

Montezuma Quail Habitat Restoration Project Update

*Southern Arizona Quail Forever Chapter Meeting
Thursday, February 17, 2022*

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Borderlands Restoration Network



outline

Borderlands Restoration Network

Mission & Programs

Montezuma Quail Habitat

Montezuma Quail Ecology

Threats to Habitat

Restoration Goals

The Project

The Site

Project Details

Accomplishments to Date

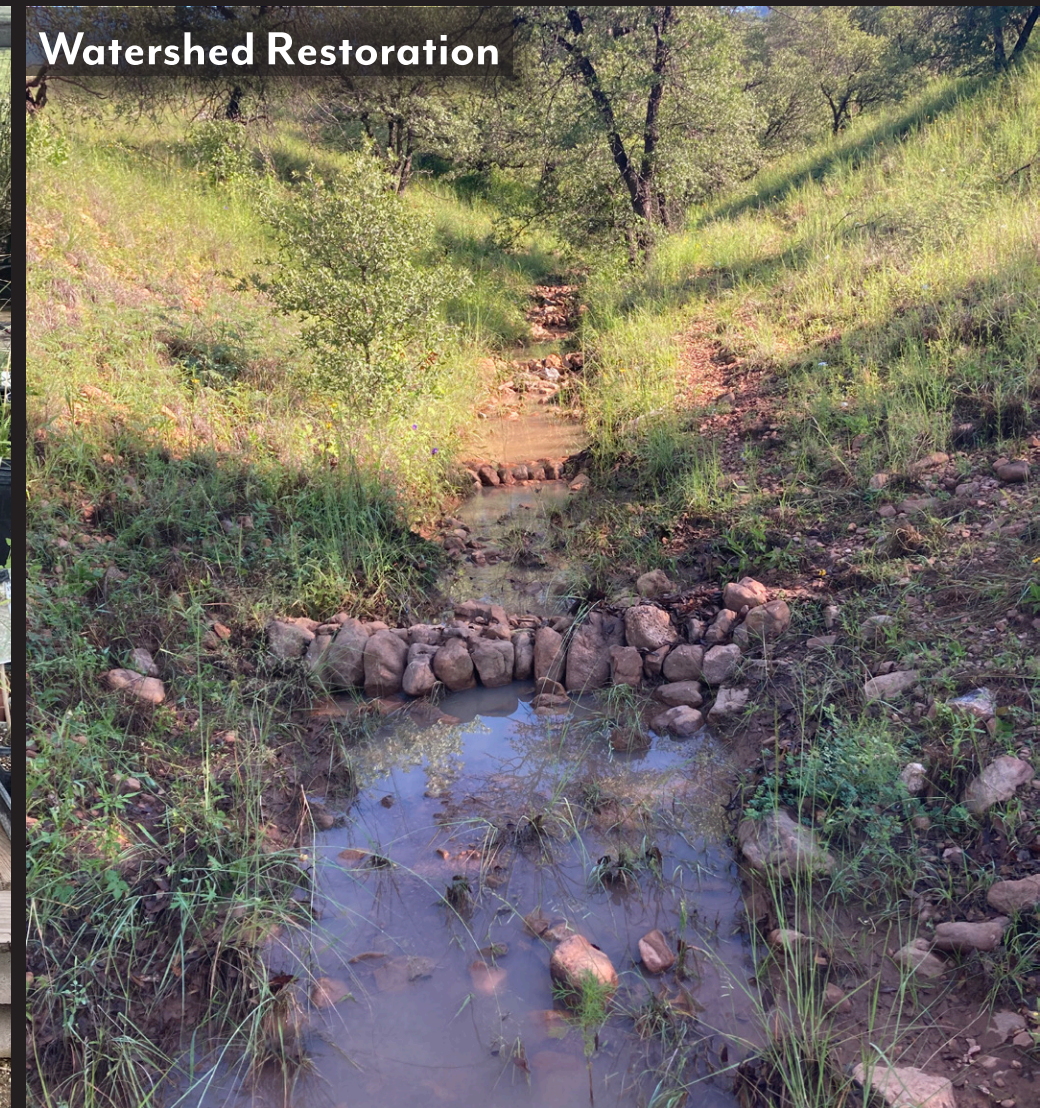
Looking Forward

Conclusion & Questions



Borderlands Restoration Network Mission & Programs

We partner to grow a restorative economy by rebuilding healthy ecosystems, restoring habitat for plants and wildlife, and reconnecting our border communities to the land through shared learning.



