

# VTAC Meeting Minutes

June 21, 2011

Soquel Demonstration State Forest  
Soquel, California

## Attendance

The following VTAC members attended the meeting:

Mike Liquori (Chair); Dr. Kate Sullivan, Dr. Kevin Boston, Richard Gienger, Peter Ribar, Dr. Matt O'Connor, and Dave Hope.

The following VTAC agency representatives attended the meeting:

Bill Stevens (NMFS), Dave Fowler (NCRWQCB, representing Bryan McFadin), and Pete Cafferata (CAL FIRE).

Attendees:

Bill Snyder (CAL FIRE), Duane Shintaku (CAL FIRE), Dennis Hall (CAL FIRE), Joe Kierman (NOAA SWFSC), Jessica Albietz (SWC), and Rich Sampson (CAL FIRE).

**[Action items are shown in bold print].**

## VTAC Announcements

Richard Gienger announced that AB 380, which directly relates to the VTAC, was approved by the State Assembly on May 31<sup>st</sup>. AB 380 is titled the "Comprehensive Forest Land Recovery and Restoration Act" and is authored by Assembly member Wesley Chesbro (see: [http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab\\_0351-0400/ab\\_380\\_bill\\_20110622\\_amended\\_sen\\_v96.pdf](http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0351-0400/ab_380_bill_20110622_amended_sen_v96.pdf)). As stated in the bill, its purpose is as follows:

*This bill would require the department and the board, when implementing a pilot project to protect and restore the riparian zone in watersheds with listed anadromous salmonids, among other things, to provide the industry, agencies, and the public with the opportunity to participate in the development of the pilot project in a transparent manner and to ensure that the pilot project has certain goals. The bill would also require certain documents to be publicly available on the board's Internet Web Site and all documents that form the basis for the pilot projects to be posted on the department's Internet Web site. The bill would require the board, with the assistance of a technical advisory committee, to develop recommendations and pass regulations for providing electronic public access to all relevant documents, organized by the California Interagency Watershed Mapping Committee, that assist the department in administering timber harvest regulations with actions that protect and recover forest and watershed productivity and quality.*

## Brief VTAC Project Updates

Mike Liquori and Pete Cafferata very rapidly updated the group on progress made on multiple VTAC projects. These projects include:

- Mike Liquori and other VTAC members have written the VTAC paper presented to the Coast Redwood Forest Symposium held on June 21<sup>st</sup>-23<sup>rd</sup> at UC Santa Cruz. The paper is titled “The VTAC Committee: Developing Guidance for an Alternative Regulatory Pathway to the Anadromous Salmonid Protection Rules” and was submitted on June 19<sup>th</sup>. Hard copies of the paper were distributed. The paper is currently in review prior to publication in the conference proceedings as a USFS-PSW General Technical Report.
- The Pre-Consultation Guidelines Subcommittee has not made further progress on their document. Mike Liquori’s detailed comments following the VTAC meeting held in April will be distributed more broadly to the entire VTAC email list.
- The VTAC Pilot Projects Guidelines Refinement Subcommittee did not meet since the last VTAC meeting in April, but Mike Liquori, Kate Sullivan and Pete Cafferata (by conference line) met on May 5<sup>th</sup> in Oakland to discuss improvements to the Pilot Project Guidelines, particularly regarding situational sentence concepts.
- Future VTAC meetings and subcommittee meetings will be scheduled with the online tool “Doodle.”

### **Brief Summary of Discussion at SDSF Field Sites**

The main purpose of this meeting was to provide field sites to view and discuss topics that will assist in the VTAC pilot project guidelines refinement process. Secondly, field sites where anchored and unanchored large wood placement is to occur later this summer/fall in the East Branch of Soquel Creek channel were observed and discussed, as well as a streambank repair site along Hihn’s Mill Road.

A brief summary of the “take-home” messages from the field discussions is provided below, followed by a more detailed description of comments made at each field site.

### **“Take-Home” Messages from Field Discussions**

#### **Ideas for Incentives:**

- Allowance of additional harvest of riparian trees:
  - Immediately adjacent to the channel (using silvicultural justifications)
  - From other areas (e.g., Class II watercourse WLPZs)
- Design support resources (perhaps in the form of qualified riparian experts) who can lay out riparian designs and help compile the paperwork

- more efficiently than RPFs (and perhaps this pool can be subsidized with funding)
- Restoration subsidies - perhaps from a pool of funds or via other restoration funding sources (can we identify these sources?)
  - Reduced (coordinated) monitoring requirements for landowners (perhaps monitoring effectiveness of these projects should fall onto a cooperative team that is sufficiently funded)

**Default Acceptable Actions:**

- Under-planting to promote desired species
- Semi-engineered wood placement (perhaps using design-build standards)
- Direct felling of wood into streams
- Instream structures (sills, groins, revetments, etc.) using existing design standards
- Large wood placement limits by geomorphic type (e.g., pool-riffle, forced pool-riffle regimes)
- What criteria do we use for default canopy gaps?

**Regarding Credits:**

- Large wood placement activities should offer more credits (incentives) than simple riparian improvements
- When is it appropriate to compromise temperature (shade) for the benefit of habitat or nutrient enhancements?

**Justification Requirements for Proposed Non-Default Actions:**

- Different large wood placement strategies might require different criteria for approval (can we identify these scenarios?), e.g.,
  - Bigger streams require more careful design
  - Steeper gradient streams require more careful design
  - Downstream capital improvement exposure requires more careful design
- Thinning of dominants or co-dominants must demonstrate excess capacity (how do we define this?)

