

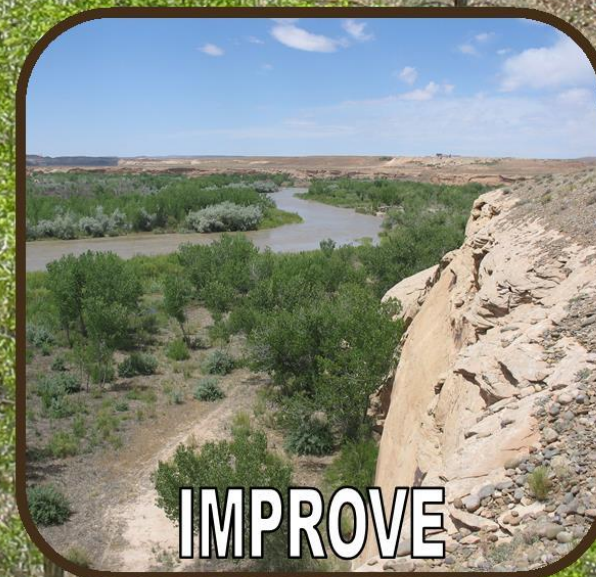
San Juan River Reserve Treaty Rights Land (RTRL) Project



PREVENT



ENHANCE



IMPROVE



RESTORE



San Juan River project area pre-treatment

OVERVIEW

The San Juan River RTRL project is collaboration between the BLM and Navajo Nation BIA. The mission is to treat approximately 300 riparian acres per year over the next 5 years from the Navajo Nation to Lake Powell. Project implementation began in fall 2016.

Best management practices for riparian restoration are being utilized to:

1. Prevent wildfire potential
2. Enhance wildlife habitat
3. Improve riparian functions
4. Restore native vegetation

Preventing wildfire includes removing dense invasive fire-prone tamarisk and Russian olive from the river banks and flood plains.

Enhancement of wildlife habitat will be achieved by creating corridors for animals to reach the river, leaving dead standing trees for shelter and increasing browsing forage.

Improvement of riparian functions is achieved by restoring fluvial processes, clearing side channels and reducing salinity for better water quality to vegetation, fish and wildlife.

Restoring native vegetation requires the removal of invasive plant species to improve existing cottonwood galleries and encourage prolific growth of willow, grass and forbs.

