

Installation of Rio Grande Project Area Monitoring Network

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BACKGROUND

Over the last several years, the Paso del Norte Watershed Council's Coordinated Water Resources Database and GIS Program (Program) was developed to provide improved and integrated access to regional water resources data for regional water stakeholders to make timely decision in water operations and flood control. (Program available at <http://www.pdnwc.org>)

The flow and water quality monitoring of the Rio Grande were enhanced as the major components of the Coordinated Database and GIS Project further developed from August of 2005 through July of 2007 through funding provided by the United States Bureau of Reclamation through the Water 2025 Challenge Grant Program to the El Paso Water Utilities, TAMU, and NMSU.

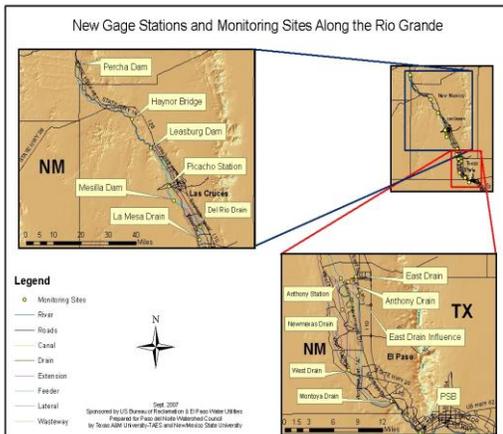
OUTCOMES

Tasks accomplished in the phase of work funded by the USBR include the following specific outcomes:

- Installation and calibration of additional 15 new monitoring stations and equipment, and inclusion of these monitoring sites in publically Web-based GIS map products to fill data gaps and provide additional real-time data.
- Linking to additional monitoring sites installed by EBID through their Project work and inclusion of these sites and data in several Web-based GIS map products.
- Development and implementation of a user needs survey focusing on new data sets of interest, enhanced access mechanisms, and other suggestions to improve the Program website.
- Development and deployment of an on-line downloadable Microsoft Access database of Rio Grande Project water resource data to provide search and query functions.
- Implementation of suggestions from a User Needs Assessment, including increased access to the database and website using Firefox and Mozilla Web browsers.



Gage Station below Elephant Butte Dam



PROGRAM RESULTS AND BENEFITS

- A technical report provides a summary of database and GIS coverage for new monitoring stations (<http://twri.tamu.edu/reports/2008/tr320.pdf>). Additional documentation of related Project activities is provided through Final Project Reports being submitted by the City of Las Cruces (CLC) and Elephant Butte Irrigation District (EBID) for the work conducted through linked USBR-funded Projects.
- The installation and public and stakeholder access to these new monitoring stations provides critical water flow and quality information enabling improved management and use of the region's scarce water resources.
- Workshops for water resources stakeholders are being held demonstrating use of database website with GIS interfaces, data availability, breadth of water resources information, user needs and RiverWare modeling.