

## **ASWM WATERSHED PROJECT INVENTORY DATA SHEET**

**3.29.19**

**Name and location of watershed:**

Jemez River Watershed, New Mexico

**Size of watershed (in acres):**

661,760 acres

**Title of Project/Initiative:**

Rio de las Vacas Wetlands Restoration Project

**Setting: (please check all that apply)**

- Urban (towns, cities, and suburbs with 2,500 inhabitants or more)
- Rural (anything outside the urban area)
- Inland
- Coastal

**Need/Challenge Addressed (200 word limit):**

The Jemez River is significantly impaired due to soil erosion, which is thought to have resulted from a variety of natural and other activities such as grazing, recreation, stream bank modification, removal of riparian vegetation, silviculture, road construction and maintenance, and channel widening. Wetland and riparian area restoration techniques and management will be used to improve and enhance watershed.

**Goals & Objectives (please include ecosystem services/values focused on):**

1. Restore and manage the watersheds on public and private land to enhance water retention and quality and to preserve natural systems dependent on water.
2. Restore wetlands by improving stream conditions, which in turn provide a buffer to naturally protect water quality.
3. Increase awareness of beavers as wetland implementers instead of nuisances, thus subsequently creating more resilient habitat through increased biodiversity and habitat productivity within the watershed.
4. Promote education for all who live, work or visit the area regarding the connection between land use, water, and the environment as well as the importance of water protection and conservation.

**Overall Strategy (i.e., what role do wetlands play in your project?)**

Watershed assessment and inventory to: 1) collect historical information that outlines effects on stream and watershed condition; 2) collect baseline data to determine the quality of fish habitat and floodplain condition and sources of habitat loss; 3) identify areas for possible

migration barrier construction; 4) identify restoration needs; and 5) determine fish species presence and distribution.

Address water quality by: 1) restoring almost 2 miles of stream along Rio de las Vacas; 2) reducing non-point source pollution into the streams by modifying and rehabbing campsites located along Rio de las Vacas; 3) reconstructing and maintaining an existing buck and pole fence on the Middle Rio de las Vacas. This fence helps maintain riparian habitat by excluding vehicle travel on riparian vegetation. 4) restoring the wetlands along the Rio de Las Vacas. Wetlands and riparian areas will be restored using bioengineering, planting of native plants, repairing fences and building cattle and elk mini-enclosures, and installing trick tanks

**Techniques Used (please check all that apply):**

- Restoration (the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to former or degraded wetland.)
- Creation (the manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist on an upland or deep-water site, resulting in a gain in wetland acres.)
- Enhancement (the manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensify, or improve specific function(s) or for a purpose such as water quality improvement, flood water retention or wildlife habitat.)
- Protection (the removal of a threat to, or preventing decline of, wetland conditions by an action in or near a wetland. Includes purchase of land or easement, repairing water control structures or fences, or structural protection such as repairing a barrier island.)

**Team Members:**

- **Team leaders (organizations, agencies or individuals that are responsible for overall project direction, outcomes and financing):** Jemez Watershed Group, USDA Forest Service, EPA
- **Partners (organizations, agencies or individuals that are responsible for implementation of the project by agreement or contract):** Santa Fe National Forest, Animal Protection of New Mexico, Rangeland Hands Inc., Private Landowners within the watershed, Albuquerque Wildlife Federation, New Mexico Trout Unlimited
- **Collaborators (organizations, agencies or individuals that are involved in an advisory role):** Cuba Soil and Water Conservation District, Zeedyk Ecological Consulting, New Mexico Soil & Water Conservation Districts, New Mexico Department of Agriculture, US Bureau of Reclamation, Rio Puerco y Rio Jemez Subregional Water Planning

**Stakeholders (organizations, agencies or individuals that are in some way impacted by the project):**

Organizations listed above, various tribal groups and residents of the watershed area.

**Overview/history (200 word limit):**

**How many individual projects are currently being implemented or are planned to be implemented within this broader watershed initiative? Please describe.**

Approximately 40-50 identifiable individual projects

**Is there a track record of past, completed projects in this watershed? If yes, please describe and provide available information regarding performance/effectiveness.** Information not provided.

**Start and end dates (dates can overlap – estimates are acceptable):**

October 2005-October 2008

- **Planning:** Not specified.
- **Implementation:** Not specified.
- **Monitoring:** Not specified.

**Cost – Financing (estimates are acceptable):**

**Funding (Federal and Final Match Balances)**

Grant Award Federal funding –

- EPA 152,335
- Match 50,793
- Drawdown FY 06 0.00 100.00
- Drawdown FY 07 7,215.00 15,000.00
- Drawdown FY 08 27,871.00 26,250.00
- Drawdown FY 09 45,586.00 20,300.00
- Drawdown FY 10 2,769.04 13,348.00
- Drawdown FY 11 68,883.33 0.0
- balance 10.63 (24,205.00)
  
- **Planning:** Not specified.
- **Implementation:** Not specified.
- **Monitoring:** Not specified.
- **Continual (are there ongoing maintenance costs that will be required?):** Not specified.

**Resulting benefits (please list what was measured and how:**

Flood Control	Water Quality	Discharge	Hydrological Conditions	Wetland Restoration	Biodiversity/Productivity	Listed Species	Economically Important Species	Pub. Access, Rec, Awareness	Other Economic Benefits	Other
	X			X	X			X		

**Environmental benefits (e.g. water quality improvements, habitat protection or improvement, reduced phosphorus and nitrogen loads, etc.):** No information provided.

**Financial or Economic Impact Benefits (e.g., avoided damage costs, increase in commercial fish revenue, increase in tourism revenue, etc.):** No information provided.

**Non-Market Economic Benefits (may be monetized - e.g., increased value of recreation or aesthetics or other improvements using dollar values; or non-monetized descriptions of benefits – e.g., number of people who may benefit from improved recreation or aesthetics or other resulting improvements):** No information provided.

**Other:** No information provided.

**Are benefits based on actual measures or did you use a model to predict benefits?** No information provided.

**Is there a cost-benefit analysis available? Yes or No (If yes, include a copy with your response):** No information provided.

**If you do not have any data currently available in regard to benefits, how do you plan to measure them?** No information provided.

**Where there any innovative designs/technologies/policy changes created to enable the project or that resulted from the project? (If so, please describe):** No information provided.

**Lessons Learned:**

This project was a delight to work on the ground, but there never seemed to be enough time to take care of all the details, including the reports. Staff has spent many hours working with private landowners, but the end result was that some did not wish to participate due to potential or perceived limitations on how their land was managed. Some were outright uninterested in restoring their land. Others, while passively interested did not want to participate in helping with the required permits. We are hoping that the neighbors have followed the process used in the SFNF public land. As the land becomes more productive and healthy, they may wish to improve their lands. It was also an important lesson to keep communication open with the Cuba Ranger District, especially Range staff, to address trespass cattle issues. The ability to compromise has been our biggest asset in moving forward with this project.

**Do you have any images or photos to share?**



Cattle grazing on the flood plain of the Rio de las Vacas. Note lack of riparian species.



Coexisting with Beavers by Preventing Damage Workshop participants



Turkey Canyon springs. One rock dam



Mini-exclosure in upper reach

**FMI (please include contact name, organization, website, phone number and/or email address):**

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