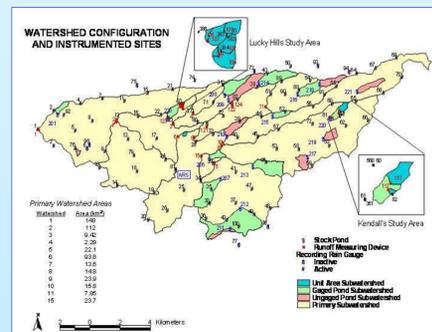


INTRODUCTION

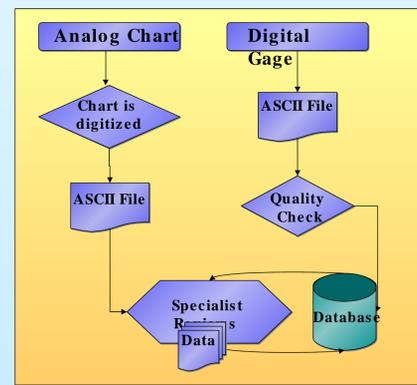
Hydrologic data, including rainfall and runoff data, have been collected on the Walnut Gulch Experimental Watershed since the 1950s. These data are of national and international importance and make up the most comprehensive semi-arid watershed dataset in the world. The USDA- ARS Southwest Watershed Research Center has recently developed an online system to provide access to the data. The goal of the system is to promote analyses and interpretations of historic and current data by improving data access. Data are collected from sensors in the field and transmitted to computers in the office. The data are then processed, quality checked, and made available to users via the Internet. The system consists of a website, which provides an interface to the data, and a relational database, which is used to process, store, and manage data. The system was released to the public in October 2003, and since that time the online data access website has received more than 1000 visitors.



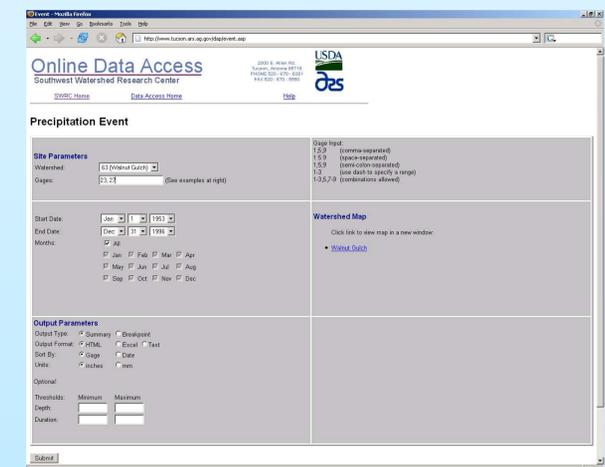
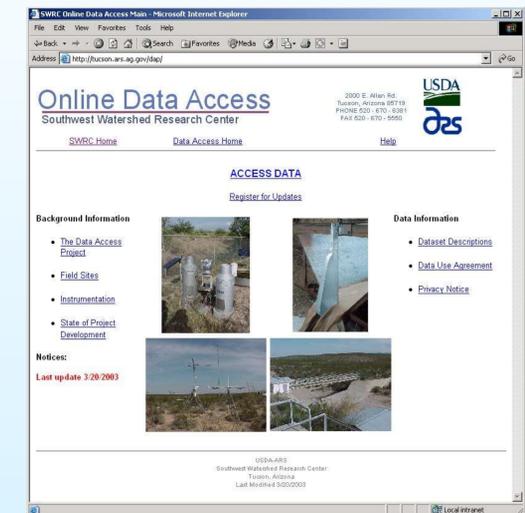
DATA

Data collected at the WGEW are a valuable resource to researchers; landowners, users, and managers, and to the public. The database is managed at the Southwest Watershed Research Center in Tucson. In 2001, a Data Access Project was initiated to efficiently disseminate data to users.

Data collected in the field are transferred to Tucson where they are written to a relational database, evaluated through data quality control and assurance algorithms, and reviewed by SWRC staff. Analog and digital data are accommodated. Data access is provided through a web-based user interface.



http://tucson.ars.ag.gov/dap/



Weighing Bucket Rain gage



Walnut Gulch Supercritical Flume



"Santa Rita" Supercritical Flume with Traversing Slot Sediment Sampler



Meteorological Station

The Data Access Project is a work in progress.

Currently data from digitized charts for precipitation and runoff through 1996 are available for both the Santa Rita Experimental Range and the Walnut Gulch Experimental Watershed. Data from the digital data loggers for precipitation from 1999 through the present for Walnut Gulch are also available now. Runoff data for the same period on Walnut Gulch are currently being quality checked and will be available soon. Data from the digital data loggers for the Santa Rita watersheds, as well as data from digitized charts from 1997 to the present are in the works. Also in the works is a GIS driven graphical interface for requesting data.

Data users who register for updates will be informed of major data additions and changes to the DAP site. Registration is a simple matter of entering your name and email address from a link on the web page and is strongly encouraged. Feedback from users on how to make the DAP web site more useful is always welcome.

Though the DAP web site will be continuously improved, it is already a useful resource that provides long-term data from a densely instrumented experimental watershed. We hope it will contribute to useful research, and that researchers and other interested parties take advantage of this useful tool.

NEW DEVELOPMENTS

An interactive, GIS driven, map interface based on ESRI ARCIMS is under development to provide access to rainfall and runoff data.

