

WATER DISPUTES IN MASSACHUSETTS

H. David Gold

It may come as a surprise that Massachusetts, which receives almost four feet of rain per year, faces water shortages. Several factors have contributed to this situation. Many communities are served by regional sewer systems that export wastewater to distant treatment plants, rather than allowing it to recharge in the watershed where it originated. The crumbling condition of much of the Commonwealth's infrastructure has allowed clean groundwater to infiltrate sewer lines, diminishing local supplies and increasing wastewater treatment costs. Water sources have become unusable due to pollution, as well as saltwater intrusion caused by groundwater pumping in coastal areas. And, urbanization and development have caused substantial amounts of storm water to become polluted and/or directed into other watersheds.

It also may be surprising that these problems are not new in Massachusetts. *See, e.g.,* Teresa A. Lukas, *When the Well Runs Dry: A Proposal for Change in the Common Law of Ground Water Rights in Massachusetts*, 10 B.C. ENVTL. AFF. L. REV. 445 (1982) (discussing all of these issues, as documented in 1979). Nearly a decade ago, the interagency Massachusetts Water Resources Commission determined that nineteen of the Commonwealth's twenty-seven major watersheds contained areas of severe stress and vulnerability, based on an evaluation of stream flows.

Concerns about water scarcity have been amplified lately by a heightened awareness of climate change impacts, development pressure, recent reports of dwindling fish populations, and the growing realization that Massachusetts' water problems persist in spite of legislative responses, judicial rules, and fairly progressive water policy. In 2009, over thirty Massachusetts cities and towns imposed mandatory water use restrictions, 160 rivers and streams have been classified as "flow-impaired," and a desalination

plant came online with a capacity of five million gallons per day (mgd).

Against this backdrop, Massachusetts is revisiting the question of who has legal control of groundwater and stream flows.

Massachusetts Water Rights

Historically, Massachusetts was an "absolute ownership" state, meaning a landowner could dig a well and withdraw groundwater without limitation. In *Greenleaf v. Francis*, 35 Mass. 117 (1836), the state's highest court established that landowners could use the groundwater under their land however they pleased, unless there was a grant, agreement, or statute to the contrary.

The common law rule for surface water was set forth in *Stratton v. Mt. Hermon Boys' School*, 216 Mass. 83 (1913). In that case, the Supreme Judicial Court held that a "proprietor may make any reasonable use of the water of the stream in connection with his riparian estate and for lawful purposes within the watershed, provided he leave the current diminished by no more than is reasonable, having regard for the like right to enjoy the common property by other riparian owners."

Legislative Action

In the intervening years, prompted by periods of severe drought in the 1960s and 1970s, the Massachusetts legislature has passed a number of statutes encroaching on the common law rules. In 1972, the Wetlands Protection Act authorized local conservation commissions to regulate proposed activity within "wetlands" and surrounding buffer zones. Because such activity may include drilling and pumping, as well as creating access ways to water withdrawals, conservation commissions may control, restrict, and potentially even prohibit the use of water supplies in certain cases. A 1996 amendment to the Wetlands Protection Act—which added 200-foot riverfront areas to the list of resources within conservation

commissions' jurisdiction—gave these local commissions further power to regulate the rights of riparian landowners, including groundwater use with potential impacts on stream flows.

In 1984, the legislature passed the Interbasin Transfer Act, authorizing the Water Resources Commission to prohibit any proposed transfer of water or wastewater between watersheds in Massachusetts. If the Water Resources Commission determines that the Interbasin Transfer Act applies to a proposed transfer, and that the transfer is “significant” (frequently construed to mean greater than 1 mgd), the Water Resources Commission evaluates the proposed transfer against several criteria, including potential impacts on in-stream flows, other environmental impacts, and proposed conservation efforts. In a few cases, the Water Resources Commission has denied Interbasin Transfer Act approval for water supply development projects based on environmental impacts. More typically, the Water Resources Commission has approved proposed transfers subject to conditions, such as monitoring and system efficiency requirements.