The image shows two Montezuma Quail birds standing on a rocky, rocky ground. The bird on the left is facing left, and the bird on the right is facing right. Both birds have brown and white mottled feathers. The background is a blurred, rocky landscape.

Montezuma Quail Habitat

ecology, threats to habitat, restoration goals

Montezuma Quail Ecology

Habitat:

dense semi-arid grasslands with open oak canopy



Native forage:

wood sorrel (*Oxalis* spp.) bulbs



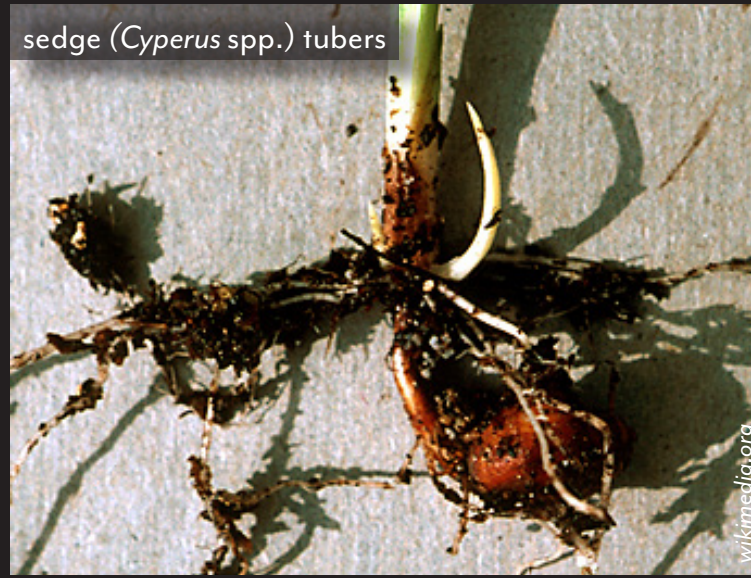
vine mesquite (*Hopia obtusa*) seeds



acorns (*Quercus* spp.)



sedge (*Cyperus* spp.) tubers



perennial bunchgrass seeds



Threats to Habitat

damming, accelerated surface and groundwater extraction, land-use change, shifts in precipitation, prolonged drought

diminished surface water availability

decreased coverage of vegetative species that require wet soil to flourish (wood sorrel and sedges)

less forage for Montezuma quail

fewer Montezuma quail (food limited)

Restoration Goals



1 *Repair hydrologic function:* increase water detention and infiltration in landscape to increase surface water availability and groundwater levels

Restoration Goals



1 *Repair hydrologic function*

2 ***Strengthen ecologic function: enhance vegetative communities that Montezuma Quail need to thrive***

