

WATER SUPPLY AND LAND USE

New Mexico is an arid state with a rapidly growing population. In 2000, according to the 16 regional water plans, 3.3 million acre-feet of water were used. The projected demand for 2040 is 4 million acre-feet. The state's surface water is already fully appropriated, and groundwater aquifers, the source of most municipal water, are being depleted. The San Juan-Chama Project (SJC) will provide only a fraction of the needed increase in supply. Some areas have plans to drill deep wells to access brackish water, but production will be costly. Conservation and watershed management can help reduce the gap between supply and demand, but they will not suffice. Nor can the federal government be expected to develop and fund another project on the scale of the SJC. Meanwhile, climate change models indicate that decreased snow pack and earlier snowmelt will affect the run-off that feeds the rivers.

The present disconnect between land use development and water availability has unintended consequences. The Office of the State Engineer (OSE) is responsible for water administration, while cities and counties make decisions about land use. Currently no structure exists for coordination between the two levels of government. In effect, land use policy within cities and counties determines the demand for water, which is often satisfied by the transfer of water rights from individual farmers to residential communities. Little or no consideration is given to the impact on the community where the water rights originated, or to the effect on the environment beyond the protection afforded by the Endangered Species Act. As a result, the value of water rights has skyrocketed, threatening the survival of traditional agricultural communities.

The establishment of mechanisms linking land development with water availability could give some protection to those communities as well as helping to avoid further destruction of the aquifers, greater fragmentation of the landscape, and the loss of additional aquatic ecosystems.

The question is how to achieve the goal. The Subdivision Act was passed in 1995 to prevent the sale of new homes lacking basic services. The Act requires a developer who is planning to subdivide a large parcel of land in an unincorporated area to demonstrate to the OSE that he can furnish sufficient water to meet the maximum annual water requirement. The OSE then investigates the hydrology and water rights and, after a full review of the application, issues an opinion. But a recommendation from the OSE is not mandatory for approval by the county, and cities are free to adopt their own procedures.

Currently developers can avoid the Subdivision Act by drilling domestic wells, which are generally unregulated. The number of domestic wells in the State has doubled since 1995. Increased regulation of domestic wells could produce better accounting of the water pumped from the aquifers and help avoid impairment of existing water rights.

New guidelines for land use and zoning ordinances could address the impacts of local land use decisions on riparian areas, wildlife migration corridors, and aquifer recharge. The permitting authority could be required to demonstrate that proposed developments are consistent with the regional water plan, including the public welfare statement. To assure the long-term sustainability of a developer's water supply, an assessment of the impact of the development on other users could be required.

Other possible approaches include a state moratorium on new development pending adjudication and a limit on growth in areas where water is not available.

The argument against any of these changes is that they will increase the cost of new housing and may make the state less appealing to new industry. The argument in favor is that, if development is not linked to a renewable water supply, we risk the enormous expense of violating the Rio Grande Compact, losing many valued characteristics of our state, and still running out of water due to prolonged drought.