In 1985, Massachusetts water law was transformed with the passage of the Water Management Act, which created a system of conjunctive management for large water withdrawals. Under the Water Management Act, water withdrawals over 100,000 gallons per day (gpd)—of either groundwater or surface water—must have either a “registration” or a permit from the Massachusetts Department of Environmental Protection (MassDEP).

The Water Management Act allowed water users with existing withdrawals greater than 100,000 gpd to grandfather their rights by filing registration statements with MassDEP, based on their water use between 1981 and 1985. The registration statements needed to be filed by 1988, and must be renewed every ten years. Registration statements describe the use of the water, the volume and the location of the withdrawal, the water source, the point of discharge, and the registrant's conservation measures. Registrants must file an annual report of water withdrawal volumes. Most registrants do not use their full allocated volumes because 1981–1985 was a relatively wet period in

Massachusetts. Public water suppliers have the largest registered use; other registrants include industrial and commercial users, golf courses, cranberry growers, and fish hatcheries.

Under the Water Management Act, new withdrawals greater than 100,000 gpd, and any withdrawals greater than a registered amount, require permits from MassDEP. In issuing these permits, MassDEP must consider a range of criteria, including the “safe yield” of the proposed water source, economic development issues, environmental impacts, and conservation measures. MassDEP may attach conditions to permits, such as withdrawal reduction during times of low stream flows, conservation requirements, installation of meters, leak repair reporting, and implementation of wellhead protection measures. Public water supplies again are the largest permitted use.

Judicial Trends

While statutes have circumscribed the absolute ownership doctrine and reasonable use rule, judicial decisions historically pointed to other legal principles to settle disputes involving the interaction between surface water and groundwater rights. For example, in the late 1800s, the courts resolved a number of disputes between mill operations and public water suppliers by invoking the legislation that authorized the suppliers to pump, and limiting their withdrawals. *See* Lukas, at 473. In 1964, the Massachusetts Supreme Judicial Court found a contractor—who had pumped water and caused land to subside under adjacent landowners' residences—liable for damages, but only based on negligence, in light of the absolute ownership rule. *Gamer v. Town of Milton*, 346 Mass. 617 (1964).

In 1986, however, the Supreme Judicial Court signaled that a “reasonable use” rule may be on the horizon for groundwater, stating “[i]n another case, we might be inclined to reexamine the doctrine which gives the owner of the overlying land absolute control over subsurface water on such land.” *Prince v. Stockdell*, 397 Mass. 843, 845 (1986). In 2003, a federal court noted that the “tides of change” were rising in the lower state courts on the issue of absolute ownership, given

the “current knowledge of the migration of groundwater” and the “current understandings of environmental interdependence [that] have surfaced.” *Liberty Mutual Insurance Co. v. Black & Decker*, 2003 U.S. Dist. LEXIS 25397 (D. Mass. 2003) (quoting *United Tech. Corp. v. Liberty Mutual Insurance Co.*, 1993 Mass. Super. LEXIS 281, 1993 WL 818913 (Mass. Super. Ct. 1993) and *Marks v. Lumbermens Mutual Cas. Co.*, 1995 Mass. Super. LEXIS 398, 1995 WL 502231 (Mass. Super. Ct. 1995)). In 2008, a trial court judge expressly stated that, in light of the Commonwealth’s extensive regulatory powers over water use, “[I]andowners no longer have ‘absolute control over subsurface water.’” *Walsh v. Hingham Mut. Fire Insurance Co.*, 24 Mass. L. Rep. 51 (Mass. Super. Ct. 2008).

None of these cases has expressly limited the common law rules. However, several ongoing controversies in Massachusetts illustrate that the right to withdraw water continues to become less absolute, and what is “reasonable” is an evolving concept.