Restoration Goals

1 *Repair hydrologic function*

2 *Strengthen ecologic function*

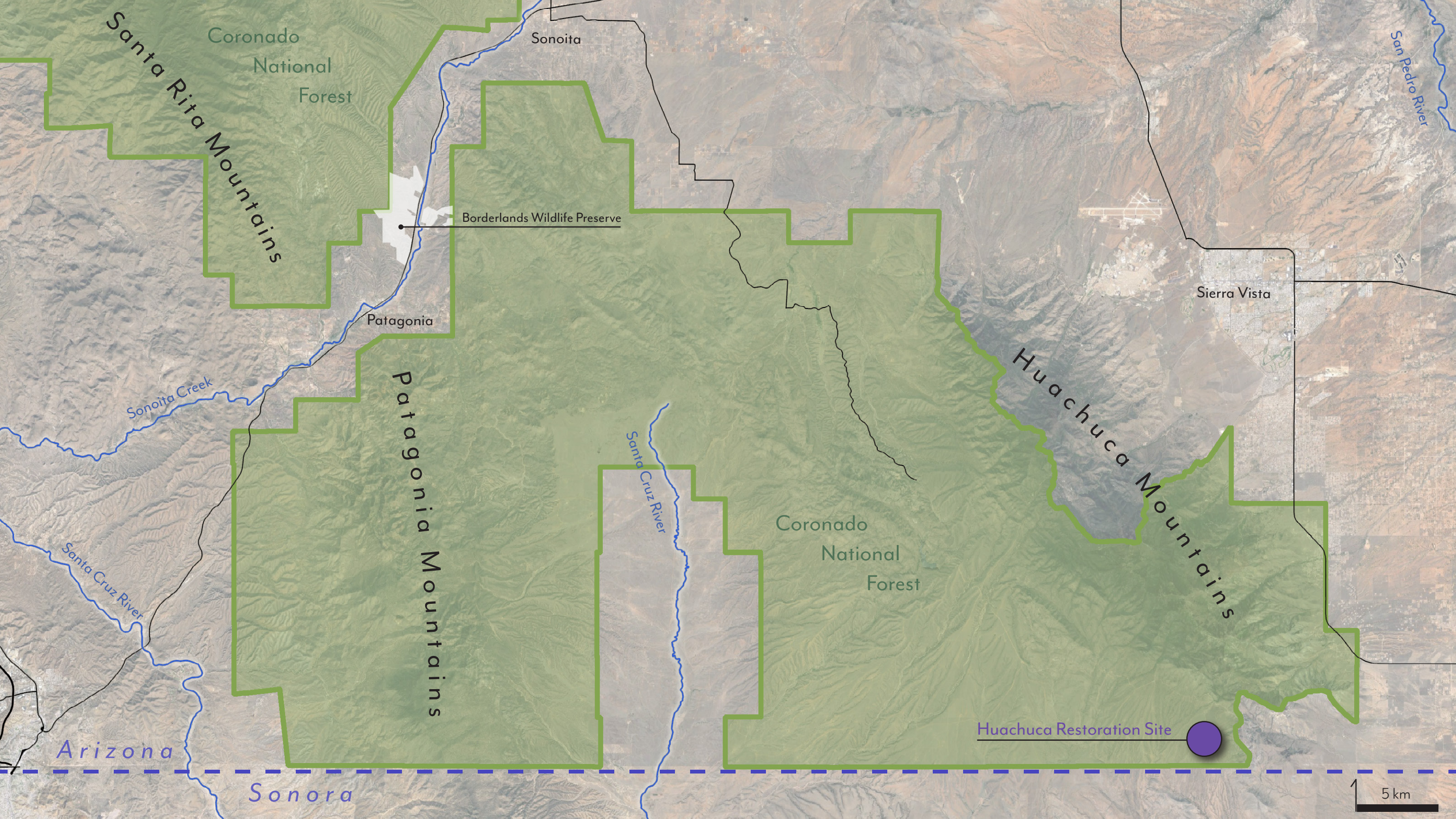
3 **Reconnect people to the landscapes they rely on: promote stewardship through outreach, volunteer events, and paid opportunities**