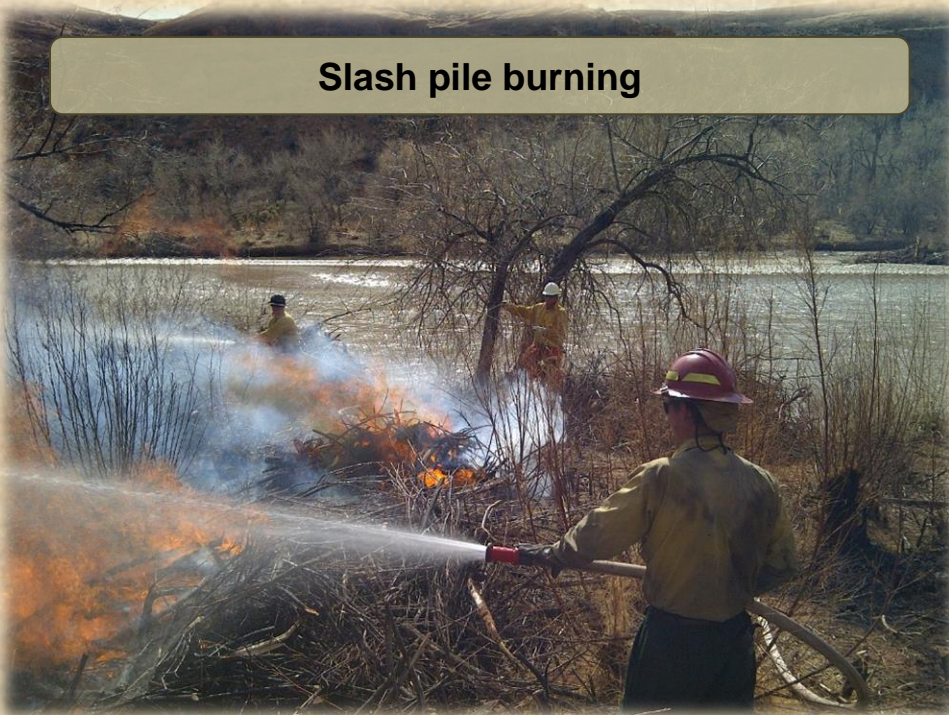
GOALS

- Mitigate wildfire threat to protect Native American priority landscapes, riparian vegetation, and campground infrastructure
- Reduce tamarisk and Russian olive to enable a competitive and resilient riparian native plant community
- Restore side channel and backwater hydrologic functions
- Offer cut vegetation for firewood, fence posts and ceremonial usages



Hand-removal of invasive vegetation

Slash pile burning



TREATMENTS

- Thin, pile and burn
- Planting of native vegetation
- Seed native grasses and forbs
- Mechanical vegetation removal
- Biological control (tamarisk beetle)
- Herbicide application
- Public biomass utilization

HISTORY

The San Juan River is world renowned for its vivid landscapes, topographic diversity and an abundance of petroglyphs and Anasazi ruins. The 20th Century establishment of tamarisk (*Tamarix spp.*) and Russian olive (*Elaeagnus angustifolia*) along the San Juan River has negatively impacted riparian and aquatic habitats. Dense stands of these exotic trees have displaced native plants, degraded fisheries and wildlife habitat, reduced livestock forage, limited human access to the river, interfered with the natural fluvial processes of the river, and increased the risk of severe wildfires. The impacts of tamarisk and Russian olive on aquatic habitats are sometimes not fully recognized, but their proliferation tends to channelize the river and eliminate the side channels and backwater environments that provide critical spawning and nursery habitat for native fish. By trapping sediments and reducing habitat complexity in stream channels, these invasive trees are negatively impacting rare native fishes and reducing the input of key nutrients that support aquatic food webs¹.

The Bureau of Land Management (BLM) Canyon Country Fire Zone (CYFZ) conducted an in-depth landscape level burn probability analysis which identified the main threat of wildfire to the area exists along the San Juan River corridor in the riparian zone. The wildfire threat has been exacerbated by the tamarisk beetle, which has killed large stands of tamarisk during the past ten years. The San Juan River RTRL Project is needed to complete the initial phase of tamarisk and Russian olive removal along the Utah portion of the San Juan River and contribute to the restoration of riparian zones within the region.

¹ Graf 1978, Geological Society of American Bulletin 89:1149-1501; Bailey et al. 2001, Wetlands 21:442-447; Keller et al. 2014, Environmental Management 54:465-478.

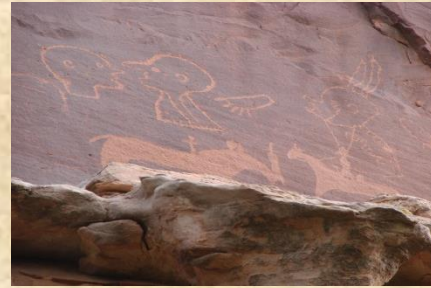
Cultural Resources



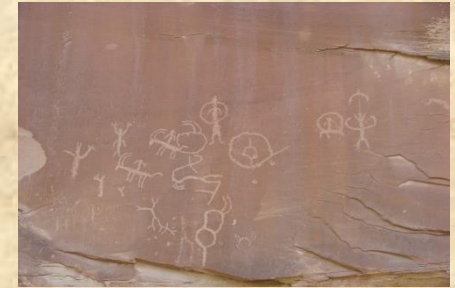
Style:
Glen Canyon Linear
Archaic
3000 BCE-400 CE



