

**NFWF CONTACT** 

Jim Bond

Manager, Southern California Forests jim.bond@nfwf.org 415-243-3107



#### **Forest fire, Angeles National Forest**

#### **OVERVIEW**

The National Fish and Wildlife Foundation (NFWF) and Angeles National Forest announced a 2017-year round of funding for Angeles National Forest – Wildfires Restoration Grant Program projects. Fifteen new grants totaling \$2.5 million were awarded, generating \$1.6 million in match from the grantees, providing a total conservation impact of \$4.1 million.

A series of wildfires — the Copper Fire of 2002, Sayre Fire of 2008 and Ranch Fire of 2007 — burned approximately 37,000 acres of national forest lands and left a significant impact on the landscapes, watersheds and ecosystems of the region. The Angeles National Forest has partnered with NFWF to restore the watersheds and ecosystems affected by these wildfire events. Through this program NFWF will invest in projects that improve the Angeles National Forest's capacity to evaluate and restore the watersheds and ecosystems affected by fire, provide sustainable and lasting ecological benefits, promote ecological resilience to future wildfire events, inform efficient post-fire restoration through innovation, and increase awareness and understanding of fire's impact in Southern California landscapes.

The 2017 grant awards represent an exciting and innovative approach to targeting a wide array of landscape-scale planning, implementation and monitoring needs. The program's investments will incorporate a variety of integrated and complementary improvement, protection and rehabilitation strategies to maximize restoration impact in the watersheds affected by these fires.

The National Fish and Wildlife Foundation (NFWF) protects and restores our nation's fish and wildlife and their habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds. Learn more at www.nfwf.org

#### NATIONAL HEADQUARTERS

1133 15th Street NW Suite 1000 Washington, DC 20005 202-857-0166



# Angeles National Forest – Wildfires Restoration 2017 Grant Slate



## Developing a Decision Support Tool for Post-fire Restoration in Angeles National Forest

Grantee: University of California – Davis University of California – Davis will develop a postfire restoration tool for resource managers focusing on the Copper, Ranch and Sayre fires. The project will result in the creation of a decision-making framework tool to identify priorities for postfire restoration, maps of spatially explicit restoration priorities in the fire scar areas and a corresponding suite of native species for restoration activities. Restoration activities will be developed in a subset of priority areas.

#### Developing Strategies to Prevent and Address Pathogen Species Introductions in Angeles National Forest

Grantee: U.S. Forest Service –

Pacific Southwest Research Station

U.S. Forest Service - Pacific Southwest Research Station will develop a plan to prevent and manage inadvertent Phytophthora pathogen introductions. The project will evaluate the incidence and impacts of Phytophthoras in disturbed and undisturbed sites on the west side of the Angeles National Forest to determine which, if any, Phytophthora species are already present, determine the extent of damage on native or previously installed plants and assess the importance of several environmental characteristics on the likelihood of Phytophthora survival.

## Assessment, Prioritization and Planning for Restoration Activities in the Angeles National Forest

Grantee: Environment for the Americas Environment for the Americas will provide detailed information about the post-fire conditions on the Sayre, Copper and Ranch burn areas to support effective restoration, revegetation and conservation projects. The project will utilize an innovative approach that integrates NASA's next-generation technology for mapping vegetation with on-the-ground verification of plant communities and faunal presence. The results may be used to develop a plan that identifies areas of greatest need for protection, revegetation and restoration.

## Southern California Conservation Corps Angeles National Forest Restoration Project

Grantee: American Conservation Experience American Conservation Experience will work in a collaborative Corps partnership to advance a wide array of post-fire restoration project activities located in areas burned and affected by the Copper, Ranch and Sayre fires. The project will focus on non-native invasive vegetation removal, control and eradication; seed collection and propagation; micro-trash removal; and trail system improvements.



# Post-fire Chaparral Restoration in Angeles National Forest

Grantee: National Forest Foundation The National Forest Foundation will focus on restoration efforts of native chaparral and coastal sage scrub plant communities lost to fire, and removal of invasive plants in the Copper, Sayre and Ranch fire burn areas of Angeles National Forest. The project will address weed eradication, collection of propagules for storage, propagation of plants for restoration, research and monitoring of chaparral restoration, sharing of chaparral restoration methods, education and outreach, and best practices for growing nursery container plants.

# Forest Aid on the Copper and Sayre Fire Scars in Angeles National Forest

Grantee: TreePeople

TreePeople will bring together forestry and community engagement programs to help restore chaparral areas affected by the Copper, Ranch and Sayre fire scars. The project will use innovative techniques for long-term invasive management, and revegetate these landscapes to restore resilient native plant communities, including gathering and propagating seeds to increase local capacity to build plant stocks for current and future restoration work.

