

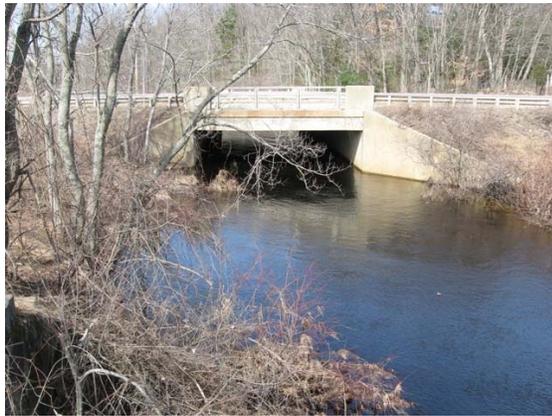
Warner's Pond Water Quality Sampling Locations & Watershed Assessment Results

Tributary Assessment/Sampling Locations

SITE	W-19, Fort Pond Brook (Sampling Station ID = WP-1)
LOCATION	Access off Route 2 East. Pull-off available at railroad track crossing or further down Route 2.
DESCRIPTION	Fort Pond Brook inlet at Route 2. Sample just upstream of confluence with Nashoba Brook. High potential to contribute sediment to Warner's Pond from upstream sources.



SITE	W-20, Nashoba Brook (Sampling Station ID = WP-2)
LOCATION	Access off Route 2 East. Pull-off available at railroad track crossing or further down Route 2. Same access point as W-19.
DESCRIPTION	Nashoba Brook inlet at Route 2. Sample just below Route 2 bridge crossing and upstream of junction with Fort Pond Brook. High potential to contribute sediment to Warner's Pond from upstream sources.



SITE	W-16, Warner's Pond Outlet (Sampling Station ID = WP-3)
LOCATION	Access from Law's Brook Road.
DESCRIPTION	Outlet of Warner's Pond, just upstream of the dam. Access from open grassy area.



SITE	WP-4A, Coles Brook just upstream of confluence with Fort Pond Brook (Sampling Station ID = WP-4)
LOCATION	Access from Law's Brook Road.
DESCRIPTION	Coles Brook discharges to Fort Pond Brook at corner of Law's Brook Road and School Street. Coles Brook watershed drains portions of Route 2, and very large impervious surface area associated with Adesa Corporation facility at Route 2 and Hosmer Road. Two stormwater outfalls discharge to Coles Brook at this location. Sample downstream of bridge and outfalls. High potential to contribute sediment.



SITE	W-21, Nashoba Brook at unnamed bridge crossing (Sampling Station ID = WP-5)
LOCATION	An unnamed street that leads to Teamworks facility crosses Nashoba Brook at this location. The street is just south of Weatherbee Road.
DESCRIPTION	Highest potential sediment load occurs from this location up to the dam at Concord Road. Numerous businesses on Rt 2A line river bank with little buffer. Landscaping business at this location; other light industrial and commercial businesses upstream.



Non-Point Source Assessment/Sampling Locations – Stormwater Outfalls

Sample ID	Photo	Description and Notes
W-10		<ul style="list-style-type: none"> • Access from small open space area on east side of Wright Road and walk south • W-10 drains catch basins on Wright Road • Flow during dry weather survey from melting snow • Slightly turbid • Discharges to scrub-shrub wetland
W-11		<ul style="list-style-type: none"> • Access from small open space area on east side of Wright Road and walk north • 24" RCP with historic stone headwall • Discharges to scrub-shrub wetland • Low flow from snow melt during dry weather survey
W-12		<ul style="list-style-type: none"> • Access from end of Wright Road and follow trail east behind homes • 24" RCP with historic stone headwall • Discharges to scrub-shrub wetland • Slight flow from snow melt during dry weather survey
W-14		<ul style="list-style-type: none"> • Park at Warner's Woods and access from Law's Brook Road • Follow pond shoreline up through woods • 24" RCP with historic stone headwall • High dry weather flow during survey • No odors or sheens detected to suggest illicit connection; flow likely due to groundwater and snowmelt