The Project

project details, the site, accomplishments



Santa Rita Mountains

Coronado National Forest

Sonoita

San Pedro River

Borderlands Wildlife Preserve

Patagonia

Sonoita Creek

Patagonia Mountains

Santa Cruz River

Coronado National Forest

Huachuca Mountains

Sierra Vista

Huachuca Restoration Site

Arizona

Sonora

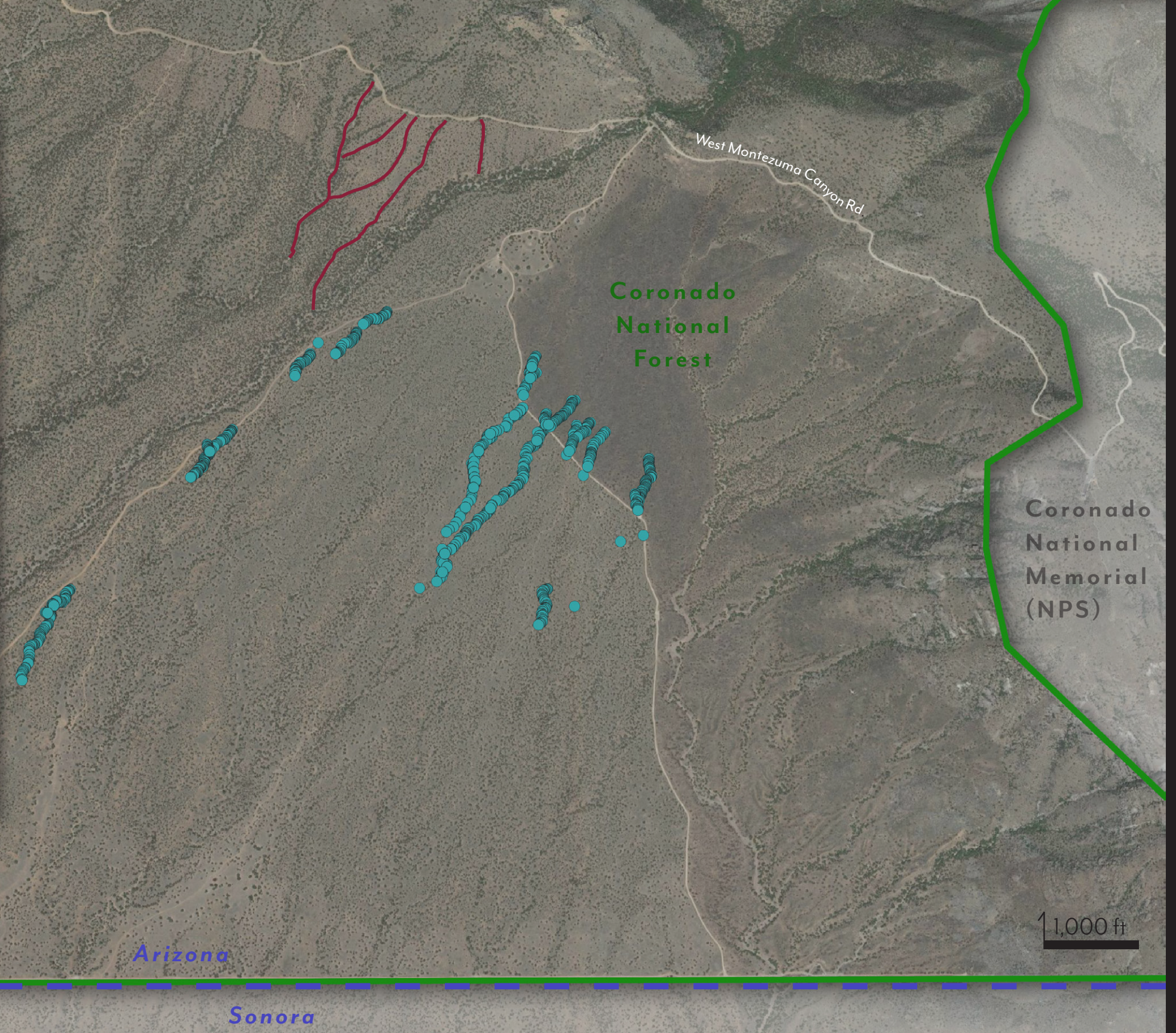
5 km

Legend

- Erosion control structures built Sept. 2020 - Sept. 2021:
 - 709 structures built
 - 13.6 pounds cleaned native grass seed distributed
 - 4 volunteer days completed with SAQF members (thank you!)


- Focus drainages for restoration work Sept. 2021 - Sept. 2022:
 - 135 structures built
 - 5 volunteers engaged
 - 18 lbs native grass seed collected

Since Fall 2020, SAQF and the National Forest Foundation have provided \$142,300 in funding to support this work. THANK YOU!!!



Looking Forward



- Continue building erosion control structures
 - Collect more seed; clean seed; pelletize seed
 - Establish vine mesquite and wood sorrel plots at the BRN nursery
 - Youth crew will build structures in summer 2022
 - Schedule volunteer days with SAQF members
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- The background image shows a stream with a stone structure built across it, likely for erosion control. The water is clear and reflects the surrounding greenery. The stream is surrounded by tall grasses and other vegetation. The overall scene is a natural, outdoor setting.

thank you, SAQF, for your support!

questions?

