

The West needs water markets

David Boaz

January 17, 2023

Despite California’s immediate deluge, the ongoing water problem in much of the West is drought — reduced rainfall, increasing use of water, dry rivers, mandated cuts. In all the stories I keep reading and hearing about the water crisis in the Colorado River basin and elsewhere, two words are absent: markets and prices. Instead the stories are all about conservation planning and allocations by a central authority — central planning for a vital resource. These Arizona farmers have already lost 60% of their “access” to water and will soon lose “every last drop.”

This article mentions scarcity. Economists know a lot about scarcity. In fact, we might say that economics is about scarcity. The economic theorist Lionel Robbins wrote, “Economics is the science which studies human behavior as a relationship between given ends and scarce means which have alternative uses.”

So why aren’t water planners in the West drawing on economic insights? People in the West want more water than is available. Who should decide who gets the water they want? That really is the wrong question. It’s a political question, a central planner’s question.

Economics tells us that all goods — land, houses, cars, steak — are scarce; if they were free, we would all want more. We allocate those resources through the price system. Prices convey information. They tell every potential consumer how much it will cost to acquire another unit of the good. They tend — “as if by an invisible hand,” Adam Smith wrote — to direct resources to their most valuable uses. Countries that tried to abolish prices and allocate resources on the basis of “to each according to his needs” found themselves in economic disaster .

If we treated water like other scarce goods, we would charge market prices for it. The introduction of market prices for any previously unpriced good is likely to be unpopular with many people, who now have to pay for something that was previously “free.” It wasn’t really free, of course; it was paid for by other people or by rationing. But market pricing could greatly alleviate the West’s water problems. If the source of the West’s water shortages is climate change, then we should attend to that. But no climate change solution is going to make water plentiful in the West in the next few years. Markets can’t make it more plentiful, but they can make water flow more dynamically and efficiently to the places where it is most needed.

And the sad lesson for the Arizona farmers might be that a market price would reveal that water is too valuable to be used to irrigate the desert. But we’ll know more about that if we let markets

work. Cato Institute authors have been making the case for years that markets can alleviate water scarcity. Here's Jonathan Adler in *Regulation* magazine in 2009:

The demands of current and projected water management challenges can best be met through a greater reliance on water markets for water management. Specifically, water management must shift toward recognition of transferable rights in water that facilitate voluntary exchanges and the market pricing of water resources. While such reforms may be difficult and there are no panaceas for the water management challenges faced by the western United States, greater use of markets offers the best opportunity to adapt to climate change and its impacts on water supplies. Even the United Nations Intergovernmental Panel on Climate Change acknowledges that “improving the functioning of water markets could help create the kind of flexibility needed to respond to uncertain changes in future water availability.”

Markets are powerful institutions for resource allocation. They facilitate the allocation of resources to their highest-valued use through voluntary exchange and the generation of information about relative scarcity and demand. Markets take advantage of localized and dispersed information about resource supplies and demands, including subjective valuations and individualized uses for different resources in different places. Such information is virtually impossible to centralize in an administrative agency.

Market institutions are easily adapted to water management. Water markets have been used in many parts of the world for the allocation and distribution of rights in water.

Terry Anderson and Don Leal in 2003:

If property rights in water use were fully defined and transferable, each owner would incur the full costs and benefits of his actions. An owner who ignored the need to allocate water to higher-valued uses would see his personal wealth decrease. Thus, knowledge and incentives would be linked. That is not the case when property rights in water are “owned” by the government. Irrigators may derive benefits from water supplied by public works projects, but they are not at liberty to transfer the water to nonagricultural uses—even when such reallocations would be of higher value. The actions of the “owner”—the agency official who authorizes water use—are not directed by the value of competing uses, as would be the case in a market setting, because he would not gain monetarily from such transfers and in fact could lose discretionary power. Disallowing voluntary trades and restricting water use to irrigation are ways of ensuring that agency control will be maintained.

There are other important differences between market and centralized allocation. Water markets would send supply and demand signals that would enable managers to conserve water and coordinate its use—precisely the type of information that is conspicuously absent under centralized allocation.

Peter Van Doren looked at California's problems in 2015. We even published books on water markets in 1982 , 1996 , and 2004 . And our friends at the Property and Environment Research Center have much more . There are better answers to the water problems of the West and indeed the world. You just have to know where to look.

David Boaz is a distinguished senior fellow of the Cato Institute.