### **Stream Condition Inventory in Angeles National Forest** Grantee: Blue Tomorrow

Blue Tomorrow will survey a minimum of eight reaches within the San Francisquito watershed in Angeles National Forest using Stream Condition Inventory (SCI) protocols developed for the Pacific Southwest Region. The project will use survey data to assess habitat conditions (including critical habitat for the California red-legged frog), sedimentation and other impacts from the Copper Fire, stream restoration opportunities, and track the effectiveness of restoration activities.

# Evaluation of Biological Control of Invasive Riparian Plants in River Systems

Grantee: University of California – Santa Barbara University of California will address the needs of riparian vegetation by assessing current impacts of invasive plants to biodiversity and ecosystem function and examining the potential to reduce herbicide use on public landscapes. The project will evaluate the status of invasive plants in riparian systems and examine potential opportunities and feasibility for biological control. Where appropriate, University of California will compile documentation to assist with NEPA planning and provide guidance for future implementation.

#### **Improving Prioritization of Restoration Activities Pre and Post Fire in Angeles National Forest** Grantee: TerrainWorks

TerrainWorks will apply advanced geospatial tools in the Copper, Ranch and Sayre fires creating a quantitative, consistent and replicable method to improve prioritizing restoration activities, targeting aquatic habitats, riparian corridors, post-fire erosion, flash flooding and roads. TerrainWorks geospatial tools will also be developed to be consistent with the USFS Watershed Condition Classification protocols, which will be used to evaluate future program effectiveness.

### Post-fire Fish Community Assessments in San Francisquito Canyon

Grantee: USGS Western Ecological Research Center USGS Western Ecological Research Center will evaluate the fish community in San Francisquito Canyon in order to understand the impacts from the 2002 Copper Fire on the current habitat and fish assemblage. The project will provide guidance to improve, protect and restore/ rehabilitate the fish community within San Francisquito Canyon.

## Environmental DNA to Map Aquatic Species Within Angeles National Forest Fire Scars

Grantee: University of California – Santa Barbara University of California - Santa Barbara will gain information on the presence and distribution of native and non-native aquatic species of interest using environmental DNA. The project will collect water samples from various locations in watersheds within and near the Copper, Ranch and Sayre fire scars, and DNA will be filtered and extracted from these samples and used to determine the presence of the DNA of each species of interest.

#### Assessment of Least Bell's Vireo and Southwestern Willow Flycatcher in Angeles National Forest

Grantee: USGS Western Ecological Research Center USGS Western Ecological Research Center will evaluate least Bell's vireo and southwestern willow flycatcher habitat in the areas affected by the Copper and Ranch fires in San Francisquito and Piru creeks. The project will survey suitable habitats for the presence of least Bell's vireo and southwestern willow flycatchers and the results will determine future management actions for long-term management of these species.

### **Forest Road Inventory and Erosion Assessment in Angeles National Forest** Grantee: Blue Tomorrow

Blue Tomorrow will survey up to 50 miles of forest roads



# Angeles National Forest – Wildfires Restoration 2017 Grant Slate



California red-legged frog

in the Copper, Ranch and Sayre Fire areas to assess the adequacy and effectiveness of road Best Management Practices, identify sedimentation sources impacting aquatic habitat, and evaluate the condition of culverts and other road infrastructure. The project will reveal restoration opportunities that will benefit aquatic habitat and improve future firefighting efforts by identifying road safety and integrity issues in the Angeles National Forest road network.

## Copper Fire Red Legged Frog Community Habitat Restoration and Education

Grantee: Amigos de los Rios

Amigos de los Rios will coordinate efforts among local partners to lead community citizen science events within the Copper Fire area. The project will develop and install interpretive kiosks and associated web content about the Copper Fire restoration area's natural and cultural history, telling the story of the U.S. Forest Service's efforts to restore post-fire habitat for the sensitive and endangered species that this region supports, focusing on California red-legged frog, arroyo chub and unarmored three-spine stickleback.

#### "Good Heart" Chicana/o and Native Science Children's Forest Watershed-Learning Laboratory Grantee: TreePeople

TreePeople will engage students and parents in the restoration and ongoing monitoring of one acre of National Forest land and support the development, delivery and testing of curriculum that is both scientifically contemporary and inclusive of Native American ancestral knowledge. The project will include management of invasive species, revegetation of chaparral, harvest native seed, and the development of one culturally relevant curriculum unit.