

Science Wins Case On Sharing Resource

ontrary to the prediction in the movie *The Graduate*, the future is in water. Of all the looming environmental problems, water quality and water quantity have the potential to make us rethink our financial systems, institutions of governance, and approaches to scientific uncertainty. Failure to do so will lead to global instability. It already has. Some facts are not in dispute. 70 percent of the earth is covered in water but less that half of one percent of that water is fresh, drinkable water. According to Maude Barlow, head of the Council of Canadians, the consumption of water doubles every 20 years.

What is in dispute is how we should address water shortages, failing infrastructure, and diminishing water quality. The anti-globalization movement as exemplified by Barlow and others has one answer, equity and conservation. The pro-globalization movement, including the IMF and World Bank, have another answer, privatization and commodification.

I report with a great deal of pleasure that a conservative judge in Michigan has just affirmed the equity and conservation view. In November, Mecosta County Circuit Court Judge Lawrence C. Root ordered the shutdown of four high capacity spring water wells in central Michigan owned and operated by Nestle Waters of North America. Nestle had spent \$150 million to build a plant to bottle Michigan groundwater. A conservation group, the Michigan Citizens for Water Conservation, had filed the lawsuit in 2001 against Nestle Waters a month after the Michigan Department

of Environmental Quality approved Nestle's proposal to drill the wells and pump hundreds of millions of gallons of spring water annually from a shallow aquifer.

The conservationists made three claims. First, they argued that the drawdown of so much water would cause unreasonable harm to surface water, wetlands, and the property owners downstream. Second, they asserted that withdrawing so much water violated the Michigan Environmental Protection Act, the Wetlands Protection Act, and the Inland Lakes and Streams Act, all of which prohibit industrial activity that harms aquatic resources. Third, the group argued that privatizing a public resource, and removing it from the watershed, was illegal under Michigan's common water rights law.

At the time of trial, the plant produced an average of 130 gallons a minute but planned to increase withdrawals to at least 400 gallons per minute, depending on demand. Both sides agreed that pumping 400 gallons per minute below ground would reduce the flow of natural springs above ground, but they strongly disagreed on the impact of the reduced flow.

The springs feed Osprey Lake, which in turn drains into the mile-long Dead Stream and the 25-acre Thompson Lake. Nestle's experts argued that the main stretch of Dead Stream would only drop by a half-inch during summer months, and even less during winter. They actually claimed that this would be good for wildlife since the stream's temperature would fall, which is good for certain species of fish, especially trout.

But scientists testifying for the group argued that negative impacts from the reduced water flow were already evident from the drawdown of only 130 gallons per minute. They focused on northern pike having trouble spawning in Dead Stream. Dr. Barbara Madsen, a wetlands ecologist for the plaintiffs, testified at trial that with the drawdown there would be habitat loss and reduction of wetland quality and quantity. Michigan has already lost 50-70 percent of its wetlands. Madsen also described the effects on wetlands-associated wildlife, particularly the bald eagle and the Blanding's turtle.

Michael Haines, the attorney for

Nestle Waters North America, said of the decision, "The court fundamentally misunderstood the scientific evidence and testimony presented during trial. The court was misled by plaintiffs' predictions of stream and wetland level declines. Those predictions have been proven wrong by the actual water level measurements taken at the site during the summer and fall, subsequent to the trial."

Keith Schneider, a writer with the Michigan Land Use Institute (and former anti-environmental writer for the *New York Times*), made an interesting observation. He said, "The ruling challenges the state's extremely conservative property rights movement to at last stand up for its principles in a meaningful way. The movement should defend landowners whose rights and property values are actually damaged by harmful behavior that was encouraged by a business-friendly government agency.

"To date property rights activists have built the movement on the back of *alleged* harms fostered by what they view as government *restrictions* on the use of their land. The Nestle Waters case, though, turns to a significant degree on the *real* damages to property caused by government *cooperation*, not restriction."

These kinds of disputes are raging all over the world. For example, Hindustan Coca Cola Beverages, Ltd., was ordered in December by the Kerala, India, high court to stop pumping groundwater for use in its bottling plant at Plachimedu in the Palakaad district. The judge said, "Groundwater under the land of the company does not belong to it. Normally, every landowner can draw 'reasonable' amounts of groundwater which is necessary for its domestic and agricultural requirements. But here, 510 kiloliters of water is extracted per day, converted to products, and transported, thus breaking the natural water cycle,'

According to responsible judges from Michigan to India, companies have no legal right to extract natural wealth on this scale and the government has a public trust duty to prevent it.

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