

Arlington MA Water Bodies

#	Name	Type	Location	Size	Ownership	Public Uses	Water Quality	Vegetation	Wildlife	Issues	Priority	Action Items	Monitor/Comment
1	Arlington Reservoir	Lacustrine	Lowell St, and half in Lexington	28 acres	Town of Arlington	Swimming at Res Beach. Walking, bird watching, fishing, ice skating.	Acceptable	Many aquatic invasives. Water chestnuts are the worst.	Many birds, fish & turtles. Major migratory bird site. Regular fishing location.	Water chestnut coverage of the water surface.	High-WC control.	Water Chestnut control.	DW: Water Chestnut control could probably be better managed. DW: Current Master Plan underway with CPA funding to determine how to better manage this area.
2	Spy Pond	Lacustrine	Rt 2, Pleasant St,	103 acres 864 acres water shed 73% arlington 27% belmont The Route 2 & Belmont section of the watershed is the largest drainage area to discharge point	Town of Arlington In 1898 the town abandons its attempts to implement Spy Pond as a local drinking water source	Arlington/Belmont Crew and Arlington Boys & Girls Club, Boating, fishing, public access, boat ramp, passive recreation, ice skating.	[ref ACT report] late 1800's and early 1900's weed growth become noticeable, 1980 - 81 study	[ref ACT report] Eurasian watermilfoil 51%, Thinleaf Pondweed 20%, Filamentous Algae 16% plus 6 other invasive 1980-81 study	[ref ACT report] 120 species of birds make their home in and along its shores at some point in the year, the most notable are Canada geese Spy Pond also contains a variety of fish species. From Wikipedia, could not find this in the AM report	[ref ACT report] Increasing phosphorus levels elevated from 2007	High - Invasive aquatic plant control	Reduce phosphorus intake from the 864 acre watershed. Reduce dependence on chemical controls.	CT: Spy Pond is and will always be a managed landscape, but more effort should be made to reduce the nutrient (nitrogen and phosphorus) loading from the surrounding watershed. Increases are noted in the 2007 – 2013 Aquatic Management reports reducing water quality and ecosystem health.
3	Hills Pond	Lacustrine	Menotomy Rocks Park, near end of Churchill St	2.3 acres	Town of Arlington, Park and Rec	Birding, Nature Walks, Family gatherings, ice skating.	Good based on most recent ACT report for water quality measures (pH, alkalinity, turbidity, dissolved oxygen, nitrogen compounds, bacteria)	Invasives: watermilfoil & curlyleaf pondweed; Increases in native plant growth 2007 to 2012	Site visit 5/2/15 (SC): wood ducks, mallards, red-winged black birds, flickers, chickadees, warblers, goldfinch, etc. observed. Native aquatic vegetation; non-native not observed (may be early in season)	Impaired water body due to: • non-native aquatic plants (DEP-MA71018) • ACT report 2012 documents reduction in non-native species 2007-2012 with chemical treatments (diaquat herbicide & copper algaecide). Herbicide and algaecide treatment continued in 2017 (Ref 7).	High - Invasive aquatic plant control	Aeration: fix pump to introduce aeration as non-chemical invasive water plant control. Completion scheduled for Spring 2018.	SC: Well-used community resource for nature outings and family activities (playground on-site near pond) - more effort should be made to control invasives using non-chemical treatment (aeration) DW: Aeration system to be reinstalled in the Spring of 2018.
4	Mystic Lake-Upper	Lacustrine	Near Mystic St, Arlington, also in Medford and Winchester	~ 200 acres	DCR, Arlington, Winchester	Boating, swimming, birding, nature viewing & walks	EPA-MyWRA 2016 rating = A+ EPA & MyRWA perform water quality monitoring for bacteria, nutrients, DO, TSS, Tphos, Temp, Color, Odor	Wetland / Riparian along river bed; some bank erosion; some invasives but mainly native vegetation	2016 Herring # increased Fish Ladder counts. Birds (water fowl & birds of prey including owls & eagles), fish, amphibians, reptiles, small mammals	Slightly impaired water body due to: • non-native aquatic plants • water chestnuts (DEP-MA71043 & MyRWA) • Some areas of Contaminated sediments (DEP-MA71027)	Low	Maintain community access from Arlington side	SC: Water bodies show excellent water quality for boating and swimming and are well-monitored by other agencies (EPA & MyWRA). Volunteer projects (Eagle Scouts) have improved community access (trails and stairs: Windows on the Mystic); MyRWA continues to monitor lake water quality
5	Mystic Lake-Lower	Lacustrine	Near Mystic St and Mystic Valley Parkway, Arlington, also in Medford	~ 100 acres	DCR, Arlington, Medford								
6	Mystic River	Riverine	From Lower Mystic Lake to Alewife, along Mystic Valley Parkway	~ 1.5 miles in Arlington	DCR, Mystic Reservation	Boating, birding, nature viewing & walks	EPA-MyWRA 2014 rating = B+ Impaired with many outfalls / storm drain connections; PAHs, metals, total phosphorus, from urban stormwater contamination; some areas dissolved oxygen saturation & high chlorophyll-a MyRWA performs water quality monitoring (see above)	Wetland / Riparian along river bed; some bank erosion; some invasives; native vegetation	2014 Herring # increased Fish Ladder counts. Birds (water fowl & birds of prey including owls & eagles), fish, amphibians, reptiles, small mammals	Impaired water body: • CSOs (storm drains; road runoff; oil spills; historical industrial contamination) • non-native aquatic plants - Water chestnuts (MyRWA) • Contaminated sediments (DEP-MA71-02)	Medium	Control Stormwater runoff to improve water quality; potential bank restoration	SC: ACC / Town awarded NRDA grant for Mystic Riverfront Restoration; Project begun October 2017 to stabilize bank, repair broken outfall, and create new habitat; completion expected 2018 Includes companion project for installation of a new pretreatment system for storm water that leads to the outfall by Town DPW.

