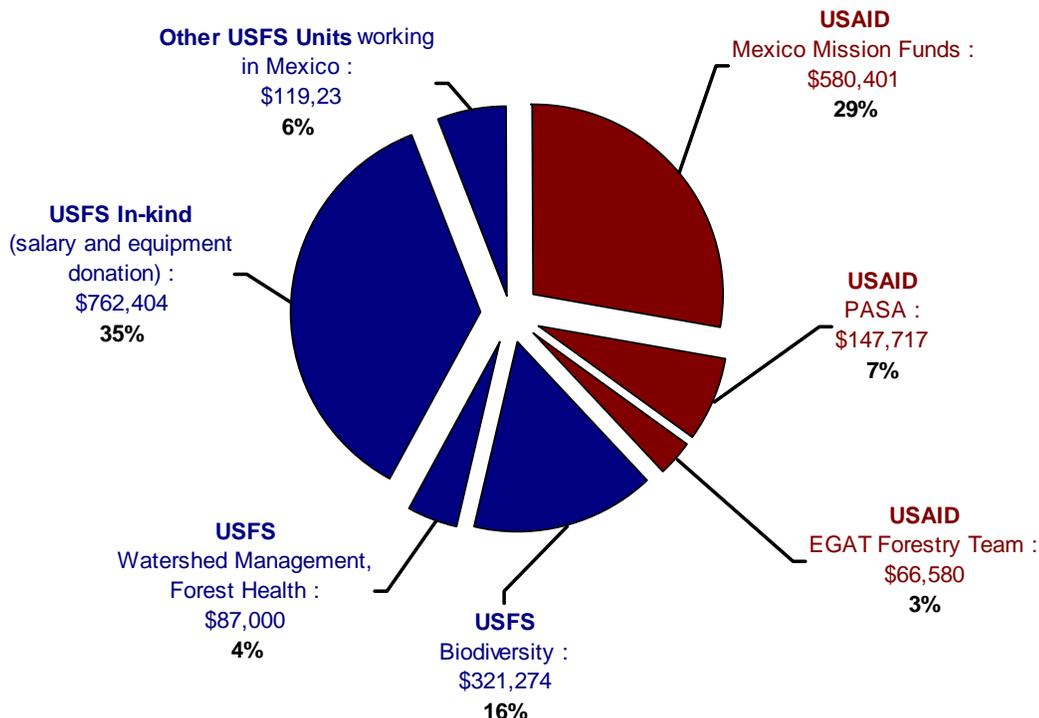


For more than seven years, the United States Forest Service (USFS) has worked side by side with the U.S. Agency for International Development (USAID) in Mexico to improve natural resource management, conserve biodiversity and increase collaboration with partner organizations and institutions. The work of this unique partnership ranges from targeted technical assistance with non-governmental organizations (NGOs) to implementing joint activities with the Government of Mexico and private institutions. Priority areas include watershed management, protected area management, migratory bird conservation, forest health protection and integrated fire management.



In FY 2005, USFS experts completed 48 technical assistance and training visits with the Government of Mexico, NGOs, institutes and communities.

USAID - US Forest Service Partnership Funding Fiscal Year 2005



Total USAID – US Forest Service Funding: \$2,084,499 USD

THE USAID ~ US FOREST SERVICE PARTNERSHIP

MEXICO FIRE PROGRAM:

Wildland forest fire constitutes a significant threat to biodiversity and forests in Mexico. The USAID/USFS partnership strengthens capacity for fire prevention, management and restoration and facilitates greater integration within the growing fire community in Mexico. The main components of the new program are:

- ❖ Strengthen local participation for integrated fire management;
- ❖ Support the development of environmentally sound and economically viable technologies for fire management; and
- ❖ Build on collaboration with Government of Mexico's central fire office focusing on technical assistance and capacity-building.

Activities are carried out in cooperation with the Mexican Nature Conservation Fund (FMCN), as the in-country partner, Government Agencies such as the National Forestry Commission (CONAFOR) and the National Commission for Natural Protected Areas (CONANP) and civil society organizations.

Key Results

- Two Forest Service information technology specialists assisted CONAFOR with the design and development of a fire management tracking database. The resulting database has been designed to track all cooperating entities and trained fire personnel, both current and past employees. This database could serve as a foundation for establishing a certification system for fire management personnel.
- 163 Mexicans trained in safety and effectiveness in fire management operations.
- USFS donated 9,000 pairs of Nomex™ Fire Pants, valued at \$500,000, to CONAFOR for fire personnel.

