



Municipal Issues

Problem Statement

Municipalities face real challenges in meeting the water demands of their growing communities, especially in times of drought. Most rights to Rio Grande water are owned by irrigation districts, and the costs of leasing water or acquiring water rights have surged in recent years. In addition, many municipalities, particularly smaller ones, rely on districts to pump and deliver their water through a system designed to carry much larger irrigation flows. Water deliveries can be compromised when irrigation water is curtailed in order to keep necessary reserves for municipal supplies. Brackish groundwater, seawater, brines produced through oil and gas production, reuse wastewater, and other sources may provide alternative supplies, but require considerable investments. Obtaining permits and financing also can be costly and time-consuming.

Facts

- **Urban Growth** – The Brownsville and McAllen Standard Metropolitan Statistical Areas are among the fastest growing communities in the country. This rapid development has



made it difficult to keep up with increasing municipal water demands.

- **Drought** – The entire Lower Rio Grande Valley has been in a drought situation for nearly 10 years, with reservoir levels currently below 50 percent of capacity. In 1999, reservoir levels were critically low, at only 19% of capacity.
- **Lack of Diversified Water Sources** – Most Rio Grande Valley cities depend solely on the river for raw water, although brackish groundwater supplies are being developed.
- **Inefficient Pumping & Transport System** – The area's small municipalities depend on third parties, usually irrigation districts, to pump and transport their water from the river. Municipalities can find themselves in emergency situations during droughts when the irrigation districts may be prohibited from drawing water from the river.
- **Water Rights & Policies** – The 28 irrigation districts that hold the majority of water rights have different policies regarding the conversion of agricultural water to municipal water when farmland is urbanized. This limits the ability of municipalities to plan for growth and increases capital costs by requiring them to develop short-term leases or look for alternate sources.
- **Outmoded Technology** – Most municipalities along the Rio Grande have populations below 100,000 people and thus are not required to meet certain higher standards for treating water under the National Drinking Water Act. Consequently, needed improvements in technology and infrastructure have not been made.



Potential Solutions

- **Establish Uniform Policies for Converting Water Rights** – Municipalities and districts should work together to develop standard procedures for converting water rights and leasing water.
- **Diversify Water Sources** – Desalination of brackish groundwater is an option that is already being pursued by several municipal suppliers. The feasibility of treating salt water from the Gulf is being studied under an initiative of Texas Governor Rick Perry with funding through the Texas Water Development Board. Wastewater reuse (using treated effluent for landscaping and industrial needs) is another water supply option.
- **Develop Regional Projects** – By forming alliances, area suppliers could better pool resources and improve the quality of life for all. The Southmost Regional Water Authority, for example, was formed to develop brackish groundwater as an alternative water supply source. Regional partnerships may be more likely to attract both state and federal funding for feasibility studies for alternative water sources.

Barriers to Solutions

- **Lack of Capital** – Because most municipalities in the region are small, the pool for revenues and the tax base are limited. Additionally, the Rio Grande Valley continuously suffers from double-digit unemployment, which intensifies the lack of capital. Most area municipalities face difficulties collecting fees for services; therefore, increasing rates doesn't necessarily result in greater revenues. There is limited availability of grants for infrastructure improvements, and grant programs often require matching funds, which most small cities have difficulty obtaining.
- **Politics** – There are some 32 municipal utilities in the Valley, each with its own set of commissioners and aldermen, as well as separate water utility board officials. Getting all entities to work together can be difficult. Political agendas and priorities as well as goals and implementation strategies vary for each city. In addition, all 28 irrigation districts have a separate board of directors and general manager.
- **Bureaucracies** – The process of developing plans to improve water supplies is time consuming, especially because these efforts have to be evaluated for approval and financing through governmental entities. Consequently, it is often difficult to obtain resources to meet pressing needs.