

WATER CONSERVATION AND RE-USE

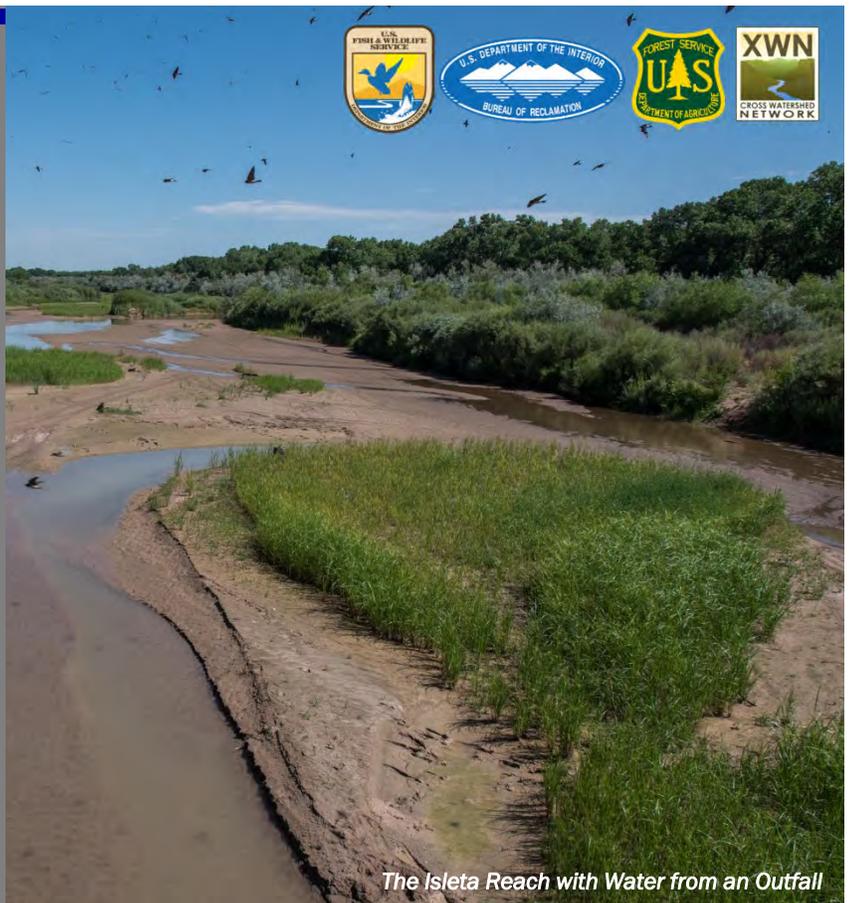
Water Transactions to Support Riparian Ecosystems in the Isleta Reach of the Rio Grande



The Rio Grande, also known as the Rio Bravo, runs nearly 1,900 miles from the mountains of Colorado to the Gulf of Mexico. The Isleta Reach of the Rio Grande extends 34 miles from the Isleta Diversion Dam south of Albuquerque to the San Acacia Diversion Dam. Since 2016, Audubon New Mexico has engaged in innovative environmental water transactions with four Middle Rio Grande Pueblos, a private golf club, several private water rights holders, and municipalities to support riparian habitats in the Isleta Reach during the driest time of the year.



Project Location



The Isleta Reach with Water from an Outfall



KEY ISSUES ADDRESSED

Rivers in the arid southwestern United States face increased demands on water supply from a growing human population, exacerbated by the effects of rising temperatures and frequent droughts. In the Rio Grande, groundwater pumping and stream channel modifications have led to a depletion of natural flows and loss of riparian habitats. Water in the Rio Grande is fully appropriated, meaning that little to no water is dedicated to supporting riparian habitats. Water transactions focused on supporting water for the environment can help mimic natural flood regimes and provide needed moisture for existing and restored riparian areas.

PROJECT GOALS

- Coordinate environmental water transactions to support riparian vegetation in the Middle Rio Grande
- Establish partnerships and build a framework for environmental water transactions throughout the Rio Grande watershed

RIPPLE EFFECT

In 2018, three municipalities—Isleta Pueblo, Los Lunas, and Belen—partnered with Audubon New Mexico to deliver water to the Isleta Reach, including annual renewal options for 10 years.



After a Summer Storm

PROJECT HIGHLIGHTS

Pueblos Support River Flows: Recognizing the inherent value of a healthy river, four sovereign pueblo nations provided 100-acre-feet of water each, a first of its kind water transfer, to increase in-stream flow in the summer of 2016. The Pueblos of Sandia and Isleta voluntarily donated water, and the Cochiti and Santa Ana Pueblos supplied water in exchange for funding riparian restoration work on tribal land.

Momentum from Private Stakeholders: Following the Pueblos' donations, the Club at Las Campanas, a private golf club in Santa Fe, donated 399 acre-feet of water in 2016. In 2018, a historic partnership of municipalities, together with Las Campanas, donated 999 acre-feet of water to the Rio Grande during a significantly dry period.

Sustaining Restored Habitats: Flows provided by water transactions can augment ongoing restoration efforts along the Isleta Reach by supporting riparian vegetation. For example, the Pueblo of Santa Ana has been engaged in floodplain restoration since 1998. The increased water availability can allow them to expand restoration efforts and provide a direct benefit to the Pueblo by restoring the bosque ecosystem for cultural and recreational uses.

Collaborators

- See online for full list of collaborators

Funding Partners

- National Fish and Wildlife, Bonneville Environmental, Coca Cola, Turner, Thornburg, and McCune Foundations

Case study support provided by US Fish and Wildlife Service, US Bureau of Reclamation, US Forest Service, and Cross Watershed Network. Updated November 2018. Photos courtesy of Paul Tashjian/Audubon New Mexico

LESSONS LEARNED

Developing strong partnerships among water managers, such as the Bureau of Reclamation and the Middle Rio Grande Conservancy District, as well as water rights holders, has been essential to the program's success. Having a third party facilitate transactions helped advance the process instead of having all tasks fall solely on the agencies.

Isolated transactions are not effective in the long term. However, temporary water transfers help set the stage for a more comprehensive water market in which these transactions are more common.

Environmental water transactions can make restoration a more worthy investment by mitigating some of the uncertainty associated with relying on unpredictable flows in the Rio to support newly established vegetation.

Public outreach through regular press releases proved essential to gaining support. Public support encourages municipalities and private entities to participate in similar water transactions that support riparian habitats.

NEXT STEPS

- Continue water leasing with municipalities, sovereign pueblo nations, private parties, the Bureau of Reclamation, and the Middle Rio Grande Conservancy District
- Work with existing partners to strengthen the water transaction program

PROJECT RESOURCES

For more information on this project, contact Paul Tashjian: ptashjian@audubon.org

For additional project resources and case studies, visit the Collaborative Conservation and Adaptation Strategy Toolbox: WWW.DESERTLCC.ORG/RESOURCE/CCAST



Monitoring the Dry Rio Grande at Bosque del Apache NWR