

Addressing water conservation and real estate

January 29, 2010
Vol.156, Issue 20

By Celeste Hammond and Virginia Harding

Midwesterners take water for granted. Those who live in Chicago or in communities that obtain their water from Chicago expect that when they turn on the faucet that all the water they need will pour out, that it will not taste "funny" and that it will not put them at risk for disease.

We live in what we perceive is a "water rich" part of the country. Water conservation programs to make existing supplies of water go further are something that only those who live in the southwest and other dry parts of the country need.

This perception is wrong. A series of reports published by Metropolitan Planning Council and Openlands: "Changing Course" (2003), "Troubled Waters" (2005), and "Before the Wells Run Dry" (2009), plus studies and reports issued by governmental agencies show that Illinois' water supply is also challenged. Population growth is cited as the single largest source of this stress. (These reports are available at <http://www.metroplanning.org/multimedia/index.html>)

Real estate attorneys and their clients, when looking at land that does not have access to water from Lake Michigan, need to include quantity water availability and water quality on their due diligence checklists. Traditionally the availability of capacity in the local waste water treatment facility (WWTF) to treat waste water (formerly called sewerage) was the only water related item on the checklist. The quantity and quality of the water in a community were not on the list, but now need to be.

All water problems are not the same. Lack of capacity in the local WWTF is a problem that money can solve, water quality is also a problem that money can solve but an insufficient supply of water to meet projected future needs may be a problem that cannot be solved. The real estate industry is experienced in developing plans to finance WWTF expansions. Municipal officials are experienced in solving water quality problems. Until recently, neither real estate professionals nor government officials spent much time thinking about having sufficient quantities of water to support future growth in the Midwest and establishing programs that would conserve existing supplies of water.

Waukesha, Wis., located south of Milwaukee, has water problems. Because it lies outside of the Great Lakes Basin, Waukesha needs permission to take water out of Lake Michigan under the Great Lakes Compact, which became effective in December 2008 (available at <http://www.glc.org/about/glbc.html>). There is nothing unique about Waukesha's water problems. As its population has grown, the quantity of groundwater available to it has decreased and the water level in its wells has dropped. Also, like many communities the radium levels in the water coming from its wells exceeded federal levels requiring remediation.

Waukesha presents a case study of a city with water problems and the options available to it to resolve those problems. Work has begun but it is an on-going process and the outcome remains unclear. However, the programs that Waukesha has implemented to conserve water will reduce withdrawals from its current water supply and may help Waukesha get permission to divert water from Lake Michigan.

Radium is a naturally occurring radioactive element that is present in the groundwater that many communities use for their drinking water. This common quality problem can be remediated by additional water treatment, which is expensive, or by finding a new water supply. While Waukesha is now treating the radium in its water, obtaining rights to use water from Lake Michigan would solve Waukesha's water quantity problem but would also save the costs it now incurs to remove radium from its water.

Obtaining access to Lake Michigan water has been Waukesha's goal for many years. Peter Annin's "The Great Lakes Water Wars" (published in 2006 before the Great Lakes Compact was approved) devotes an entire chapter to Waukesha's efforts to this including litigation and a public relations campaign to generate support for its plight.

The Great Lakes Compact sets forth the conditions that communities such as Waukesha must meet in order to obtain Lake Michigan water. Its application has not yet been filed and there is no guaranty that a diversion will be approved.

Water conservation is one of the conditions that Waukesha will have to meet. The Great Lakes Water Wars notes that during its early efforts to gain Lake Michigan water "Waukesha's underwhelming water-conservation record" became an issue. Like many cities its water rates were low and the cost per gallon decreased as usage increased. Other city policies were described as encouraging residents to water their lawns. Residents had no economic incentives to conserve water.

Water conservation has come to Waukesha. The Waukesha Water Utility report "Responses to Questions Regarding Waukesha's Potential Application for Great Lakes Water," (The Water Report) dated June 3, 2009, describes the conservation program that has been instituted since 2006. In addition to adopting an ordinance which imposes limits on the use of sprinklers, it started a toilet rebate program to encourage replacing old, inefficient toilets. As a demonstration project, the Waukesha installed water efficient facilities and replaced a water-cooled air conditioning system in its City Hall and reduced water use by 90 percent. Yet, the most interesting part of the program is the new residential water rates. (The Water Report is available on the City's Web site at www.ci.waukesha.wi.us/)

The Wisconsin Public Service Commission allowed Waukesha to adopt new residential water rates designed to give residents an economic incentive to use less water. Under the new rates single family home owners pay \$2.05 per 1,000 gallons for the first 10,000 gallons used as opposed to \$1.95 per 1,000 gallons for the first 30,000 gallons used. Under the new rates \$2.65 per 1,000 gallons is charged for usage between 10,001 gallons and 30,000 gallons as opposed to \$2.20 per 1,000 gallons for usage between 30,001 gallons and 40,000 gallons under the old rates. Usage above 30,001 gallons and 40,001 are billed at the rates of \$3.40 per 1,000 gallons and \$2.70 per 1,000 gallons respectively.

The Water Report indicates that water consumption has been reduced by 11 percent in the three years since the conservation plan was adopted. A conservation plan incorporating water rates that encourage water efficiencies seem to be effectively changing how the residents of this one community use water. It may be an important factor in determining whether or not Waukesha will be permitted to divert water from Lake Michigan.

Celeste M. Hammond is a professor and director of the Center for Real Estate Law for The John Marshall Law School and can be reached at 7hammond@jmls.edu. Virginia M. Harding is of counsel at Gould & Ratner LLP and is a member of the adjunct faculty at John Marshall. She can be reached at vharding@gouldratner.com.