Expanding Beaver Habitat in New Mexico with Low Tech Process-Based Restoration

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RIO GRANDE RETURN

Reference Conditions: Jemez Mountains, New Mexico

Beaver-dominated streams have multiple channels and pools that span the floodplain

Current conditions of New Mexico's headwater streams:

Channelized and incised

Poor access to floodplain

Wood and trees/shrubs absent

Only ~7% of streams are perennial

~45% of assessed streams are impaired for water quality

Historic land practices negatively affected water resources

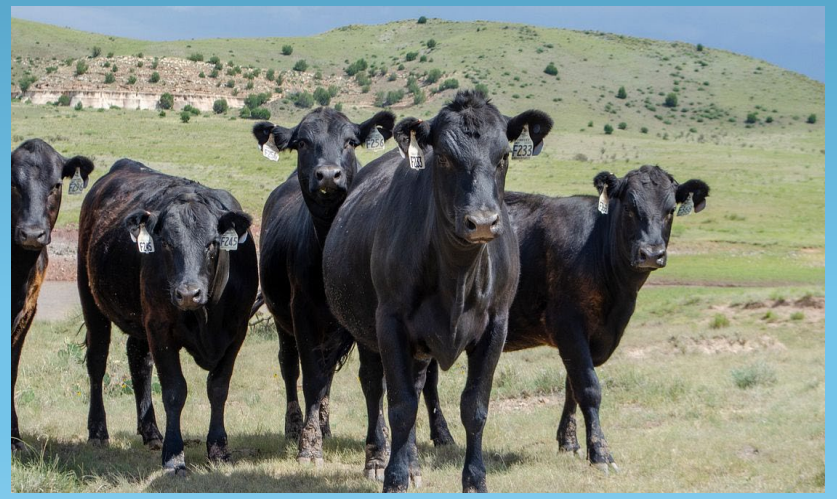
Mining

Logging

Roads

Grazing (sheep, cattle wildlife)

Fire suppression



Santa Fe National Historic Trail

~ 44,0000 beaver pelts exited New Mexico between 1824 - 1842 (Scurlock, 1998)

Low Tech Process-Based Restoration:

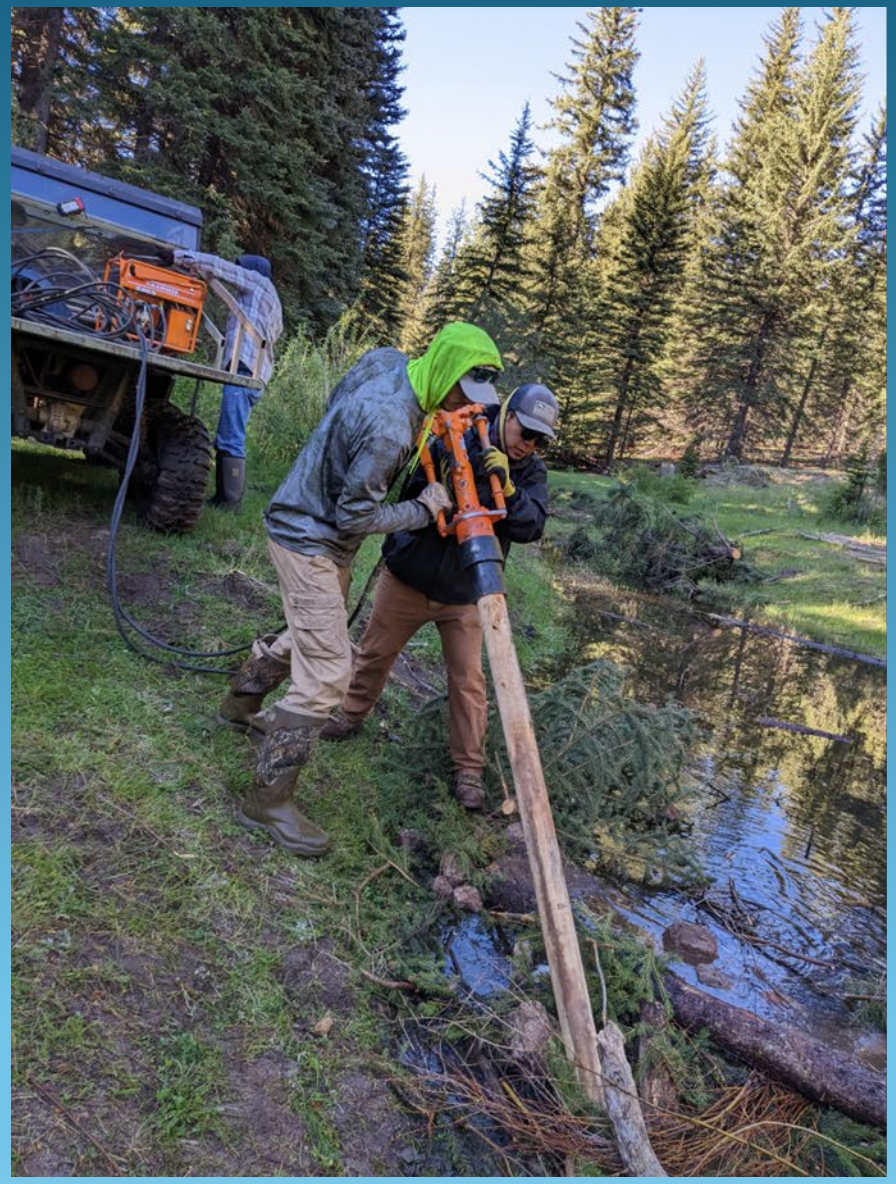
Beaver Dam Analogs

Post-Assisted Log Structures

Large Woody Debris

Rio Grande Return constructed and maintained 4,000 structures on 15 stream-miles since 2020

Beaver Dam Analog, San Antonio Creek



Beaver Dam Analog, Rito Peñas Negras

Post-Assisted Log Structure, Polvadera Creek

Planted 600,000 willows/aspens/ cottonwoods

Constructed fences around 150 acres to protect plants from grazing

Completed 50 projects

Employed 3 Full-time crews

Engaged 200 volunteers annually

Upstream of Beaver Dam Analog,
San Antonio Creek

Goal: Increase the scale and pace of low tech processed-based restoration to impact entire mountain watersheds

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RIO GRANDE RETURN

REVITALIZING THE REGENERATIVE CAPACITY OF DAMAGED ECOSYSTEMS