Proposed Wellfield Development in Framingham

The town of Framingham is one of sixty-one municipalities that rely on the Massachusetts Water Resources Authority (MWRA) for water or sewer service. The MWRA recently undertook millions of dollars of renovations to upgrade its water supply system, which runs from the reservoirs in central Massachusetts to the metropolitan Boston area. Those costs are passed onto MWRA’s ratepayers.

To defray those costs, Framingham sought to reduce its reliance on the MWRA by using funding from the American Recovery and Reinvestment Act to redevelop and reactivate some of its old public water supply wells. The wells were removed from regular service in 1979 because of high levels of contaminants, but have been maintained since then for emergency backup use. Framingham planned to use these wells to replace water it would otherwise have needed to purchase from the MWRA.

Framingham initially sought to redevelop its wells to a capacity of 4.3 mgd. Because that volume exceeded the 100,000-gpd threshold of the Water Management Act, the town’s proposal was subject to MassDEP review. Based on pumping tests, MassDEP determined that up to 3.96 mgd could be approved under the Water Management Act, accounting for potential environmental impacts. The town’s proposal also triggered the Interbasin Transfer Act, which contains an exemption for the replacement of existing wells to their original capacity, so long as there is no increase in the current rate of interbasin transfers. The original capacity of Framingham’s wells was 3.17 mgd. To avoid review under the Interbasin Transfer Act, the town decided to reduce its proposed withdrawals to 3.17 mgd, its grandfathered amount.

The environmental community largely opposed Framingham’s proposal, based on concerns about the effect of pumping on the nearby Lake Cochituate, which flows into the Sudbury River, a federally designated Wild and Scenic River.

The town’s proposal also raised a number of “hydropolitical” questions. First, other MWRA member communities argued that their rates would unfairly increase as they absorbed Framingham’s share of the cost of MWRA’s system upgrades. In addition, while reactivation of Framingham’s wells was consistent with the much-repeated admonition to “keep water local,” the town’s intent to continue using MWRA sewer service would result in exports of the withdrawn well water to treatment systems many miles away. And, because Framingham’s largest water customer reportedly is Nestlé, which filters the municipal supply and bottles it for resale, detractors have argued that the town’s proposal would result in a de facto privatization of public water supplies, allowing a commercial enterprise to exert undue influence over the environment.

Framingham’s proposal—although originally fast-tracked to access stimulus funding—has become subject to heightened scrutiny under the state environmental impact review process. The state recently determined that the final environmental impact report was inadequate in several respects, including its lack of analysis of the proposed withdrawals on nearby water levels.

The restrictions on Framingham’s ability to withdraw groundwater provide a clear example of the erosion of the absolute ownership rule in Massachusetts. And, the Framingham story demonstrates that modern debates over water rights encompass a complex—and sometimes unforeseeable—array of interests.

Town of Hamilton v. MassDEP

Pursuant to the Water Management Act, the town of Hamilton has a registered volume of 0.92 mgd and an additional permitted volume of 0.11 mgd. In 2003, MassDEP imposed several conservation-related conditions on the town’s permit, following a number of reports showing severe hydrological stress in surface waters connected to the aquifer where the town’s wells are located. The town appealed the new conditions. Local environmental groups intervened in the case, arguing that MassDEP needed to recalculate the “safe yield” of the Ipswich River to facilitate permitting decisions under the Water Management Act.

Among the conservation-related conditions imposed by MassDEP was a summertime water use cap of 0.70 mgd. The town argued that this cap effectively and illegally reduced its registered volume, taking away its grandfathered rights. At the administrative level, the magistrate rejected the town’s argument, finding that even if Hamilton was restricted to 0.70 mgd during the summer months, it could still theoretically use its registered amount of 0.92 mgd over the course of the year. *In the Matter of Town of Hamilton*, DEP Docket No. 2003-065 (Final Decision, Mar. 27, 2006). After the town sought judicial review, the trial court ruled even more harshly, concluding that the summertime cap was legal because it sprung from the town’s application to withdraw more than its registered volume. *Town of Hamilton v. Department of Environmental Protection*, Civ. Action No. 06-745 (July 13, 2007).

