



# WATER MARKETING

Issue Paper

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Water marketing, if properly designed, can encourage greater conservation and avoid the need to construct new reservoirs that can be costly and environmentally damaging. In a successful water market, voluntary transfers can create a market where prices reflect the scarcity of the resource. Then conservation would become a top priority because water that is saved could either be used or sold to someone else. This is very important in times of drought, or rising demand when the public benefits the most from stretching water supplies and minimizing inefficient use.



In some parts of Texas, water markets are already working to reallocate water among users in a businesslike way. For example, in the lower Rio Grande below Amistad Reservoir, a water market has been in place for nearly 20 years. Farmers are selling water to meet the demand of growing cities in the lower Rio Grande Valley. In passing the Edwards Aquifer Act, also known as Senate Bill 1477 – first in 1993, and again in 1995, the Texas Legislature capped pumping from the aquifer and provided for a

water market. Even though the adjudication process of assigning groundwater rights is still underway, transfers have begun both in terms of sales and leases from irrigators to the city of San Antonio. Groundwater purchased from farmers will cost less than trying to move water from the mouth of rivers to Central Texas.

As demand for our limited water supplies increase, the demand for a robust water market in Texas will grow. However, we need a strong legal and institutional framework to ensure that markets work as a good conservation tool and that large-scale marketing does not impair the future of rural communities or damage the environment. With an appropriate framework, water markets can also provide a way to acquire water from willing sellers to restore and protect instream flows. Adopting such a framework will require that we address some challenging issues.

## The Rule of Capture in Groundwater Won't Support Markets

Under the rule of capture there is no mechanism that holds an individual water producer accountable for how their pumping will affect an aquifer or an adjoining landowner. We need a new theory for groundwater management. In some areas of the state groundwater conservation districts have been set up in an effort to manage and regulate withdrawals. Lawmakers should require that caps on pumping be set for all aquifers and permits issued consistent with those caps



and reasonable use of the resource. Then landowners would have an exclusive and enforceable right to groundwater that could be leased, sold or passed down to their heirs. This approach would also provide buyers and sellers of groundwater more certainty and consistency in how groundwater is managed and about eventual prices. For additional recommendations on groundwater management see Issue Paper No. 4.

### **Markets in Surface Water Need Regulations to Protect Instream Flows.**

As the demand for water grows and groundwater supplies become more limited, cities and developers are turning to surface water supplies. The challenge for lawmakers is to find the right mechanism to use surface water resources while still ensuring sufficient instream flows remain in the river to support fish, wildlife, water quality and associated economic activities. One way to protect river flows would be to require that a portion of the water transferred be dedicated to instream flows. Another approach that could contribute to protecting instream flows would be for the state or some other entity to buy existing water rights on a voluntary basis and convert them to nonconsumptive, instream flow rights.

### **An Efficient Water Market Needs Technical Assistance and Good Enforcement**

Decisions to further develop water marketing must first be based on a sound understanding of the water resources that are to supply future needs. Some additional funding could help groundwater districts assess the ability of aquifers to sustain production and how pumping will affect water levels in the aquifer and spring flows. Second, water rights need to be secure and enforceable for a water market to operate efficiently. Additional funding will be needed to implement an enforcement program that would ensure compliance with water rights and instream flow requirements and impose stiff penalties if water rights are violated. By contrast, groundwater conservation districts now have the authority to enforce production, transport and depletion rules.

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