problems. For NTMP-NTO crossing implementation, 70% of the crossings met or exceeded all the applicable FPRs rated, 11% had marginally acceptable rule ratings, and 19% had at least one departure from the rule requirements. Ten percent of the NTMP-NTO crossings evaluated for effectiveness had one or more major problems. Common deficiencies for both THPs and NTMP-NTOs included culvert diversion potential, road approach cut-off drainage structure function, scour at the outlet of culverts, and culvert plugging. NTMP-NTO watercourse crossings appear to be generally comparable to THPs from a water quality standpoint, but the sample size is small. Watercourse crossing implementation and effectiveness ratings recorded with FORPRIEM suggest that there may be improvement when compared to ratings reported in the two earlier monitoring programs (particularly for diversion potential and culvert plugging), but lack of large stressing winter storm events for most of the state over the life of the study and differing entities collecting monitoring data make direct comparisons difficult. Crossing diversion potential and cutoff drainage structure function on road approaches remain high priority items for training and enforcement. QA/QC re-measurements for eight culvert crossings evaluated in the five randomly selected THPs showed that there was a higher rate of poor implementation and effectiveness ratings assigned during the first visit. It was concluded that the crossing evaluation process was less repeatable than that developed for WLPZ canopy and road drainage structure spacing measurements.

In summary, Mr. Brandow stated that, similar to what was reported earlier for the HMP and MCR monitoring, the rate of compliance with the FPRs designed to protect water quality is generally high, and that they are effective in preventing erosion and observable sediment transport to channels when properly implemented. The final report includes 14 recommendations, including four related to training and enforcement needs, six addressing modifications needed for the next iteration of FORPRIEM monitoring, and four that list work needed to complement FORPRIEM monitoring conducted in 2015 and beyond.

BOF Effectiveness Monitoring Committee and AB 1492 Updates

George Gentry informed the group that a AB 1492 meeting was being held on December 19, 2014 in Sacramento to provide an update on the Timber Regulation and Forest Restoration (TRFR) Program and to solicit public comments on the draft charters for the following AB 1492 Working Groups: Ecological Performance Measures, Data and Monitoring, and Administrative Performance Measures. The Working Group charters are posted at: http://resources.ca.gov/forestry/working_group/. Additional TRFR Program information is provided at: http://resources.ca.gov/forestry/.

Mr. Gentry also stated that the Board's Effectiveness Monitoring Committee (EMC) has produced a draft Strategic Plan, posted at: http://bofdata.fire.ca.gov/board_committees/effectiveness_monitoring_committee_/mission_goals/emc_draft_strategic_plan.pdf. A revised draft will be developed with input from the agencies on their key monitoring questions. **Two EMC publically noticed meetings have been held to date and a third meeting will be held in February (the MSG email list will be used to notice this meeting)**. Information on the EMC, including the EMC Charter, EMC Roster, and meeting agendas, is posted on its BOF webpage: http://bofdata.fire.ca.gov/board_committees/effectiveness_monitoring_committee_/. Richard Gienger stated that improved public stakeholder involvement is needed in the EMC process, and that pilot projects are required for assembling available data on the planning watershed level to assess cumulative impacts and identify opportunities for restoration of habitat for listed anadromous salmonids.

Brief Updates on Cooperative Instream Monitoring Projects

Kevin Faucher, Campbell Global, informed the MSG that the South Fork Wages Creek project was active in 2014, with the implementation of a plan that upgraded four miles of road and built 0.5 miles of new road. Four new culverts and five rock ford crossings were installed. The road work will be monitored for two years, and a THP to log selected parts of the basin will be submitted in 2017. There was 10 years of background data collected prior to the road work completed in 2014. Two 2014-2015 storms of significance have occurred to date; the largest in early December had a recurrence interval of only 1-2 years.

Pete Cafferata, CAL FIRE, provided a handout with current information on the Caspar Creek watershed study. A new five-year contract between CAL FIRE and the USFS PSW was approved in December 2014. The PSW will be hiring Dr. Salli Dymond in late January for four years as a Post-Doctoral Researcher. Her primary responsibility will be to design and begin to implement a study plan for the third experiment in the Caspar Creek watershed (i.e., second South Fork Caspar Creek Experiment). The Caspar Creek website (http://www.fs.fed.us/psw/topics/water/caspar/) has publications and research data for the project, as well as real time stage and turbidity data for the South Fork of Caspar Creek (http://nrs-isa.humboldt.edu/rsl/tts_plot.html).

Dr. Cajun James, SPI, reported remotely that all the field work, including stream water quality data collection and hillslope erosion monitoring, is finished for the Judd Creek cooperative study. She worked with Dr. Lee Benda in 2014 to use GRAIP-Lite (Geomorphic Roads Analysis and Inventory Package) for modeling road erosion and comparing it to the data collected with sediment fences. **Dr. James anticipates having a final report for the Judd Creek study available by mid-2015**. An earlier abstract is posted at: http://abstractsearch.agu.org/meetings/2012/FM/sections/EP/sessions/EP52C/abstracts/EP52C-08.html.

Dr. Brian Dietterick, Cal Poly SLO, reported remotely that he has produced a draft final report for the Little Creek watershed study, conducted on Swanton Pacific Ranch in Santa Cruz County. The report documents the impacts associated with an NTMP logging operation conducted in 2008, as well as the impacts of the 2009 Lockheed Fire (see the following paper and Masters thesis for currently available information: http://www.fs.fed.us/psw/publications/documents/psw_gtr238/psw_gtr238_173.pdf http://digitalcommons.calpoly.edu/theses/1028/). **A final version of the report will be available in early 2015.** Dr. Dietterick stated that the project is transitioning from a post-fire study to a SERM (Spatially Explicit Riparian Management) study.

Brief Updates on ASP Rule—Section V Pilot Projects and Other Section V Projects

Pete Cafferata provided a short PowerPoint presentation on Anadromous Salmonid Protection (ASP) rule Section V pilot projects and other 14 CCR Section 916.9 (v) projects. The PowerPoint is posted at: http://www.bof.fire.ca.gov/board_committees/monitoring_study_group/msg_archived_documents/. The goal of these types of projects is to promote rapid short-term habitat improvement with active riparian management in watersheds with listed salmonids. The first VTAC pilot project was implemented in August 2014 by Campbell Global as part of the Mill Smith THP, in Smith Creek, a Ten Mile River tributary. There were six sites and about 30 trees were felled to increase large wood loading. The second pilot project is with Green Diamond Resource Company in the lower Klamath River. A large research experiment is being designed as part of their AHCP to see if thinning in the riparian area will enhance light and nutrient input sufficiently to improve salmonid production. NMFS approved a pilot phase using a unit in existing THP 1-13-106 HUM in November 2014. The THP is located in the South Fork Ah Pah Creek watershed. There are abundant stream monitoring points for temperature, turbidity, and hemispherical photo points for canopy in the WLPZ to be treated. The goal is to have 50% overstory canopy after treatment and the trees marked are not conifers. The SPI "LINE" THP was also briefly discussed. It is not a VTAC pilot project, but a Section V project proposing a shaded fuel break covering 28 miles in Tehama County. It is a SPI District-wide fuel break crossing seven Class I watercourses, some with listed salmonids. Basal area proposed in the WLPZs is 50 square feet. Several photos from an agency pre-consultation with SPI were shown.

Next Monitoring Study Group Meeting Date

The next MSG meeting date is tentatively planned for March or April 2015, with the location to be determined. When a definite date, venue, and agenda are available, this information will be emailed to the MSG contact list.