<p>W-15</p>		<ul style="list-style-type: none"> • Access on Law's Brook Road, park at Warner's Woods visitor spot • 2 outfalls – one 12" RCP, one 36" Corrugated Metal pipe • Drains road runoff
<p>W-17</p>		<ul style="list-style-type: none"> • Access from prison parking facility, walk along treeline and follow trail past cemetery through woods to outfall • 36" RCP with low flow during dry weather survey from snowmelt • Slight sheen on water • See AECOM figure of drainage • Drains Rt 2 runoff – discharges directly to pond with no wetland buffer • See GeoSyntec Report for past results • High priority sampling location
<p>W-23</p>		<ul style="list-style-type: none"> • Outfall drains catch basins along Weatherbee Road • Light industry nearby • No flow during dry weather survey but likely runs during wet weather

Selection of Other Key Areas Investigated During Watershed Assessment

Location ID	Photo	Description and Notes
W-1		<ul style="list-style-type: none"> • Road cut along Route 111 • Sediment from road discharges to Guggins Brook, a tributary of Fort Pond Brook • Culvert under road is blocked
W-1A		<ul style="list-style-type: none"> • Fort Pond Brook at Central Avenue, West Acton • Road cut with moderate sediment deposition on the roadway
W-3		<ul style="list-style-type: none"> • Catch basins along Route 111 in West Acton • Moderate sediment deposition on the roadway • Catch basins likely drain to Fort Pond Brook
W-6		<ul style="list-style-type: none"> • Pratt Brook crossing at Main Street near south Acton • Moderate sediment deposition on the roadway • Large impervious surfaces associated with parking area adjacent to brook and car dealership further north

<p>W-7</p>		<ul style="list-style-type: none"> • Fort Pond Brook at Main Street in South Acton • Large parking area at the commuter rail station is located in proximity to the brook, a potential sediment source
<p>W-9</p>		<ul style="list-style-type: none"> • Catch basins along Wright Road discharge sediment load from the street to Warner's Pond via the outfalls on the pond's western shore
<p>W-13</p>		<ul style="list-style-type: none"> • 12" Corrugated Plastic Pipe outfall that drains road runoff from Laws Brook Road • Outfall discharges to forested area and not directly into Warner's Pond; sediment load attenuated by forested buffer • Not recommended for water quality sampling
<p>W-18</p>		<ul style="list-style-type: none"> • Agricultural fields along Route 2 and School Street • Potential source of nutrient loading to Warner's Pond

<p>W-22</p>		<ul style="list-style-type: none"> • Eastern bank of Nashoba Brook along Route 2A/Route 119 • This stretch of brook is a sediment-loading hotspot; there are numerous businesses and parking lots along the bank with little forested buffer • Steep eroding banks in this area likely contribute heavy sediment load
<p>W-23</p>		<ul style="list-style-type: none"> • Weatherbee Road Crossing of Nashoba Brook near Route 2A • Numerous business and light industrial areas contribute sediment to the brook along this reach
<p>W-24</p>		<ul style="list-style-type: none"> • Nashoba Brook at Concord Road with view of dam downstream of Ice House Pond • A proportion of the sediment within the brook likely settles out in front of the dam

<p>W-25</p>		<ul style="list-style-type: none"> • Nashoba Brook at Brook Street • Road cuts on upstream and downstream side of the brook at this location with moderate sediment load in the roadway • Heavy commercial development to east on Rt 2A/Route 119
<p>W-26</p>		<ul style="list-style-type: none"> • Example of some of the commercial development along Route 2A/Route 119 located to the east of Nashoba Brook • Although this area is a potential source of sediment, much of it is likely attenuated before it reaches the pond given the distance to the pond and presence of dams downstream
<p>W-28</p>		<ul style="list-style-type: none"> • Nagog Brook at Route 27 • Newly installed box culvert • Surrounding area is less developed than southern portion of the watershed • Light sediment deposition on the roadway
<p>W-30</p>		<ul style="list-style-type: none"> • Conant Brook at Nagog Road • Rural area of the watershed • No catch basins on the roadway • Surrounding area has no obvious sources of sediment loading to Warner's Pond

W-32



- Grassy Pond Brook at Arlington Street
- Large church parking area adjacent to the brook is a potential sediment source



WARNER'S POND WATERSHED MANAGEMENT PLAN
 Concord, Massachusetts

Scale: 1" = 3000'
 0 3,000 Feet

Source: 1) MassGIS, Orthophotos, 2008
 2) ESS, Watershed Assessment Results, 2011

Legend

- Assessment Locations
 Sediment Source Potential
- Low
 - Medium
 - High
 - Pond Watershed

Watershed Assessment Results

Figure 1