Style:
Basket Maker II
Ancestral Puebloan
1000 BCE-550 CE



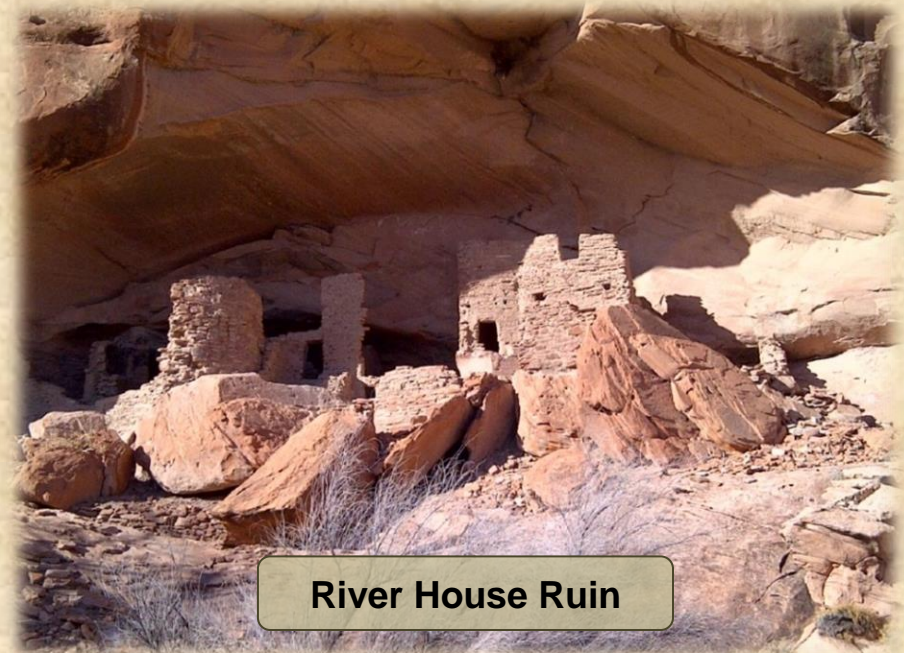
Style:
Navajo
Proto-historic
1500 CE



Style:
Ute
Proto-historic
1500 CE

The project area is situated in southeastern Utah near the Four Corners area and directly borders the Navajo Nation along its northern boundary. Native Americans have utilized this river system for the past 3,000 years. Numerous rock art and archaeological sites depict the history of peoples who lived, farmed, hunted and traveled through this land.

Archaic, Puebloan, Navajo, Paiute and Ute cultures left their imprints etched in stone, preserving their memories through centuries of time. These etched images and dwellings now stand as a legacy for our present generation to remember the enduring spirit of the past.



River House Ruin

COLLABORATION

- The Department of Interior Reserve Treaty Rights Lands (RTRL) program was established as a means of ensuring the retention of ancestral rights to the land for Native American tribes, and enhancing the health and resiliency of priority tribal natural resources (i.e. religious, cultural, subsistence) at high risk to wildland fire. For many tribes, these resources exist within the jurisdiction of one or more land management agencies. The RTRL program enables tribes to participate in collaborative projects with non-tribal land managers to restore tribal landscapes across boundaries.

To maximize the benefits of this program, a significant emphasis was placed on cooperation and coordination between the BLM Canyon Country Fire Zone and Bureau of Indian Affairs (Navajo Nation). This successful working relationship has been crucial in employing personnel across jurisdictional boundaries to move tribal priority landscapes to desired future conditions and long-term ecologic resiliency to wildland fire.