COMMUNITIES AND MARKETS:

The USFS is working with the Rainforest Alliance, CONAFOR, and other partners to provide technical assistance and market linkage support to community forestry operations working towards sustainability. Currently, the USFS is focusing its efforts in the States of Oaxaca and Durango to complement USAID efforts to strengthen sustainable forest management. Partner identified priority areas for USFS technical assistance included: reduced impact harvesting systems, low-impact rural roads, and strategic planning.

Key Results

- Two Strategic Planning Courses carried out in Durango and Oaxaca. This one-week training course for forestry technicians and community members provides training in reduced impact harvesting including the following topics: basic harvesting systems, road network planning, road design and construction, road location and economic analysis.
- Two USFS technical experts from the USFS Forest Products Lab met with wood producing *ejidos*, communities and others in Durango and Oaxaca to gather information on wood grading systems, oak species utilization, sawing practices, kiln-drying and finished products. Program partners are in the process of defining appropriate next steps for technical assistance and support.

ADDITIONAL US FOREST SERVICE IN MEXICO

WATERSHED MANAGEMENT/FOREST HEALTH:

Sustainable Management of Watershed and Aquatic Resources in Sierra Gorda Biosphere

Reserve: This on-going project seeks to strengthen the capacity of the Grupo Ecologico Sierra Gorda (GESG), a local NGO designated as the Reserve's directorate, in three primary areas: 1) community-based watershed analysis and restoration program development; 2) training teachers in aquatic ecology investigation/monitoring techniques, and field-based curriculum testing; and 3) characterizing stream systems and aquatic resources both in terms of physical and biological parameters. The USFS is assisting in the following areas: design and implementation of aquatic and terrestrial ecosystem inventories; watershed assessment; technical review and assistance in forestry, road/trail improvements, and environmental education.

Key Results

- An interdisciplinary team of USFS experts conducted a field review and prepared a technical report on a major road construction project in progress within the Reserve. Based on the issues identified in the report, GESG has targeted improved road design and maintenance as a priority, and is working with other agencies to develop a workshop to raise awareness.
- The team also worked with GESG staff and the Rio Escanela *ejido* to develop a prototype, community-based watershed analysis and restoration strategy for the upper Jalpan River watershed using GIS data and FY02-03 field data.

Klamath/El Ocote Ecosystem Partnership: The Forest Service is working with protected area staff from the El Ocote Biosphere Reserve to monitor the health of its watersheds and to develop management plans to preserve critical areas and functions. Forest Service experts are assisting with the compilation of satellite and GIS/GPS coverage of the watershed and its tributaries, topography, and land use. Several reservoirs and tributaries are being monitored to collect information on water quality and sedimentation rates. Information is also being collected on aquatic resources through a fisheries inventory and analysis in order to understand what species are present in the watershed and their distribution. In 2005, a 6 person USFS and US Geological Survey team completed a 10 day training and technical assistance session with Reserve staff.

Key Results

- A third year of fisheries inventories has identified 20 fish species and one eel species. The sampling has extended the range of approximately four species which had not been documented in the state of Chiapas.
- USFS staff successfully obtained a grant from the Switzer Foundation for \$23,000 to carry out a year-long fishery study.

Rio Laja Community Watershed Protection Project: The USFS continues to provide technical assistance and support to Save the Laja and several environmental and community health organizations in order to help communities in the Rio Laja watershed carry out activities to restore stream, riparian and watershed functioning. Over the years, the Forest Service has provided technical guidance to treat stream channels with rock structures and tree plantings. Additionally, Forest Service experts have conducted training for representatives of government agencies and NGOs, with continued monitoring and recommendations for community actions.

Key Results

- USFS staff provided technical assistance to Save the Laja in organizational and programmatic project planning for ongoing and future habitat restoration activities in the State of Guanajuato, Mexico. USFS also provided technical instruction in wetland design and restoration to Save the Laja staff.

