



In cooperation with the U.S. Army Corps of Engineers (USACE) Albuquerque District

Web Application to Access U.S. Army Corps of Engineers Civil Works and Restoration Projects Information for the Rio Grande Basin, Southern Colorado, New Mexico, and Texas

The Rio Grande Civil Works and Restoration Projects Web Application, developed by the U.S. Geological Survey (USGS) in cooperation with the U.S. Army Corps of Engineers (USACE) Albuquerque District, is designed to provide publicly available information through the Internet about civil works and restoration projects in the Rio Grande Basin. Since 1942, USACE Albuquerque District responsibilities have included building facilities for the U.S. Army and U.S. Air Force, providing flood protection, supplying water for power and public recreation, participating in fire remediation, protecting and restoring wetlands and other natural resources, and supporting other government agencies with engineering, contracting, and project management services. In the process of conducting this vast array of engineering work, the need arose for easily tracking the locations of and providing information about projects to stakeholders and the public. This fact sheet introduces a Web application developed to enable users to visualize locations and search for information about USACE (and some other Federal, State, and local) projects in the Rio Grande Basin in southern Colorado, New Mexico, and Texas.



Rio Grande Basin.

A Public Need for Information

Federal, State, and local organizations, as well as private citizens, need access to locations and information about USACE civil works and restoration projects to participate in planning or other activities involving natural hazards, natural and water resources, or water recreation in the Rio Grande Basin. The first major USACE project in the basin (before establishment of the Albuquerque District) was the Conchas Dam near Tucumcari, N. Mex., built in the 1930s to impound the South Canadian and Conchas Rivers. Since that time, the USACE has overseen hundreds of projects in the Rio Grande Basin. The USACE has acted as steward for the natural resources of the basin ever since, protecting the natural environment by surveying endangered species, conducting field investigations, monitoring air quality, remediating

hazardous-waste sites, and ensuring environmental compliance. The breadth of work over such a long period of time adds up to a large number of projects; however, at present (2009) the Web application contains information about a relatively small number of these projects. The Web application is a work in progress, and projects are added as information becomes available. The Web application described here provides a simple way for people to identify where and how the USACE is currently providing, and has historically provided, services in the Rio Grande Basin.



Conchas Dam near Tucumcari, New Mexico.

Accessing Civil Works and Restoration Information on the Web

The Web application (USACE Rio Grande Data Project) is available at <http://txpub.usgs.gov/USACE/>



USACE Rio Grande Data Project home page.

The Web site is navigated using the four tabs across the top of each page. Clicking the “Database Info” tab links users to a page that contains descriptions of the two datasets featured on the Web site: Project Summaries and Fire Occurrence. The Project Summaries data can be accessed using one of two search interfaces. The first is an interface that returns a list of projects on the basis of specified search criteria, and the second is a mapping application through which users can visually locate projects. Either interface can be used to discover more information about a specific Rio Grande Basin project by linking to a “PROJECT DETAILS” page.

The Web site hosts fire occurrence data as a result of USACE involvement in fire restoration, which began after devastating wildfires in Bernalillo and Sandoval Counties, N. Mex., in the mid-2000s. The mapping application can be used to locate fire occurrences, and for each fire, links to a “FIRE DETAILS” page that contains information about the particular fire.

Clicking the “INTERACTIVE MAP” tab opens the mapping application, which allows users to zoom in to areas and search for projects or fire occurrences by name using the “Identify” tool. If the user clicks on a project or fire occurrence point, boundary, or line on the map (with the “Identify” tool active), a pop-up window appears containing a link (red arrow) to the “PROJECT DETAILS” or “FIRE DETAILS” page, as appropriate.



USACE Web-mapping application.



USACE Project Details page.

Clicking the “PROJECT DIRECTORY” tab on the main page of the Web site allows users to access project data using a keyword search. After entering a keyword and clicking the “Search” button, a list of projects is returned. A project name can then be clicked to open its “PROJECT DETAILS” page.



USACE Project Directory (project search form).

The “RESOURCES” tab provides metadata for the project layers in the map and Web links to more resources about USACE projects. A link to a Web-mapping service for the Civil Works and Restoration Projects datasets, which can be used to view the data in a GIS system, is provided on the “RESOURCES” page. Links to the sources for the Fire Occurrence data also are listed on the “RESOURCES” page.

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Additional Information:

More information about the U.S. Army Corps of Engineers Albuquerque District is available at <http://www.spa.usace.army.mil>

More information about the Bosque Restoration Projects of the U.S. Army Corps of Engineers Albuquerque District is available at <http://www.bosquerevive.com>

More information about the U.S. Geological Survey is available at <http://www.usgs.gov>

Photographs courtesy of U.S. Army Corps of Engineers.