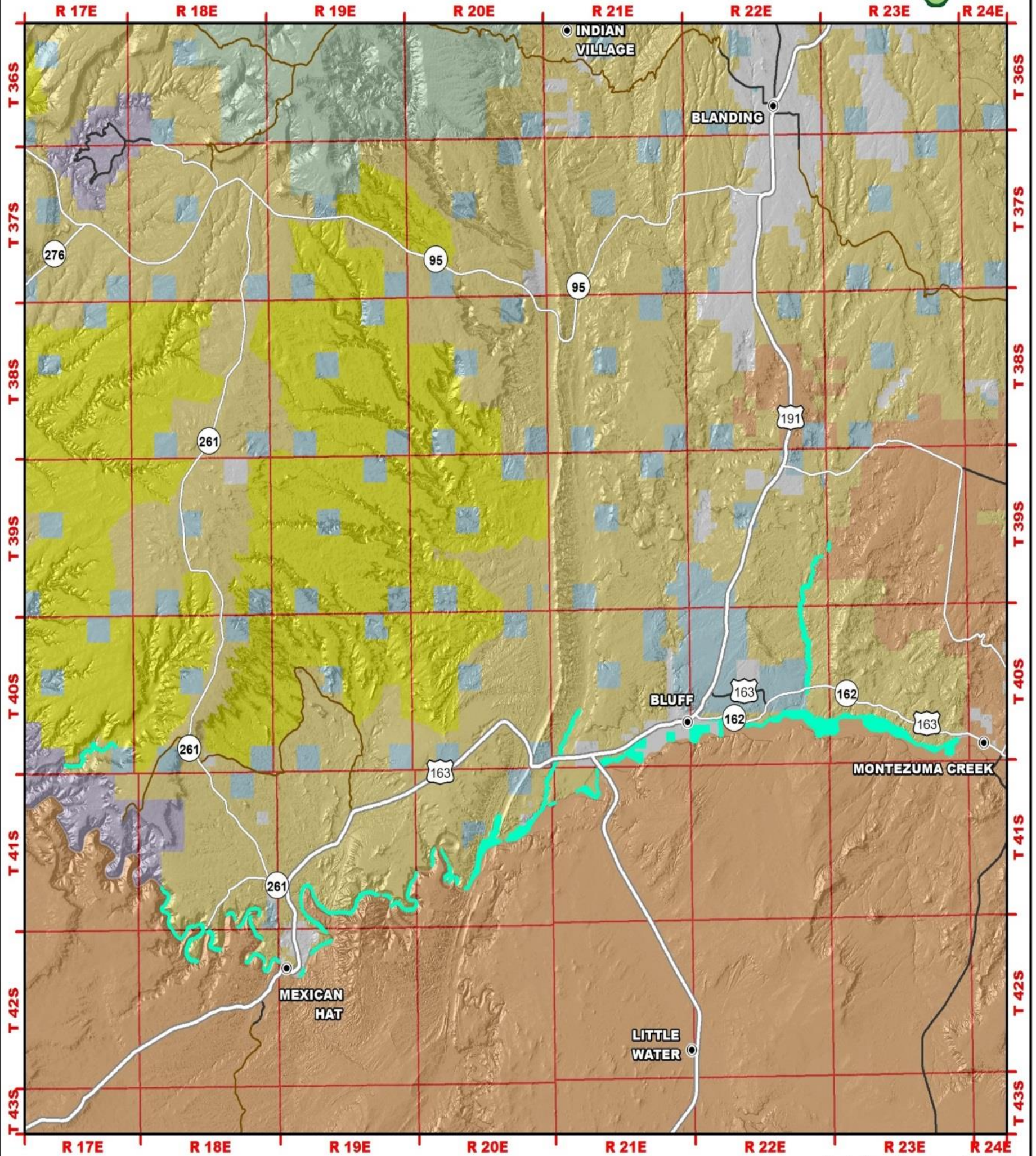
- Strong collaboration exists among the southeast Utah land management agencies and non-profit groups to tackle the enormous tamarisk and Russian olive invasion within the region's river systems. Participants in the effort include, but are not limited to: the BIA (Navajo Region), BLM (Utah and Colorado), National Park Service (NPS Southeast UT group), State of Utah, Utah Watershed Restoration Initiative (WRI), Four Corners School, and the Tamarisk Coalition.
- The achievement of the San Juan River RTRL project is the application of sound land management practices and the application of contemporary scientific research.

Reserve Treaty Rights Lands Proposal

April 21, 2016

San Juan River Project (3,089 Acres)

Canyon Country Fire Zone



Utah County Boundaries

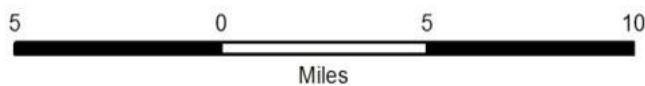


- US Highways
- Major State Highways
- Major Local Roads (Paved)
- Major Local Roads (Not Paved)
- RTRL San Juan River Project
- PLSStownship

- Wilderness Study Areas
- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Private (White)

- State
- State Parks and Recreation
- US Forest Service (USFS)
- USFS Wilderness Area

Created by: gbiassone on 4/21/2016



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www.UtahFireInfo.gov

For more info and
other on-going projects

www.blm.gov/utah