The trial court also found that when MassDEP considers a Water Management Act permit, it must make an up-to-date determination of the “safe yield” of the affected water source. MassDEP’s modification of Hamilton’s permit was based on a safe yield calculation from 1991, which the court construed to be too high based on more recent studies. The trial court

remanded the matter back to MassDEP to redetermine the safe yield of the Ipswich River.

The town then brought its case to the Massachusetts Appeals Court. In August 2009, the appeals court affirmed the trial court’s decision upholding the modified withdrawal permit, and remanded the issue of safe yield back to MassDEP. *Town of Hamilton v. Department of Environmental Protection*, 74 Mass. App. Ct. 1129 (2009). In October 2009, MassDEP announced a new safe yield methodology, defining safe yield as “the amount of water that would be present during a drought year” for each of the state’s twenty-seven major watersheds. Environmental groups recoiled, arguing that this definition would allow water withdrawals to increase in already-stressed basins, and would offer no protection for in-stream flows or other environmental considerations. In protest, four environmental groups (the Conservation Law Foundation, Charles River Watershed Association, Ipswich River Watershed Association, and Clean Water Action) resigned from the Water Resources Management Advisory Committee, which was established by the Water Management Act and must include appointed members from watershed associations and environmental groups.

The protest worked. On November 3, 2009, after Governor Deval Patrick met with the environmental groups, MassDEP suspended the new safe yield definition. MassDEP announced that it would work with stakeholders to quickly develop interim safe yield determinations accounting for environmental protection and hydrologic factors. MassDEP committed to using best efforts to promulgate regulations setting forth a new, final methodology to calculate safe yield by October 31, 2010.

Because safe yield is one of the central criteria that MassDEP must consider in issuing Water Management Act permits, the new methodology will have a profound influence on water use regulation, and on the rights of the 850 water withdrawal permit holders in the Commonwealth. Of course, withdrawals below the thresholds of the Water Management Act will not be directly affected by this decision. In many suburban areas, such withdrawals have had major impacts, and

litigation may soon be forthcoming to address competing uses.

Town of Fairhaven v. MassDEP

Another dispute over MassDEP's authority under the Water Management Act recently reached the state's highest court. *Fairhaven Water Department v. Massachusetts Department of Environmental Protection* involves fourteen cities and towns whose Water Management Act registrations were up for renewal in 2007. MassDEP sought to impose new conservation-related conditions on those renewals, requiring, among other things, the public water suppliers to meet performance standards of no more than sixty-five gallons per day per residential customer and to lose no more than ten percent of the water pumped. Those standards were based on 2006 guidance from the Water Resources Commission that, in turn, was developed based on a comprehensive water policy issued by the Massachusetts Executive Office of Environmental Affairs in 2004.

The cities and towns sued MassDEP, asserting that the new conditions were illegal. In contrast with Water Management Act permits, the cities and towns maintained, registrations are simply submittals to MassDEP from water users for recordkeeping and planning purposes. The registration statements, they argued, are intended to protect grandfathered rights and cannot be trampled upon. MassDEP countered that registered volumes constitute eighty-five percent of all withdrawals authorized under the Water Management Act, and therefore the statute would be "lobotomized" if MassDEP could not use it to regulate registered uses. MassDEP pointed to broad language in the statute that required MassDEP to manage water and ensure a balance among competing withdrawals and uses, and added that registration statements always have been subject to conditions, such as metering and reporting requirements. A number of watershed associations and environmental groups filed an amicus brief echoing MassDEP's arguments.

