

Habitat Restoration After a Fire in the Middle Rio Grande Bosque

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Save Our Bosque Task Force

Socorro, New Mexico

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A 501 c(3) nonprofit established in 1994

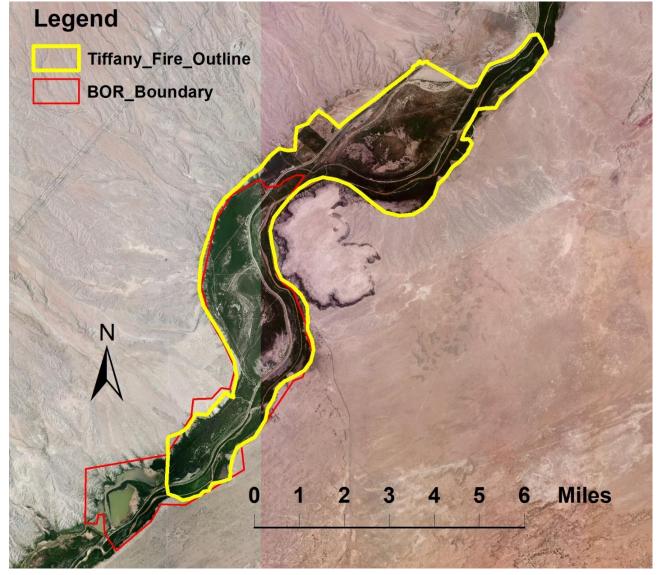
Our Mission - The Save Our Bosque Task Force works to preserve, protect, and enhance the Rio Grande river and its adjoining riparian area (bosque, wetlands, grasslands) while respecting the customs and cultures of the residents of Socorro County to provide for public recreation, allow for historical resource use, and plan for public safety, all within the confines of current infrastructure and political limitations.

Our Vision - We envision a riparian ecosystem that functions as naturally as possible within the confines of the 21st Century infrastructure and political limitations while respecting the traditions and cultures of the citizens of Socorro County.

Our all-volunteer Board consists of 6 members. We have one full-time paid staff member (Program Director).



June 2017: 9200-acre fire caused by lightning 50% private, 50% public (mostly Bureau of Reclamation) Fire was carried by dense stands of *Tamarisk*





Response to the Fire

Along with the saltcedar, hundreds of acres of native riparian habitat consisting mainly of old-growth Cottonwoods and Goodding's Willows were burned. Many individual trees were killed, but some survived and are resprouting.



Immediately after the fire, a group of interested stakeholders came together to rehabilitate the area and restore native trees and shrubs to improve habitat and reduce future fire















Phase 1 Funding

Water Trust Board (Sierra SWCD) – \$466,000

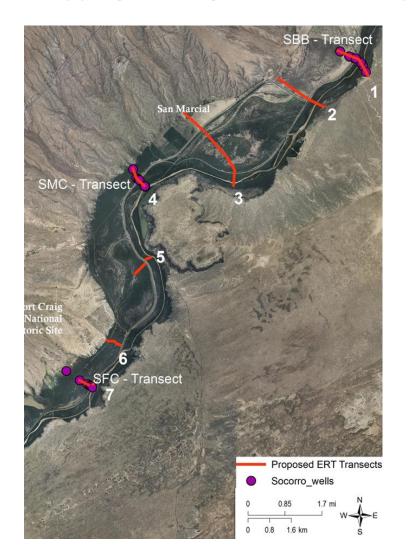
New Mexico State Forestry – \$1,250,000 (~\$900,000 remaining after admin)

Bureau of Reclamation - \$500,000

Total for Phase 1 - \$1,866,000



Analysis – Water Trust Board. LIDAR (BOR, to be completed in May), vegetation mapping (BOR), groundwater analysis (NM Bureau of Geology)



LIDAR: 3-dimensional topography of the landscape. Data is collected leaf-off.

Vegetation mapping – Hink and Ohmart 2016 vegetation classifications – BOR may do more intensive habitat surveys for SWFL and YBCU

Groundwater analysis: Electrical Resistivity
Tomography (ERT) – Determines the depth of the
water table by generating a current between two
electrodes

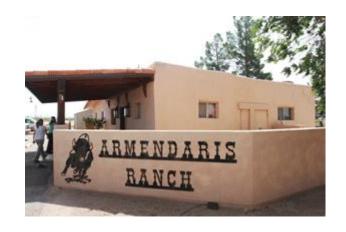
Planning – Water Trust Board. Outreach to stakeholders (particularly private landowners) is a unique aspect of this project. Outreach will include land ownership searches, public meetings, and meetings with landowners.



Historic town of San Marcial – Abandoned in the 1930s due to repeated flooding.

The Middle Rio Grande valley has been occupied by humans for hundreds of years – many cultural sites on the fire footprint.

Turner Enterprises – Largest private landowner in the fire footprint. Providing in-kind match for Partners for Fish and Wildlife project



Site Prep – State Forestry. Approximately \$537,000 has been allocated to site prep, which includes removal of dead and downed trees and spot-spraying of saltcedar and Russian Olive resprouts on approximately 900 acres.

Goal – to prevent the reestablishment of saltcedar on areas that had a good cover of Cottonwoods and Goodding's Willow pre-fire.

Priority:

Hazard tree removal along the levy and major roadways





Compliance – State Forestry and BOR. Archaeological surveys; EPA and ESA compliance

Archaeological surveys have not been completed on much of the project area in over 30 years – could take >2 years to survey the entire 9200 acres. We will start on the north end (private land) and work south.

Southwestern Willow-Flycatcher and Yellow-billed Cuckoo surveys – to be completed by BOR by September. At least 2 dozen SWFL territories were burned up but birds have been observed back at the sites since the fire.







Priority Treatment Areas

- Hink and Ohmart 2016 vegetation classification data
- Priority treatment areas = 930 acres (approx. 10% of total)
- Priority treatment areas have a strong native component (cottonwood and Goodding's willow)
- Access was a factor in choosing priority treatment areas – access is difficult east of the river



Priority Treatment Areas – Vegetation Monitoring

- Vegetation was sampled at multiple locations in each priority treatment area.
- Transects 50mx2m sampling area
- Recorded all woody plants to species along the transect
- Data was collected in July-Sept of 2018





Next Steps

Analysis – Will have LIDAR and groundwater monitoring data this spring

Outreach and Planning – Public information meetings this spring

Site prep – Get on the ground with spot-spraying and mastication this spring if possible – no root raking = no ground disturbance.

Compliance – Begin arc surveys on north end of site (private)

Phase 1: 2018 - 2020

Phase II - Potential funding from the Water Trust Board – Phase II will include more on-the-ground work including habitat restoration of native trees, shrubs and grasses.

