



AGWA - Automated Geospatial Watershed Assessment

What is AGWA?

The Automated Geospatial Watershed Assessment (AGWA) tool is an interface designed to run two watershed runoff and erosion models: the Kinematic Runoff and Erosion (KINEROS) model, and the Soil and Water Assessment Tool (SWAT). The interface was developed in a geographic information system (GIS) to facilitate the preparation of model inputs, and the visualization of model outputs.

AGWA is an extension for ArcView versions 3.X. It is available as a stand-alone tool, or as an integrated part of BASINS (Better Assessment Science Integrating point and Nonpoint Sources) version 3.1.

How can AGWA help with TMDLs?

- Locating potential impairment
 - AGWA can quickly and inexpensively identify and prioritize problem areas at the basin and watershed scales
- Evaluating the impacts of land-use change
 - AGWA can evaluate where water-quality impacts of past and future landscape change are most significant
 - AGWA includes a land-cover modification tool to assist with scenario development
- Mapping results
 - All model outputs for both streams and upland areas can be mapped to facilitate comparisons with other data layers and the presentation of results

Where can I get AGWA?

AGWA example datasets, training exercises, and documentation can be downloaded via the Internet free of charge from:

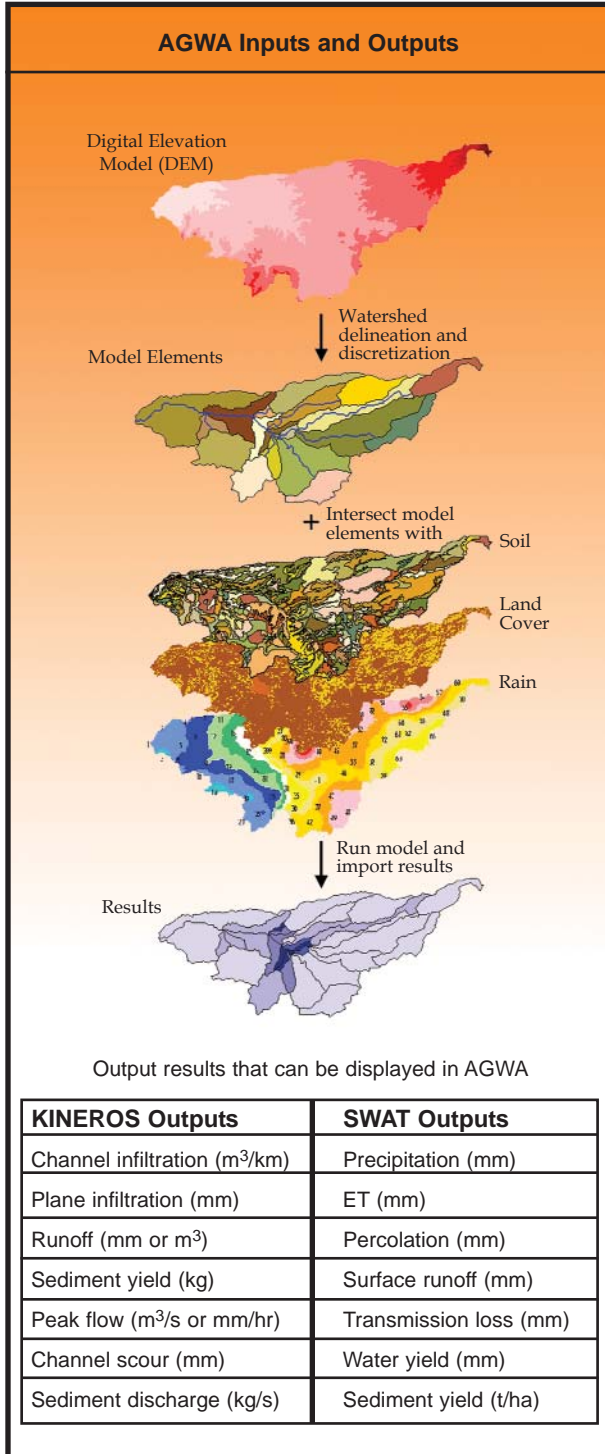
www.tucson.ars.ag.gov/agwa

or

www.epa.gov/nerlesd1/land-sci/agwa

BASINS-AGWA can be downloaded with BASINS version 3.1 from:

www.epa.gov/docs/ostwater/BASINS



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What's Next?

- Migration to ArcGIS - AGWA and BASINS extensions are currently being developed for ArcGIS
- DotAGWA - a web-based interface for AGWA is currently under development. The interface will allow users to access all of the same functionality of AGWA without purchasing expensive GIS software, or downloading and projecting data. DotAGWA will also allow users to develop land-use management scenarios, and simulate their impacts on water and sediment yields.

System Requirements

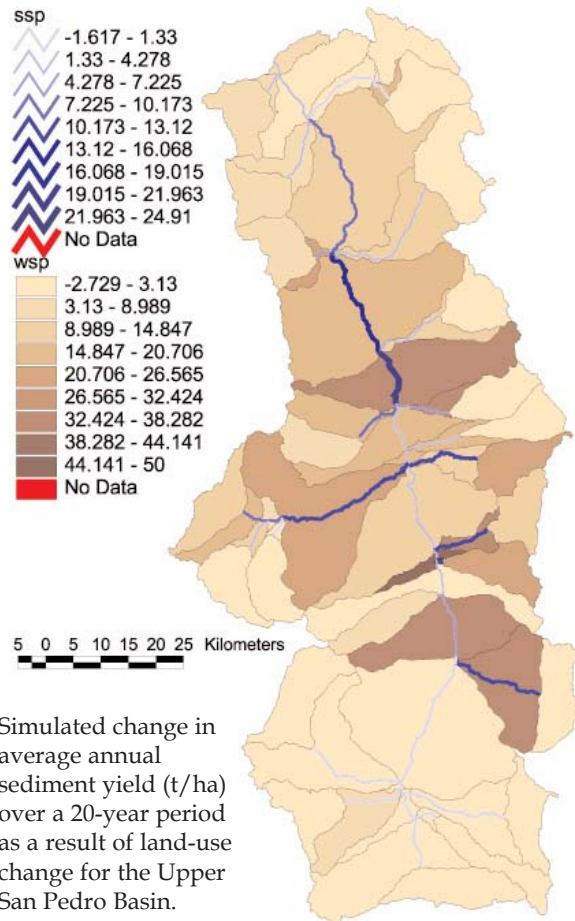
To use AGWA, you will need version 3.1 or later of ArcView and version 1.1 of the Spatial Analyst extension. AGWA works with Windows 95, 98, 2000, NT, ME, and XP operating systems.

For Further Information

For further information contact:

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Simulated change in average annual sediment yield (t/ha) over a 20-year period as a result of land-use change for the Upper San Pedro Basin.