StreamStats - A Web-based Streamflow Statistics Tool for New Mexico

- Provide an interactive web-based tool to determine streamflow statistics for stream locations in New Mexico
- Use available streamflow regression equations (Waltemeyer, 2002 and 2008)
- Allow users to easily obtain streamflow statistics, drainage-basin characteristics, and other information for user-selected sites on streams



StreamStats - A Web-based Streamflow Statistics Tool for New Mexico

- All basin characteristics are functioning properly and peak flow equations have been implemented
- The StreamStats Team is working on implementing the low-flow equations and needs to conduct QA/QC on the peak-flow and low-flow equations
 Test development site is available



New Mexico StreamStats Development Site



http://ssdev.cr.usgs.gov/ss_dev/





Implementing a Web-based Streamflow Statistics Tool for New Mexico (StreamStats)

Background:

Estimates of streamflow are needed for a wide variety of applications, including water-resources planning and management, flood-plain mapping, and instream flow determinations. Surface water is the primary source of water for irrigators along major stream corridors in New Mexico and is increasingly being utilized by large municipalities. While streamflow statistics for gaged sites are readily available from existing sources, streamflow statistics are needed for ungaged sites where no observed flow data are available. Quantification of streamflow at ungaged locations will provide information that State and local water planners and managers need to insure a secure water future for New Mexico.

Objectives:

Provide an interactive web-based tool for determining streamflow statistics (low-flow and peakl-flow frequency) for any stream location within New Mexico for which applicable streamflow regression equations have been published.



Approach:

- Compile a streamflow statistics database;
- Develop digital map-base layers; and
- Construct the web-based Geographic Information Systems (GIS) hydrologic framework.



Administrative Details:

Timeline – FY2016

Project Chief – Nathan Myers
(nmyers@usgs.gov)

Status – Active

Cooperator – U.S. Forest Service, New Mexico Department of Transportation, New Mexico Water Resources Research Institute, New Mexico Environment Department

Deliverables and Other Details – Interactive web-based tool and integrated hydrologic GIS datasets for the State (http://water.usgs.gov/osw/streamstats)







U.S. Geological Survey New Mexico Water Science Center