

# Ecological Restoration – Inyo National Forest

## Overarching Goals

- Reduce fuel loading especially around communities and other areas of high visitor use
  - Stabilize stream banks and riparian areas
  - Restore Meadow function and resilience
  - Reduce offsite erosion and stream sedimentation associated with visitor use
  - Restore T&E species habitat (Mountain Yellow Legged Frog, Whitebark Pine, Sage Grouse, Tui Chub)
  - Improving water quality and stabilize (attenuate) flood flows
  - Control or eradicate non-native plants
1. **Goal:** To retain and store ecological resilience and provide a broad range of services to organisms and humans (4+ million visitors/year). Provide clean water and natural landscapes.  
**Challenges/Opportunities:** A. Managing visitor access while providing for needed ecological services. B. Reducing fuel loading around communities and other high visitor use areas.  
**Need:** Most landscapes (watersheds) are in relatively good condition (as displayed in the Watershed Condition Assessment completed in 2011). The need is to keep our landscapes in good condition to provide necessary ecological services. An additional need is to repair/restore damaged landscapes to proper functioning condition to provide satisfactory ecological services.
  2. The Forest has a variety of projects designed to meet ecological restoration goals in FY12-13. These include:
    - Red's meadow blowdown repair (fuel reduction, road and campground repair and trail tread repair) (Planning and implementation in FY12-13 and likely beyond)
    - Mt. Whitney trail repair and watershed stabilization (Implementation in FY12)
    - Roads/OHV – route closure, and mitigation (on-going implementation of 2009 TM EIS decision FY12-13 and beyond)
    - Unauthorized route decommissioning (Planning in FY12-13, Implement in FY13 and beyond)
    - Deadman Road – watershed repair including treatment of hydrologically connected segments (Implementation in FY12)
    - June Mountain Vegetation Management implementation (Implementation in late FY12 and beyond)
    - June Lake Loop fuel reduction project (Planning completed in FY12, Implementation in FY13 and beyond)
    - Sherwin- Scenic Loop fuels reduction (Planning completed in FY12, Implementation in FY13 and beyond)
    - Mammoth Lakes Basin Fuel Reduction (Planning completed in FY12, Implementation in FY13 and beyond)
    - New Jeffery Pine Healthy Forest Fuel Reduction (Planning completed in FY13, Implementation in FY13 and beyond)
    - Crowley Communities fuels reduction, (Planning completed in FY13, Implementation in FY13 and beyond)
    - Portals fuels Reduction, (Planning completed in FY13, Implementation in FY13 and beyond)
    - Kern Plateau Meadow restoration and stabilization (Implementation in FY12-13 and beyond)
    - Mammoth Meadows meadow restoration (Implementation in FY12)
    - Mountain Yellow Legged Frog Habitat Restoration and fish removal (Planning and Implementation in FY12-13)
    - Forest Wide noxious and Invasive Weed environmental assessment (Finalize planning in FY13, Implementation in FY13 and beyond)
    - Aspen Enhancement Environmental Assessment (Finalize planning in FY13, Implementation in FY14 and beyond)
    - Black Canyon OHV watershed repair (Finalize planning in FY12, Implement in FY13 and beyond)
    - Sage grouse habitat restoration (Planning FY12, implementation in FY12-13 and beyond)

- Hilton Lakes Trail/watershed repair and decommissioning (Finalize planning in FY12, Implement in FY13 and beyond)
- Golden Trout Conservation Strategy (FY12-13 and beyond)
- Glass Mountains meadow restoration (update NEPA in FY12-13, Implement in FY13 and beyond)
- Oak Creek gully stabilization planning (Planning in FY12-13, Implementation in FY13 and beyond)
- Lamarck Lakes trail/watershed repair and stabilization (Inventory and planning in FY13, Implementation in FY14 and beyond)

### Tactics to increase restoration

The Forest has been steadily increasing and/or maintaining a high level of restoration work in recent years. Internal capacity constrains our ability to take on additional partnerships. To further increase restoration capacity, the Forest is working with partners and partners are taking on a greater role of writing grants to fund and complete priority work on Forest land. (Examples include Americorps and Student Conservation Association applying for National Forest Foundation grants and the Inyo/Mono Integrated Regional Water Management Group (IRWMG) and Ft. Independence Tribe applying for Prop. 50 funds for planning the restoration of Oak Creek gully).

The Forest is working on maintaining existing partnerships for successful restoration efforts now and into the future.

To increase ecological restoration the Forest needs to continue to develop a long-term strategic “vision” of ecological restoration needs to assist in developing needs and securing funding.

The Forest is working with the BLM in an “all-lands” approach to fuels/vegetation management projects. This is facilitated by two interagency fuels planners and interagency vegetation management specialists.

