Trinity County Erosion and Sediment Control Best Management Practices Workshop

June 6, 2016 | Weaverville, CA

Salmonid Restoration Federation in collaboration with the CA Department of Fish and Wildlife, Pacific Watershed Associates, and the Five Counties Salmonid Conservation Program are offering a BMP workshop and field tour of erosion control sites in Trinity County on June 6.

Time: 9am - 5pm

Location: Fire Hall Room, Weaverville Fire Department.

The workshop will cover identifying and evaluating sediment sources, assessing environmental impacts, creating erosion control and prevention plans, designing and evaluating grading plans, and the environmental permitting application process.

Part I) 9:00-10:30
Introduction to roads, environmental impacts related to roads, identifying and characterizing sediment sources on road systems.

(1) Elements of a road
(2) Some potential environmental impacts from road systems
    - Sediment delivery to streams
    - Disruptions to hillside hydrology and alteration of a streams hydrograph
    - Fish barriers
    - Road encroachment and Riparian disturbance
    - Road related landslides
(3) Maintenance issues or environmental protection issues: Sediment erosion vs sediment delivery
(4) Jahnsian steps to engineering geology: Identify, characterize, analyze, and mitigate
(5) Identifying and characterizing sediment sources from road systems
    - Episodic erosion
        - Cutslope landslides
        - Fillslope landslides
        - Stream crossing erosion
        - Stream crossing washouts
        - Stream crossing diversions
    - Chronic erosion
        - Cutslope rilling and gullying
        - Fillslope rilling and gullying
        - Road surface rutting and gullying
(6) Prioritizing road related features for implementation
    - Considerations

Problem types: Fish barrier, stream crossing performance, potential sediment delivery, landslides, chronic erosion
Likelihood of sediment delivery
Future volume of sediment delivery
Biologic importance of receiving waterbody

Part II) 10:30-12:00
Creating erosion control and prevention plans for roads and road systems

(1) Considerations for choosing your approach to road storm-proofing
Available funding, design vehicles, future road uses, weather issues, long term planning, stacking functions, material availability

(2) Top road upgrading/decommissioning priorities for environmental protection
Removing fish barriers
Preventing stream diversions
Preventing stream crossing washouts
Reducing chronic road erosion

(3) Choosing the most appropriate treatment options for your road system
(Benefits, limitations, relative costs, relative levels of effort)
Stream crossings
Culverts
Bridges
Armored fills and fords
Decommissioning
Temporary crossings
Landslides
Direct excavation
Buttressing
Road drainage
Road shaping
Ditches and ditch relief culverts
Rolling dips
Waterbars

(4) Performance standards and BMP designs for road upgrading and decommissioning
Stream crossings
Culverts
Bridges
Armored fills and fords
Decommissioning
Temporary crossings
Road drainage features
Road shaping
Ditches and ditch relief culverts
Rolling dips
Waterbars

Part III) 12:00
Lunch and Afternoon Field Tours