The case was argued before the Supreme Judicial Court in November 2009. On the one hand, several justices seemed worried about giving MassDEP the power to ratchet back existing (registered) water

allocations. The justices questioned whether MassDEP could take away a registered water right if a public water supplier did not meet MassDEP's proposed conservation-related conditions. MassDEP argued that it could, but it was "highly unlikely" to do so, as it understood that people's drinking water was at stake. MassDEP noted that it could use several enforcement tools—from administrative penalties to criminal actions—to avoid impinging upon existing allocations. Further, MassDEP argued that the issue of MassDEP authority to cut back existing allocations need not be reached in this case, because MassDEP already could exercise such authority if a registrant did not comply with the renewal or reporting requirements of the Water Management Act.

On the other hand, Chief Justice Marshall suggested it may be appropriate for MassDEP to reduce registered water uses under some circumstances, such as if a community with registered withdrawals was profligate while its neighbors faced shortages. Chief Justice Marshall stressed the pervasiveness of the word "Commonwealth" within the Water Management Act, and expressed concern about enabling a municipality to ignore the interests of its neighbors. Other justices suggested, with a possible allusion to Nestlé, that a community with registered withdrawals should not be able to serve water to private bottling companies that then sell the water to residents in towns that do not have permits for sufficient supplies.

The justices also asked why MassDEP could not accomplish its conservation goals by placing related conditions on permits whenever a community sought water in excess of its registered use, hearkening back to the summertime cap in Hamilton's permit. For example, the court proposed that MassDEP could require any registered public water supplier seeking a permit for additional allocations to first ensure it reached conservation goals for existing users. In response, MassDEP noted that basins throughout the Commonwealth are already hydrologically stressed even though many registered public water suppliers are not using their full authorized withdrawal volumes.

With 260 public water supplier registrations renewed in 2007, the reach of the *Fairhaven* decision will extend throughout the Commonwealth. If the municipalities succeed in their challenge of conservation-related

conditions, it is questionable whether MassDEP would be able to successfully pursue a legislative remedy.

New Legislation

The political feasibility of water rights reform will be tested by the fate of the Sustainable Water Resources Act (H. 834). The bill, introduced in January 2009 and sponsored by forty-two state legislators, consists of three components: (1) a requirement that state agencies establish standards to restore and maintain stream flows; (2) authorization for public water suppliers to charge fees for new withdrawals, to be deposited in a fund for conservation measures and water system improvements; and (3) authorization to remove aging and abandoned dams.

H. 834 has set off debate between the environmental community and water supply interests. While the former generally supports the bill, some have pointed out that dam removal could adversely affect wetlands and other environmentally sensitive areas that have formed around upstream impoundments.

The bill's provisions on stream flow standards have drawn the most opposition. Standards, the bill's proponents argue, are the only way to drive behavior toward sustainability. Water supply interests have argued there is not enough scientific certainty to establish stream flow standards and that such standards would result in draconian restrictions on water use. Many water suppliers contend that they lack financial resources for substantial system improvements. And, because the bill is drafted to amend provisions of the Water Management Act, public water suppliers believe it places an undue burden upon them to help meet conservation objectives within the Commonwealth. Meanwhile, the Commonwealth itself has pushed back on the idea of standards, suggesting that it is already developing stream flow criteria that may provide more flexibility in the management of water supplies.

If the prevailing perception is that H. 834 will impinge upon existing water rights, the bill may suffer an early death. Yet, even if there is enough political will to sustain H. 834, its sponsors optimistically predict that the legislation is still years away from enactment, and

likely would spawn litigation as it is administered and enforced. Some environmentalists worry that, in the meantime, continuing stress on Massachusetts rivers and streams will cause irreparable damage.

Conclusion

Water scarcity issues in Massachusetts have been documented for decades. Shortages have hit critical levels and evoked legislative responses. Related disputes are now in the hands of the courts, the regulators, and perhaps most importantly, the end users. The erosion of the absolute ownership doctrine and the evolution of the reasonable use rule may seem daunting from the perspective of an individual water supplier or consumer. For the sake of the "Commonwealth," however, this may augur well.

H. David Gold is a counsel in the Boston office of *Wilmer Cutler Pickering Hale and Dorr*. He can be reached at david.gold@wilmerhale.com.