The Forest is beginning analysis of Oak Creek gully with the Natural Resources Conservation Service, Bureau of Reclamation, and the Ft. Independence Tribe (among other stakeholders) to determine suitable restoration techniques.

The Forest manages the majority of land in the headwaters and throughout the watershed in the East Sierra and the part of the Forest that is in Nevada. There are comparatively few opportunities to work with other land managers with similar restoration objectives. This presents challenges for the Forest.

### Integration of Program Budgets

For FY12 integrated projects and targets were identified and will be funded through a variety of funding authorities. The Forest has also acquired outside funding to accomplish planning and implementation of vegetation management projects. Examples include: Funding from June Mountain to complete a vegetation management plan and Environmental Assessment and funding from the Sierra Nevada Conservancy (SNC) to implement a fuels reduction project.

### Ecological Restoration Projects:

- **Stream crossing hardening in the Coyote area:** This project implemented stream crossing hardening treatments as specified in the Travel Management EIS (2009) in the Coyote area. The Forest utilized State of California OHV grant monies as well as Legacy Roads and Trails to fund this project. The Forest utilized partners and volunteers such as Friends of the Inyo to implement this project. This project will limit the amount of sediment entering perennial and intermittent stream channels and stabilize adjacent meadow systems.
- **Route Closures (Forest Wide):** This project implemented route blocking and closures as specified in the Travel Management EIS (2009). The Forest utilized State of California OHV grant monies as well as Legacy Roads and Trails and other appropriated funds to fund this project. The Forest is working closely with Friends of the Inyo as well as other volunteers to implement this project. This project closes and partially restores routes that were identified as causing risks to watershed function, aquatic and terrestrial wildlife habitat, Wilderness values and heritage resource sites among other reasons.
- **Horton Creek Mud bog:** This project implemented hardening of a wet meadow/bog area adjacent to Horton Creek. The Forest utilized Legacy Roads and Trails as well as appropriated funds to complete this project. This project protects water quality, enhances and protects wet meadow habitat and vegetation.

### NEPA ready projects:

- **Aspen Enhancement** – The Forest would likely pick a discrete geographic area like the Glass Mountains area to finalize NEPA.
- **Hilton Lakes Trail stabilization/meadow restoration project** – NEPA is complete. The Forest is currently identifying partners (such as Americorps and Friends of the Inyo) and funding

sources to implement this project in FY13 and beyond.

- Lamarck Lake Trail/Watershed stabilization: Additional money and/or partnerships would allow the Forest to inventory and plan this project in FY13.
- Glass Mountains Meadow Restoration: The Forest is in the process of updating the NEPA. Additional resources are needed to implement this project. The Forest is in the process of identifying partners and applying for grants to help implement this project.
- Weed EA – Additional money and/or partnerships would allow the Forest to treat additional acres.
- Fuels projects: The Forest has several on-going fuels/vegetation management projects. Additional resources would allow the Forest to complete the projects in a timely manner.

The following projects do not yet have NEPA completed but are important for achieving ecological restoration goals:

- Lee Vining campground evaluation – Several campgrounds and associated infrastructure are impacting meadow and stream habitat. There needs to be a comprehensive evaluation of the campgrounds to determine opportunities for moving and/or decommissioning sites and improving watershed function.

- Monache Meadow – South Fork Kern River – The River is severely downcut through the majority of Monache Meadow (approximately 5 miles) impacting meadow and aquatic habitats. A large scale planning effort is needed to determine suitable restoration techniques compatible with existing range management and recreation uses.
- Oak Creek Gully – Both the North Fork and South Fork of Oak Creek suffered damage and downcutting during a 2008 thunderstorm. The Forest is engaged with the Ft. Independence Tribe, Bureau of Reclamation and the Inyo/Mono Integrated Regional Water Management Group (IRWMG) in acquiring funding and assistance with collaborative planning to address restoration needs.
- Forestwide Weed EA – Supplement – This project would update the existing Weed EA and allow the Forest to treat additional acres of invasive and noxious weeds.
- Kern Plateau Grazing management EIS – This project is looking at four grazing allotments on the Kern Plateau. We are currently engaged in a collaborative public process and the ID Team is developing a draft proposed action.



Mud Bog on Bishop Analysis Area, pre-implementation site visit and final project design.



Project near completion with an extra layer of cobble on top of the crush to facilitate proper drainage.



Smoothing the road for drivability.



Completed rock causeway project to protect water quality, riparian resource and provide for a sustainable driving surface.



Putting the final touches on a seasonal closure gate near the Boy Scout Mine on the Mono Lake District (Road #02N135 ).



Finished seasonal gate on Road # 02N135. The closed gate will prevent wet weather traffic on the road, minimizing rutting and potential off-road erosion and stream sedimentation.



Pre-implementation site visit on Trail #31E301.



Drainage hardening at seasonal stream crossing to prevent erosion and further headcutting on Trail #31E301.