

Restoring Desert Grasslands

Mesquite Treatments in Southern New Mexico

*Treating mesquite to
allow the return of
native prairie
vegetation,
creating healthy,
vibrant ecosystems
that benefit
wildlife and people*



Mesquite-dominated grassland 1 year after treatment



Mesquite-dominated grassland 3 years after treatment

Of the 15 million acres of desert grasslands in southern New Mexico, about two-thirds (10 million acres) have been invaded by brush species that significantly degrade the habitat. Many BLM grasslands are dominated by mesquite and other invasive plants that established themselves when land was disturbed; much of this disturbance occurred in the late 1800s and has not been addressed until now.

Native brush species once comprised about 10 percent of the vegetation in short-grass prairies, which supported vast numbers of antelope, prairie chickens, and a host of other species.

Today brush makes up 90 percent or more of many areas' plant cover. These ecosystems support much lower numbers of wildlife and livestock, and harm watersheds by exhibiting higher runoff (and flash flooding) during rain events, resulting in much lower soil moisture and groundwater.

The lesser prairie-chicken and sand dune lizard are now candidates for listing as threatened or endangered species. The listing of either species would have significant impacts on a variety of human uses of the land, including ranching, recreation, and energy development.

Case Study: Pecos District

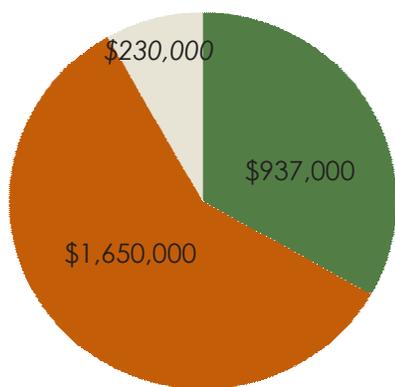
Starting in 2005, the BLM's Pecos District and a variety of partners began large-scale restoration of grassland ecosystems in southeastern New Mexico. In 2008 more than 115,000 acres of mesquite were treated, restoring 55,927 acres of federal lands, 53,286 acres of private lands, and 6,435 acres of state lands.

Once landscapes are transformed, fire will be reintroduced to maintain their health and vigor. A variety of native animals can now be reintroduced to these areas, including antelope, mule deer, wild turkey, and Aplomado falcons.

Partnerships are an essential part of the BLM's restoration efforts. Partners include Soil and Water Conservation Districts, the Natural Resources Conservation Service (Environmental Quality Incentives Program and Wildlife Habitat Incentives Program), the National Fish and Wildlife Foundation, and ranchers and other private landowners.



Pecos District Mesquite Treatments



- BLM One-Time Funding = \$937,000
- BLM Base = \$230,000
- Partner contributions = \$1,650,000

BLM One-Time Funding From:

- Range (1020)
- Soil, Water, & Air (1010)
- Wildlife (1110)
- Threatened and Endangered Species (1150)

Used For:

- Contracts to supply and apply herbicide

BLM Base Used For:

- Planning/NEPA
- GIS mapping & database
- Landscape assessments
- Contract administration
- Pre-Post Treatment Monitoring

Partnership Contributions From:

National Fish and Wildlife Foundation	\$197,000
Natural Resources Conservation Service (private EQIP program)	\$1,050,000
Wildlife Habitat Incentives Program	\$88,000
Private landowners	\$318,000
TOTAL	\$1,650,000

Future Goals

for Restoring Desert Grasslands in Southern New Mexico

Treatment	Future Acres	Estimated Cost/Acre	Total Funding Needed
Creosote	425,000	\$30	\$12,750,000
Mesquite	350,000	\$30	\$10,500,000
Prescribed Fire	60,000	\$30	\$1,800,000
Riparian	2,000	\$1,500	\$3,000,000
Mechanical	1,500	\$500	\$750,000
Defragmentation	300	\$3,000	\$900,000
TOTAL	838,800	\$35*	\$29,700,000

*Average Cost/Acre