Development of Pheromones for Bark Beetle Control: Bark beetles in the genus *Dendroctonus* are the most damaging forest pests in North America, responsible for enormous losses of timber and ecologically priceless stands of rare pines. Recent research has shown the potential for pheromones, which are environmentally benign, to protect forest stands from bark beetles. The Forest Service has developed an innovative formulation of the pheromone, verbenone, which has shown promise in tests conducted in Mexico, California and China.

Key Results

- USFS experts continued to assess the efficacy of verbenone and methylcyclohexenone for control of *Dendroctonus mexicanus*, *D. adjunctus*, and *D. pseudotsugae* in Mexican conifer forests and to investigate the causes of lack of oak regeneration in crucial oak woodland watersheds.

BIODIVERSITY CONSERVATION:

Targeting bird species of highest concern: In cooperation with The Nature Conservancy, Ducks Unlimited Mexico, the Audubon Society and Pronatura Noroeste, the Forest Service is working to ensure sound natural resource management for species of highest conservation concern and their wintering habitats. Forest Service experts are working with Mexican partners to complete a *Mexico Shorebird Management Plan* that will outline conservation work along Mexico's coastline as well as a detailed assessment of coastal habitat loss in the States of Sonora and Sinaloa. The Forest Service also addresses trans-boundary conservation challenges by working to restore riparian habitat in the Upper San Pedro Watershed in Sonora and grassland habitat in Chihuahua and Coahuila. Further, the Forest Service supports comprehensive natural resources management training to managers from Mexico, the Caribbean and other Latin American countries.



The following projects were carried out this year:

- ❖ Shortgrass Prairie Birds: Conserving Critical Grassland Bird Wintering Habitat in Northern Mexico
- ❖ San Pedro River Watershed: Restoring and Monitoring Grasslands and Wetlands, Sonora, Mexico
- ❖ Mexico Fire Management Network: Ecological Fire Management in Sonora, Mexico
- ❖ RESERVA: Latin America Reserve Manager Training Program
- ❖ Digital Wetland Change Detection: Sonora, Sinaloa
- ❖ Protecting shorebird habitat in Northern Mexico: A partnership with Pronatura Noroeste

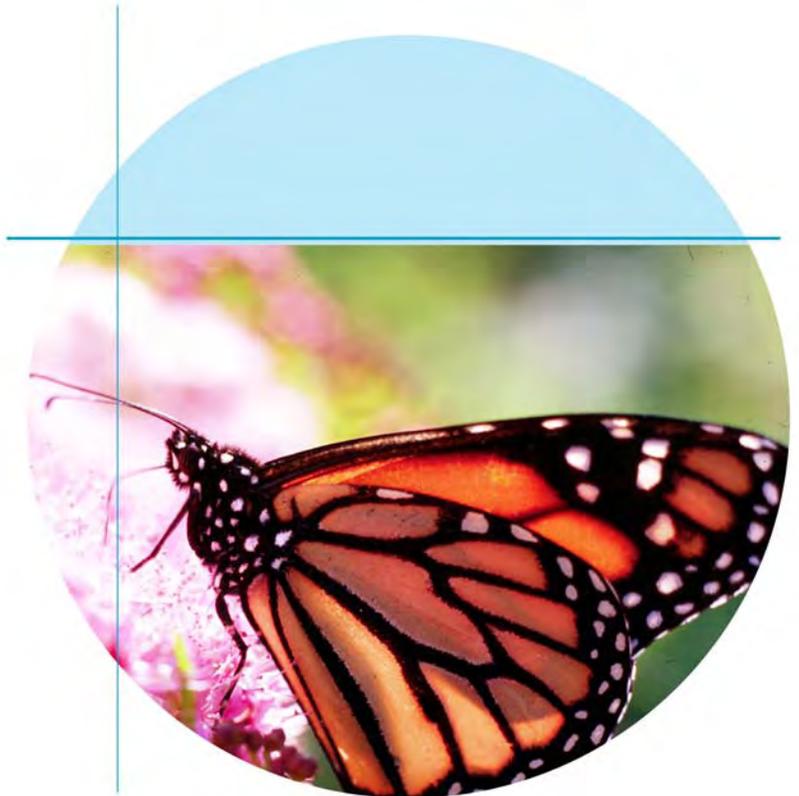
OTHER US FOREST SERVICE ACTIVITIES:



