

# **Water Bodies Assessment and Recommendation Report**

## **Arlington Conservation Commission May 2016**

The Arlington Conservation Commission has carried out an initial assessment of fourteen water bodies in the Town of Arlington, which include five lakes and ponds and nine streams. A majority of these are negatively impacted by polluted runoff and stormwater discharges due to the highly urban nature of Arlington and surrounding towns. Most of these water bodies also have excessive aquatic invasive plants that degrade water quality, impede recreational use, and degrade aesthetics. In determining which waterbodies could benefit from management measures using Town funding, we have taken a triage-based approach:

1. Water bodies that are in generally good shape that do not need much help, or whose issues are being addressed by other agencies or funding sources, e.g., Upper & Lower Mystic Lakes and Upper Mystic River
2. Water bodies with some issues that could benefit from directed intervention, e.g. Spy Pond, Arlington Reservoir, Hills Pond, Reeds Brook
3. Water bodies that are in poor shape with many issues that would need major efforts and thus funding to improve, e.g. Mill Brook, Alewife Brook.

Based on our analysis we have identified the following five priority locations for attention in the coming year:

- **Arlington Reservoir** – Town-owned water body in Arlington and Lexington with aquatic invasive water chestnuts that form dense, impenetrable mats at the water’s surface, which impair public use and water quality. Recommend continuation of current management practices to mechanically remove water chestnuts. In the future, when the water chestnuts’ seed bank is depleted, the harvesting could be taken on by volunteers.
- **Hills Pond** – Small pond in a very heavily used park with water quality and invasive plant problems. Recommend review and modification of current management practices for greater use of non-chemical treatment (e.g., aeration) for invasive plant control.
- **Mill Brook** – The very poor water quality (EPA/MyWRA 2014 rating of D-) is primarily due to storm water runoff; however, the brook and its adjacent shore provide valuable wildlife habitat and opportunities for nature views. Some areas are attractive natural areas and efforts should be made to enhance public access. A possible effort might be invasive plant control along the banks and adjacent areas. In addition, the Working Group recommends that the Town DPW prioritize pretreatment stormwater improvements in the drainage area of Mill Brook to improve the water quality, since this is the most highly impacted Water Body in Arlington.
- **Reeds Brook Detention Ponds at McClennen Park** – These are small constructed ponds that have major value for storm water control and provide wildlife habitat. A preliminary review indicates that there may be seepage from the landfill material – which was capped but not lined. Recommend professional analysis of current issues and conditions, and recommendations of management practices to improve the wildlife nesting habitat. The recommendations may include additional native vegetation, reduction of mowed grass areas, and restriction of off-leash

dog activities adjacent to the constructed ponds. Also an operation and management plan should be created for this area.

- **Spy Pond** – Heavily used by public for recreation with invasive plant problems in and around the pond that impair use; also erosion along portions of the shoreline. Recommend assessment, design review and implementation of shoreline erosion control, updating or creating the operation and management plan, and continuation of aquatic invasive plant management practices.

The recent Carp die-off at Spy Pond was due to the same epizootic that occurred last year on the Charles River, the Lower Mystic Lake, and other nearby water bodies. The recent die-off was fairly small and other species were not involved, it is not a serious worry according to MA Department of Environmental Protection.

The Water Bodies Working Group has created an assessment workbook that is available for all the water bodies evaluated in support of this report. We recommend that other locations that have not been identified above as a priority for Town Water Bodies funding for FY16 should continue to be monitored, and recommendations for actions and funding should be reviewed on an annual basis.

Respectfully Submitted by:

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Current version with updates for Reeds Brook and Spy Pond: 5 May 2016