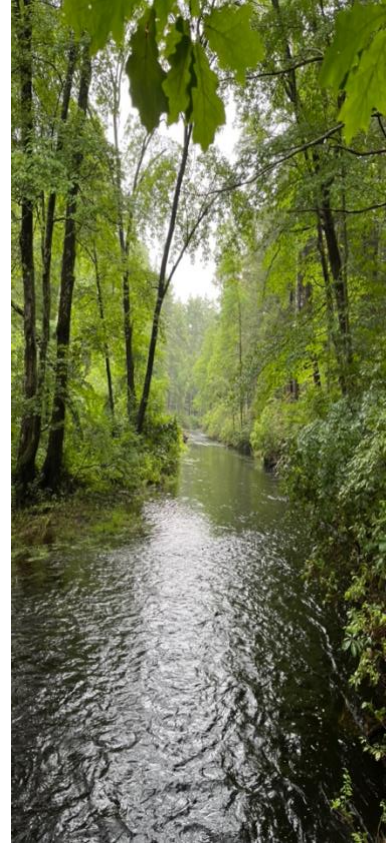


The Stillwater

DCR Investment and the Dividends for Sterling

The Stillwater River twists through Sterling on its way to the Wachusett Reservoir, once the largest manmade reservoir in the world when first filled in 1905. Connected by aqueduct to the newer and much larger Quabbin Reservoir, these two water bodies collect the run-off from a 400 square mile watershed system capable of delivering 300 million gallons a day to some 2.7 million consumers living and working in 53 cities and towns primarily within the Greater Boston Region. The responsibility for distributing this water falls to the Massachusetts Water Resources Authority (MWRA) while the management of the watersheds is in the jurisdiction of the Department of Conservation and Recreation's Division of Water Supply Protection (DCR/DWSP). That is a mouthful but read on, for Sterling looms large in this story.



DCR, (formerly called the Metropolitan District Commission or MDC) with the MWRA, was handed a dilemma to solve. EPA's Safe Drinking Water Act required America's public surface water suppliers to construct treatment/filtration facilities to ensure that all Americans had reliable access to safe clean water. However, if stringent conditions were met, a waiver to this rule might be granted. If not, a treatment plant must be built. Just five major water districts in the country were able to meet the waiver thresholds, with the DCR/MWRA system being one of them – winning national awards for their efforts.

The implications of earning this status were enormous, for the cost of building and operating a treatment plant is in the hundreds of millions of dollars. Why was this waiver granted in Massachusetts and how has it been continually renewed following periodic reviews? There are numerous factors that contribute to maintaining this pristine resource with watershed land protection being first and foremost. It has long been recognized that the purest water in the world is offered up by a carefully managed forested landscape. Alternative expensive infrastructure-based treatment ranks a distant second to nature's capacity to provide this service of high quality, naturally filtered, water at the least cost in both dollars and environmental impact.

We have learned why most surface water resources in the country had to yield to building expensive plants: their watersheds have been irreversibly compromised by inappropriate conversions of open space to the built environment. Sufficient care has not been taken to keep upstream sources out of harm's way wrought by human activity. The particulars of why and how this takes place is a topic for another time but suffice to say that land protection is paramount if safe drinking water is to have a future. Those who drink Quabbin and Wachusett Reservoir water (about 40% of the Baystate population) enjoy one of the finest metropolitan water supplies in the world – a world increasingly troubled with lack of access to safe and sufficient supplies.

How does Sterling and the Stillwater River fit into this picture? The MWRA/DCR leadership recognized the value of the Stillwater River's contribution within the bigger realm of this large watershed system which includes portions of 26 towns. Sterling's share of this territory is 7.5%, but its contribution in water volume amounts to 12% of the total Quabbin/Wachusett system's water yield (think one in every eight gallons consumed by four out of every ten MA citizens comes from "our" Stillwater River).

This river is remarkable for yet another reason. It glides over, and is a surface manifestation of, the largest subterranean aquifer within the entire 400 square mile watershed area – by far. Aquifers are underground reserves typically comprised of deep glacial sand and gravel deposits capable of storing large quantities of groundwater. A high yield aquifer, for instance, can be described as one that will gush over 300 gallons per minute from an artesian well. Sterling's municipal town wells tap into the incomparable Stillwater Aquifer.

1978 saw the completion of Interstate 190 which slices through Sterling. Suburban sprawl was marching into town as the population here climbed rapidly by several thousand souls. Nearly all land within the Stillwater watershed was held in private hands with little or no checks on threats to water quality posed by opportunities to sell land to satisfy burgeoning real estate markets. Farms and woodlots were beginning to become subdivisions and cul-de-sacs. Once gone, open space does not come back. Water quality dips dramatically. The writing on the wall was clear – protect the land or suffer the consequences of costly treatment and less than ideal water quality.

Since 1985, MDC, followed by DCR, with funding mostly from MWRA rate payers, has been purchasing land and watershed preservation restrictions (WPRs) within the

entire multi-town system. In round numbers, nearly 28,000 acres have been protected – purchased from over 640 amenable landowners, costing approximately \$150,000,000. This program is ongoing, with conservation minded landowners regularly approaching DCR with inquiries.

DCR has purchased these new lands in 20 watershed towns over the past 40 years. Of all, Sterling stands out as being the town in which much attention has been concentrated.

DCR in Sterling - The Numbers:

- MDC watershed holdings before 1985: 1,116 acres (including 236 acres under the reservoir, purchased between 1898 and 1901)
- Dollars spent since 1985: Approximately \$50,000,000 (mostly with ratepayer fees and Forest Legacy grants, not tax revenue)
- Acres purchased in fee (outright ownership) since 1985: 4,348
- Number of fee purchase transactions: 117
- Number of watershed preservation restriction acres: 539 (WPRs mean landowners remain owners of record with DCR holding land preservation restrictions.)
- Number of WPR landowners: 19
- Total DCR acres in Sterling protected by fee ownership and WPRs: 6,003 (1,116 + 4,348 + 539)
- Sterling's total area: 20,231 acres
- Area of town within the Wachusett Reservoir/Stillwater River watershed: 11,565 acres, or 57% (the remaining 43% flows into the Nashua River below the Wachusett Dam)
- Percentage of town area under DCR care and control: 29.7% (fee and WPR holdings combined)
- Payments in Lieu of Taxes (PILOT) presently being paid by the MWRA to Sterling: approximately \$850,000 – which will increase to approximately \$1,000,000 in 2026.

In summary, Sterling's rural vistas within the Stillwater River drainage basin survive in large part due to decisions made 135 years ago to create a reservoir for capturing the runoff from upper tributaries of the Nashua River (the Quinapoxet and Stillwater Rivers). We can safely

assume that this region would be bereft of most of its protected open space today had this decision not been made by the Metropolitan Water Board in the late 19th century.

If you are an advocate for open space protection, hunting and fishing, a trail hiker, a consumer of Sterling's public water supply, a wildlife enthusiast, cross country skier, hay farmer (DCR leases fields), or simply a lover of rural vistas then you will agree that our town has hit the jackpot with respect to its position within the Wachusett Reservoir watershed. It's a twist of fate with multiple dividends for our town today. All because a premier river runs through it.

For further information regarding DCR's land acquisition program contact Felicia Bakaj, Watershed Land Acquisition Coordinator, 180 Beaman Street, West Boylston, MA, 01583 ; 508 338-4801; felicia.bakaj@mass.gov

There is also an excellent website about the program at DCR/DWSP Watershed Land Acquisition – Mass.gov.