**Other Key Ideas:**

- What tools can we make available to assist landowners? (e.g., Google Earth Watershed Maps?)
- Scaling is important - information should be provided at reach-scales (10-20 channel width?) and aggregated via classification where appropriate
- Watershed-scale supporting information should also be provided
- How should we define "surplus" riparian trees?

## **Field Stop 1. Hihn's Mill Road Repair Site to Stabilize Streambank Erosion**

Pete Cafferata provided a brief description of the planned work to occur at this site. A complex of large logs with rootwads augmented with large rock or other ballast will be installed at this site to stabilize an active streambank erosion site threatening Hihn's Mill Road. It is estimated that this project will require approximately 10, two-log revetment units. Permit applications have been submitted to the USACE and DFG. Trees will be excavated with a 25 foot bole and rootwad from within SDSF and transported to a location near the construction site by a contractor. These trees will be derived from the road right-of-way associated with the Fern Gulch Timber Sale.

The group discussed how a watershed-scale assessment showed that large wood is lacking in the East Branch of Soquel Creek, and how the matrices in the draft Pilot Projects Guidelines document led to the conclusion that large wood placement, including the log revetments to be used at this site, are appropriate for rapidly improving anadromous salmonid habitat. Stream gradient and channel confinement were found to be acceptable for these types of projects.

Key concerns discussed at this site and others were: (1) how to provide a landowner with an incentive to do this type of stream improvement work, and (2) how to appropriately scale the required analysis/information requirements to the project being undertaken.

## **Field Stop 2. Longridge Crossing on the East Branch of Soquel Creek**

The VTAC crossed the East Branch of Soquel Creek where a temporary bridge will be installed to allow log trucks to operate this summer and fall. A wide flood prone area was observed with coast redwood trees, mainly located near the active channel, and abundant hardwoods (red alder, sycamore, and cottonwood—many resulting from the very large 1955 flood event) (Figure 1). Recent bank erosion input two coast redwood trees into the channel near the crossing location (Figure 2).

Mike Liquori asked the group to consider what an appropriate Section V project might include at this site. Ideas expressed included: (1) conifer enhancement at the far end of the flood prone area, (2) thinning of existing redwood clumps, (3) retention of hardwoods, and (4) placement of large wood in the channel without using complex engineered structures. Possible incentives for landowners to undertake this type of work were again raised at this site. It was suggested that if there is suitable upslope timber volume, it may be possible to relax ASP rule standards to allow some harvest in exchange for placement of simple wood structures in the channel.

The benefits and risks of thinning these types of stands were discussed in detail at this site. It was suggested that thinning large mature stands likely will produce

less benefit than thinning young immature stands, and that there is a risk of over-thinning stands to the point where self-thinning with subsequent mortality will not occur. Thinning must take place in a manner that improves riparian functions.



Figure 1. Discussion near Longridge Crossing.



Figure 2. Recent wood entry due to bank erosion along the East Branch of Soquel Creek.



There was considerable discussion regarding the concept of receiving flexibility in the Core and Inner Zones in exchange for immediate placement of large wood in the channel to improve habitat conditions—as determined to be appropriate on a site specific basis. It was expressed that cutting co-dominant or dominant trees in the Core and/or Inner Zones may be able to be proposed to provide an incentive to place wood in the channel, but this must be conducted in a manner that does not adversely impact stream shading. Summer water temperatures in the East Branch of Soquel Creek are high enough that shading is an issue here.

The group also discussed the appropriate reach length for assessment purposes, and how to determine this length.

### **Field Stop 3. Unanchored Large Wood Placement Along the East Branch**

Pete Cafferata explained that non-anchored large wood structures will be installed at this site during the late summer/early fall months to improve habitat conditions. Two clusters of redwood trees arranged as four quasi-interlaced logs, with one of the logs having the rootwad attached, will be installed along this reach. Log clusters will be placed upstream of a large rootwad anchor so that when/if the logs become mobilized, there will be opportunity for them to interact with the rootwad anchor.

The group observed a leaning mature Douglas-fir that is planned to be excavated with its rootwad attached at this site (Figure 3).



Figure 3. Group observation of a mature Douglas-fir tree proposed for excavation into the East Branch of Soquel Creek channel.

Near this reach, the VTAC observed an existing log in the channel that may be related to historic logging activities that is sorting gravels and has scoured a pool (Figure 4).

Stream gradient here is approximately 3%. Kate Sullivan stated that this is the maximum upper end where these types of projects can be expected to be successful. There was discussion of possibly developing a dichotomous key to help landowners and RPFs determine where different types of management and stream enhancement work can be expected to be successful, while enhancing riparian functions.



Figure 4. Group observation and discussion of an existing large log in the East Branch of Soquel Creek.

#### **Field Stop 4. Engineered Large Wood Placement Along the East Branch**

At this site, Pete Cafferata explained that there will be construction of a log-vane structure (Figure 5). This structure will be anchored by a combination of large rock (1 to 2 tons) and overburden to reduce near-bank velocities, and it is intended to facilitate development of lateral bars for sorting of spawning gravels. The log vane structure will be augmented with large rootwads, which will provide additional cover at the plunge pool that typically develops at the immediate downstream end of the structure.

This site was selected since Hihn's Mill Road is very near the channel and past erosion of the streambank has occurred. In addition to improved habitat for listed



Figure 5. Discussion at the site of a proposed log-vane structure in the East Branch.

fish species, the goal is to use the log-vane structure to protect the road, diverting water away from the road prism.

The group discussed the likely success of this structure, as well as a more general discussion regarding the need for knowledge of watershed-scale limiting factors to inform decisions for Section V projects at the reach scale. Watershed-scale information can be obtained from air photos, existing reports (e.g., NCWAP reports), old THPs, pre-consultation with agency representatives, etc.