

GROUNDWATER MODELING UNIT FACT SHEET

ADWR Contact

Wesley Hipke Modeling Section, Manager ADWR 3550 N. Central Ave. Phoenix, Arizona 85012 (602) 771-8560 modeling@azwater.gov

Current Calibration Periods & Scheduled Updates for Groundwater Models Developed By ADWR

<u>Pinal AMA</u> Calibration: 1922 – 2009 Model Update in 2011

Phoenix AMA (SRV Model) Calibration: 1983- 2006 Model Updated in 2008

<u>Prescott AMA</u> Calibration: 1939 -2004/05 Model Updated in 2007

Tucson AMA Calibration: 1940 - 2009 Model Update in 2011

<u>Santa Cruz AMA</u> Calibration: 1997- 2002 Model Updated in 2007

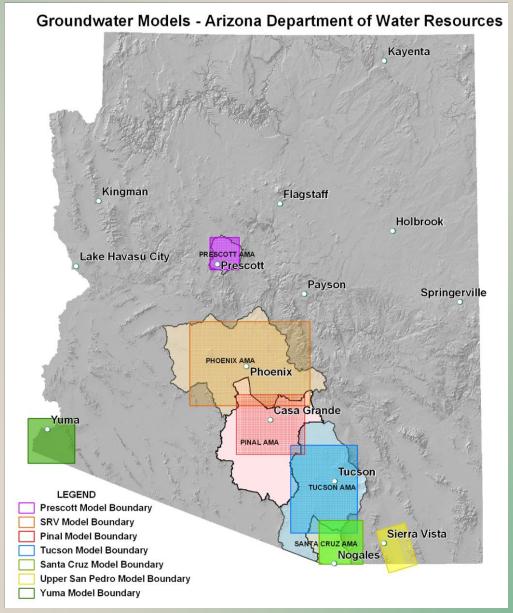
<u>Yuma Area</u> Calibration: 1978 - 1989

Upper San Pedro Area Calibration: 1940– 1990

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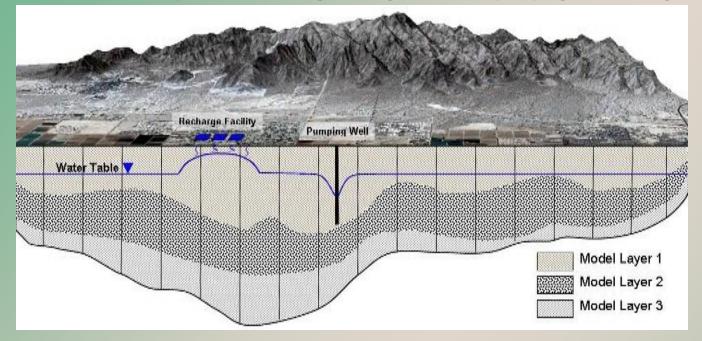
ADWR's Groundwater Modeling Unit Supports Water Management in Arizona Through the Development of Numeric Groundwater Models.



Purpose of Groundwater Models:

- Provide a tool that can be used to simulate past, present, and future impacts of water use on aquifers.
- Allow water resource planners to make long-term management decisions based on potential impacts of future water uses on Arizona's groundwater resources.

Numeric Groundwater models assist our understanding of aquifer systems and provide a representation of the landscape that can be used to quantify the potential future impacts of various assumptions concerning future groundwater pumping and recharge.

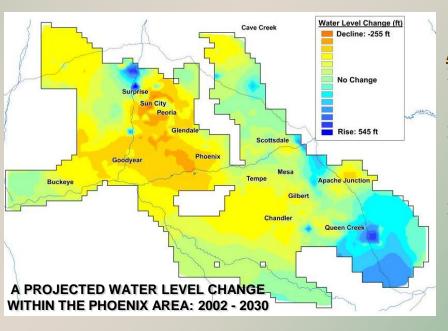


What Information is Used for ADWR Groundwater Model Development?

- Data from well logs, geophysical studies, and various hydrologic reports
- Data from crop surveys, stream gages, precipitation stations and data submitted to the Department from various permit holders.
- Data collection sources include the ADWR, USGS, academic institutions, municipalities, water companies, Indian communities, irrigation districts, and private entities.

How are the ADWR Groundwater Models Used?

- Models quantify the effects of various groundwater management and water conservation strategies and programs
- > Models test various predictive scenarios for AMAs.
- Assist various agencies (EPA, Bureau of Reclamation, AZ DEQ) and public groups (East Valley Water Forum) in developing models for specific user objectives.
- > Provide information for regional and local water budgets



Additional Modeling Unit Tasks:

- Provide technical guidance related to submitted applications.
- Publication of model reports, databases related to hydrologic information, and model datasets.
- Provide modeling education and outreach for the ADWR and public