Arlington MA Water Bodies

#	Name	Type	Location	Size	Ownership	Public Uses	Water Quality	Vegetation	Wildlife	Issues	Priority	Action Items	Monitor/ Comment
7	Mill Brook	Riverine	From Arlington Reservoir to Lower Mystic Lake, near bikepath	~ 3 miles	Private and public owners	Nature view and wildlife habitat area.	Impaired with many storm drain connections. Grade D- in recent EPA/MyWRA report.	Mostly channeled or covered. Some vegetated bank areas.	Nesting birds. Some aquatic life below Cooke's Hollow.	Invasive JKW plants on banks. Outlet for many storm drains.	High	Improve water quality and public access	MyWRA received CPA funds to perform environmental analysis and design for Wellington Park. Phase 1, schematic designs, to be completed Summer 2018. <a href="http://www.mysticriver.org/millbrook">www.mysticriver.org/millbrook</a>
8	Alewife Brook	Riverine	From Rt 2, to Mystic River, along Alewife Brook Parkway	~ 2 miles	DCR, Alewife Reservation	Nature viewing from the Greenway path; canoeing.	EPA-MyWRA 2014 rating = D Impaired: high bacterial counts (sewer discharges & urban stormwater runoff)	Vegetated bank with some erosion. Native and non-native plants.	Water fowl; nesting birds; migratory birds; small mammals	Impaired water body due to: • CSOs: bacteria • low DO • contaminated sediments (DEP-MA71-04)	Medium	Control Stormwater runoff to improve water quality	SC: Increase public accessibility.
9	Ryder Brook	Riverine	From bikepath to Mill Brook, near Ryder St	~ 1/8 mile	Town of Arlington properties	Nature view from the bikeway.	Intermittent fed from a storm drain.	Upper section well vegetated. Lower section weedy.	Nesting birds. Small mammals - skunks, racoons have been spotted.		Low	Protect.	DW: An isolated but useful habitat area.
10	Coolidge brook	Riverine	Btwn Coolidge and Mt. Vernon St	< 1/8 mile	Private owners	No,	Clear fed by ground water and flooding with storm water runoff	Opportunities exist to make a difference with native planting and buffer edges to support flora and adapted fauna.	Nesting birds. Small mammals	habitat for wildlife, people, and pets.	Low	Public education, no salt, low phosphorus, no yard waste.	CT: Urban pocket habitat.
11	Noname Brook, aka Bow Run	Riverine	Along bikepath from Nourse Rd to Mill Lane	~ 1/2 mile	MBTA. Managed by DPW.	Walking on the bikeway	Usually flows clear being fed regularly by ground water and flooding with storm water runoff.	Overgrown with Japanese Knotweed. Shaded by a variety of trees.	Nesting birds including ducks, probably small mammals.	Japanese Knotweed that also intrude on the bikeway. Storm water flooding onto the bikeway.	Medium	JKW control.	DW: Would like to do something about the JKW.
12	Herbert Meyer Brook	Riverine	Thru Winchester Country Club, crosses Mystic St, to Upper Mystic Lake	~ 1 mile	Winchester Country Club, private owners.	Viewing and water trap.	Clear, fast running. Probably benefits from golf course watering.	Minimal, fairly open. Few invasives.	Some small animals and birds, but surrounded by grass and pavement.	Perhaps fertilizer runoff to Mystic Lake.	Low	NA	DW: Private ownership.
13	Clematis Brook	Wetland, headwater	Poets corner park, Shelley Rd	< 1/8 mile	Town of Arlington, Park Dept, possibly also church property	Wildlife habitat	Intermittent channel with some wetlands.	Some Phragmites. Many invasives including multiflora rose.	Birds and small mammals.	Invasive plants and trash dumping.	Low	Trash & invasive removal.	DW: Very overgrown with invasive plants.
14	Reeds Brook & McClennen Park Detention Basins	Riverine, stormwater detention basin and bordering wetlands.	From Winchester Town Line btwn Dothan and Wright St, thru McClennen Park to Lexington TL behind Reed St	~ 1/4 mile	Private owners, and Town of Arlington, Park and Rec	Passive recreation	Poor, unstratified warmwater basin, Receives waters/ drainage from the caped landfill into Munroe Brook downstream to the Arlington Reservoir	Bank vegetation consists of a mixture of native and introduced species, aquatic invasives	Nesting birds including ducks, mammals. There is not an abundance of wildlife but has sufficient diversity of flora and fauna to justify continued cleanup	Potential capped land fill runoff. Observed iron flocculation may impair habitat values and functions (Brown & Caldwell, 2017)	High	Continue assessment of detention basins and brook; sampling & analysis to evaluate ecological risk; <b>need additional funding to complete assessment</b>	Continued investigation of iron flocculation at detention ponds to improve aesthetic, recreational, and wildlife values and functions. Results of initial investigations 2016-2017 indicate potential for ecological risk from high iron & manganese. Further sampling & analysis planned for 2018.

Reference Documents

- 1 ACT, "Arlington Ponds 2007 Baseline Survey"
- 2 ACT, "2012 Arlington Aquatic Management Program - Arlington, MA. Spy Pond, Arlington Mill Reservoir and Hills Pond"
- 3 "MyWRA: Annual EPA Grade Assessment - 2014," June 9, 2015 (<http://rpubs.com/walkerjeffd/myrwa-epa-grade-2014>) including reference #5, below, and other MyWRA online information
- 4 MassDEP online information on water bodies (#s listed)
- 5 EPA Water Quality Report at <http://mysticriver.org/2014waterqualitygrade/>