

AQUIFER MANAGEMENT

Groundwater conservation districts have been established in Brewster, Jeff Davis and Presidio Counties to ensure the orderly development and management of groundwater resources. In general, the District's management goals strive to:

- Improve understanding of groundwater conditions
- Provide for efficient use of groundwater
- Protect and enhance the quantity and quality of groundwater by controlling and preventing waste
- Regulate the development and production of groundwater to ensure adequate supplies for the future.

The Districts will play an important role in the development of best management practices by providing basic geologic and hydrogeologic information to the public, by conducting public education programs on water use and conservation, and by promulgating reasonable and fair policies to guide the development of groundwater.

The Districts, as well as the communities of Alpine, Fort Davis and Marfa, might further consider the following management issues:

1. Because the Igneous aquifer system is the only source of water for the cities of Alpine, Fort Davis and Marfa, it will be important to monitor water levels in and around the municipal wellfields. Where possible, municipal groundwater production should be distributed over as wide an area as possible. This strategy would reduce the amount of localized drawdown by minimizing the stress within the aquifer system.
2. Plans for housing developments that are not expected to be supplied by municipal water systems should first demonstrate that adequate groundwater is available to meet the needs of residents. This should include an assessment of the maximum amount of water usage expected from a development, along with estimates of the number of wells, expected depths of the wells, and expected yields.
3. Water quality should be monitored regularly, especially where there is a high concentration of underground storage tanks or septic tanks.

4. Drought-contingency plans should be reviewed regularly to ascertain whether elements of the plans should be fine-tuned or changed completely. This is especially important in case population growth exceeds projections, or if some of a city's infrastructure must either be replaced or expanded.
5. The flow of many springs in the Igneous aquifer system area is sensitive to the amount of precipitation. As such, diminished springflow, especially sharply diminished springflow, may be regarded as an early indicator of the onset of drought conditions. Landowners might consider monitoring the flow of springs on their property as a means of helping the groundwater conservation districts and cities decide when to implement the first stages of drought contingency plans.