

## **TOUR ITINERARY**

### **Feather River Coordinated Resource Management Group Steering/Management Committee Spring 2007 Meeting**

**Meeting Time:** No Meeting

**Lunch:** 1 pm @ Casa Carmelita Mexican Restaurant in Portola

**Tours:** Wednesday, November 7th, 10 am- 4 pm (see below for more details)

**Reasonable Accommodations:** In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting or tours please contact the Feather River Coordinated Resource Management Watershed Coordinator at (530) 283-3739, ext. 106.

### **Tour Itinerary**

**Tour on Wednesday, November 7<sup>th</sup>. Be prepared for cold and wet conditions; project areas may be muddy. Meet @ Park and Ride at junction of Hwy. 70 and Hwy. 89 at 10 am; we will carpool from there.**

#### **10:30 Raap-Guidici and Boulder Creek Projects**

Raap-Guidici Creek and Boulder Creeks are a tributaries to Sulphur Creek. The Sulphur Creek stream channel has cut down approximately eight feet, lowering the base elevation throughout the valley. The base elevations of all tributary streams are now dropping to match that of the main Sulphur Creek channel, increasing the extent of the entrenched system, including Raap-Guidici and Boulder creeks. The *Sulphur Creek Watershed Analysis* (FRCRM, 2004) and *Sulphur Creek Watershed Restoration Strategy* (FRCRM, 2005) have ranked these projects as high priority because of the high risk of increasing bedload quantities to Sulphur Creek, further destabilizing that channel. The project treats Raap-Guidici Creek and Boulder Creek by restoring stream channel and floodplain functions, such as reducing flood impacts and maintaining sediment storage features and functions. In addition, aquatic and riparian habitats will be restored, along



with the fisheries.

Recently constructed in Aug/Sept. of 2007 the Raap-Guidici project occurs within the Whitehawk Ranch properties owned by Ronald Raap and Mike Murry. The Raap portion of the project was completed this year, obliterating the entrenchment with a series of soil plugs and ponds (soil borrow sites) and restoring surface water flow to an existing remnant channel and floodplain system. The Raap-Guidici

Creek merges with Boulder Creek just before flowing into Sulphur Creek. The project merges the two streams further up valley than presently in a natural, shallow depression before flowing over a large grade control structure constructed of rock and soil and covered with transplanted sod and willow shrubs. The upstream portion of the project on Mike Murry's property and the Boulder Creek Project will be constructed in 2008. Raap-Guidici is funded by the Secure Rural Schools and Community Self-Determination Act of 2000, Public Law 106-393 (Plumas County Resource Advisory Committee (RAC)). Total project budget is \$170,720 with \$39,145 in match contributions from landowners, watershed monitoring volunteers, and technical assistance from agency partners (Dept. of Water Resources (DWR) and Calif. Dept. of Fish & Game (CDF&G)). Funding for Boulder Creek is provided by the State Water Resources Control Board Proposition 40 Non-Point Source Pollution Control Program. Total project budget is \$243,725, including \$168,725 of the Raap-Guidici RAC grant as match.

### **11:30 Smith Creek**

Currently under construction, the Smith Creek Restoration Project encompasses 30 acres of private lands owned by ten separate landowners, comprised of an upper meadow section and a lower bank treatment section. The upper meadow section is a 4,000-foot reach of entrenched channel averaging five feet or more in depth and 121 feet wide. This portion of the project will restore the stream channel and meadow floodplain functions utilizing the pond and plug technique. The lower section of the project consists of a 100' eroding outcurve bank, which will be treated with rock vanes, construction of a small floodplain bench, and vegetation (willow transplants). The State Water Resources Control Board Proposition 40 Non-Point Source Pollution



Control Program is funding this project with match contributions from the landowners and partner agency assistance (Trout Unlimited, DWR, and CDF&G). Total project budget is \$264,000, including \$12,000 in match.

### **1:00 LUNCH @ Casa Carmelita Mexican Restaurant**

### **2:30 Little Last Chance Creek**

The Little Last Chance Creek project consists of two separate project areas in Sierra Valley. The upstream project is on private lands owned Don Guidici and includes some public land on Plumas National Forest (PNF). The downstream project occurs

solely on private lands owned by six separate landowners (Goss, Bertrand, Ramelli, Leslie, Tolotti, and Rockridge LTO).

The restoration concept on the Guidici portion is to lay back and re-vegetate the vertical banks, and install boulder vanes to direct flows away from the banks. Most of the erosion is located on meander bends, with relatively stable sections between the bends. Only the discreet areas of bank erosion will be treated. In three locations where the meander bends are very sharp, the existing meander channel will be cut off, similar to natural avulsion, with flows re-directed into remnant channels existing within the inset



floodplain. The somewhat steeper slopes of these remnant channels will be treated with rock weir grade controls. All treated banks would be sloped at an angle of 2:1 or less, to encourage vegetative cover, but discourage cattle access. All disturbed areas will be mulched with weed-free hay, seeded with native grasses and sedges, and reinforced with willow transplants. The riparian area will be rested from cattle grazing for one to two years following construction. The

existing fence will be moved back to accommodate bank sloping, with the addition of two perpendicular arms extending down to the bank to discourage cattle trailing.

The restoration concept on the North and East branches of Little Last Chance Creek is to raise the base level of the channel uniformly throughout the reach by raising

98 riffles up to within two to three feet of the meadow surface. The overall design on the North and East branches seeks to balance landowner concerns with channel/floodplain function. Landowner objectives include restoring some of the functional elements of the channel while minimizing channel flooding. The functional elements include maintaining the base level high enough to achieve some groundwater recharge and vegetative cover on the banks for stability.



Riffles will be built with 2-foot-minus pit run material. Vegetation plantings with willow transplants and native grasses and sedges will be used to further stabilize eroding banks. In addition, some landowners are working

with the Natural Resources Conservation Service (NRCS) on fencing and grazing management prescriptions within the project area.

Funds from the Plumas County RAC were awarded in 2006 to implement the project on the Guidici Ranch. Total project budget for the Guidici project is \$195,500 with \$20,500 in match contributions from PNF, landowners, and agency assistance (DWR and CDF&G). The Plumas Watershed Forum funded implementation of the riffle augmentation project on the lower portion of the North Branch, with funds from the State Water Resources Control Board Proposition 40 Non-Point Source Pollution Control Program paying for the remainder of the riffle augmentation on the North Branch and the East Branch above Highway 70. Total project budget for the riffle augmentation is \$941,460, which includes Forum, Prop. 40, and match contributions from landowners, RAC, PNF, Natural Resources Conservation Service (NRCS), and partner agency assistance (DWR, CDF&G, and the Sierra Valley Resource Conservation District (SVRCD)).