- ❖ The **North American Forest Commission (NAFC)** is one of six regional forestry commissions of the Food and Agriculture Organization of the United Nations. NAFC provides a policy and technical forum for Canada, Mexico and the United States to discuss and address forest issues on a North American basis. NAFC carries out its mandate by supporting research and natural resource management activities through nine working groups that explore issues of concern to the three countries. These working groups include: atmospheric change, fire management, forest products, insects and diseases, invasive plants, silviculture, forest inventory and monitoring, watershed management, and forest genetic resources.
- ❖ The **USFS Forest Health Protection** collaborates with Mexico to address forest health issues of mutual concern such as: identify dwarf mistletoes and other forest pathogens, conduct aerial survey assistance and training, and determine bark beetle impacts on pinyon pine ecosystems.
- ❖ The **USFS Missoula Fire Sciences Lab**, with funding from the National Aeronautics and Space Administration (NASA), is working to develop a daily emissions inventory of CO₂, CO, and CH₄ from biomass fires in the United States, Canada, and Mexico with a 1-km x 1-km resolution from 2001 to 2007.
- ❖ The **USFS Rocky Mountain Research Station** is working to provide science and technical leadership support to Mexican institutions and organizations on issues and problems related to monitoring and assessment for the sustainable management of terrestrial ecosystem resources. This long-term project is working to advance the development and application of geospatial information across ecosystem resource domains and geopolitical jurisdictions.
- ❖ The **USFS cooperates with CONAFOR** and other Mexico partners along the border to address wildland fire and to support bi-national environmental education activities.

LIST OF PARTNERS

- ⊞ US Agency for International Development (USAID)
- ⊞ Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT)
- ⊞ Comisión Nacional Forestal (CONAFOR)
- ⊞ Comisión Nacional de Areas Naturales Protegidas (CONANP)
- ⊞ Instituto Nacional de Investigaciones Forestales y Agropecuarias (INIFAP)
- ⊞ North American Forest Commission
- ⊞ Fondo Mexicano para la Conservación de la Naturaleza (FMCN)
- ⊞ The Nature Conservancy
- ⊞ The Rainforest Alliance
- ⊞ Ducks Unlimited - Mexico
- ⊞ World Wildlife Fund for Nature
- ⊞ Grupo Ecológico Sierra Gorda
- ⊞ Pronatura Noroeste
- ⊞ Save the Laja



FINANCIAL OVERVIEW

In Fiscal Year 2005, \$1,209,272 in USAID funding was available to support activities in Mexico which has been used to leverage a total of \$1,289,801 in Forest Service funding and in-kind support.

ACCOUNT	CARRY-OVER	FY05 FUNDS RECEIVED	TOTAL AVAILABLE	TOTAL EXPENDED as of 9/30/05	REMAINING FUNDS
USAID					
Mexico Mission					
Fire Program	\$339,675	\$400,000	\$739,675	\$575,144	\$164,531
Photoseries	\$68,643		\$68,643	\$5,257	\$63,386
PASA	\$115,965	\$178,749	\$294,714	\$147,717	\$146,997
EGAT Forestry Team		\$106,240	\$106,240	\$66,580	\$39,660
Total USAID	\$524,283	\$684,989	\$1,209,272	\$794,698	\$414,574
USFS					
Biodiversity			\$321,274	\$321,274	0
Watershed Management/Forest Health			\$87,000	\$87,000	0
USFS In-kind *			\$762,404	\$762,404	0
Other			\$119,123	\$119,123	0
Total USFS			\$1,289,801	\$1,289,801	0
GRAND TOTAL	\$524,283	\$684,989	\$2,499,073	\$2,084,499	\$414,574

* Includes USFS salary contribution and \$550,000 equipment donation.

USAID FUNDS:

- ❖ In fiscal year 2005 the USFS received \$400,000 from the USAID Mexico Mission to support on-going fire management activities in Mexico. In addition, a total of \$408,318 was brought forward from FY2004. † At the end of the 2005 fiscal year, \$580,401 had been expended with \$227,917 remaining.
- ❖ The USAID Mexico Mission also provided \$294,714 for Heather Huppe's salary and benefits for fiscal year 2005 and 2006. At the end of 2005, \$147,717 had been expended with \$146,997 remaining.
- ❖ A total of \$106,240 in USAID/EGAT funds went to support community forestry activities and salary.

† Carry-over includes \$339,675 in FY04 Mexico Fire Program funds and \$68,643 in FY04 Photoseries funds.