

The Silver Lake Stormwater Improvement Project

How YOU Can Help!



- ✓ Keep litter, leaves, and debris out of street gutters and storm drains. These outlets drain directly to Silver Lake, local streams, and wetlands.



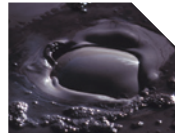
- ✓ Don't feed waterfowl! Bread and snack food is harmful to waterfowl and can lead to malnutrition. Feeding waterfowl discourages winter migration, can lead to aggressive behavior, and encourages large bird flocks that degrade the Silver Lake beach and shoreline with droppings.



- ✓ Apply lawn and garden chemicals sparingly (if at all) and according to directions.



- ✓ Dispose of used oil, antifreeze, paints, and other household chemicals properly. Do not dump these products in storm drains or on the ground!



- ✓ Clean up spilled brake fluid, oil, grease, and antifreeze. Do not hose them into the street where they eventually reach Silver Lake or other water bodies.



- ✓ Pick up after your pet! Use biodegradable doggie bags to collect pet waste. Don't dispose of pet waste in storm drains.



- ✓ Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas.



- ✓ Wherever possible, re-use rainwater for irrigation. Rain barrels are a low-cost way for homeowners to capture and re-use roof runoff for lawn and garden watering.



Contact Information:

The Silver Lake Stormwater Improvement project is a cooperative effort of:



MA Department of Conservation and Recreation
For more information about this project, including opportunities to become involved as a volunteer, please contact:
Sara Cohen (617) 626-1374



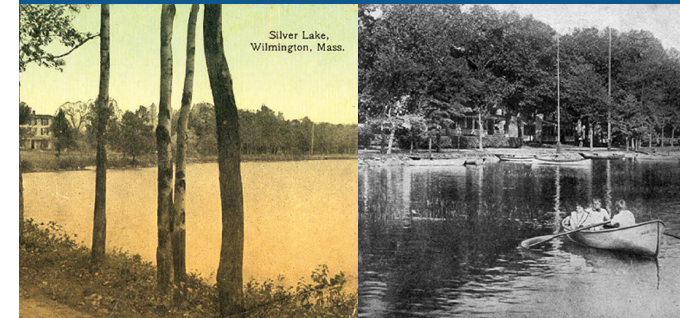
The Town of Wilmington
Contact: Jamie Magaldi, Asst. DPW
Superintendent (978) 658-4481



Project Partner:
United States Geological Survey



Project funding provided by:
U.S. Environmental Protection Agency - Targeted Watersheds Grant



Actions YOU Can Take to Protect Silver Lake



For more information on **how you can help keep our lakes and ponds clean**, please visit www.mass.gov/lakesandponds

For more information on **Low Impact Development stormwater techniques**, please visit www.mass.gov/envir/lid



This brochure was developed by **GeoSyntec Consultants**
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As part of a restoration project for the Ipswich River Watershed, the Massachusetts Department of Conservation and Recreation and the Town of Wilmington are developing innovative designs to reduce the amount of stormwater runoff entering Silver Lake, improve the lake's quality, and reduce beach closures.



To reduce polluted stormwater runoff from paved surfaces, “porous paving” systems will be installed at the Silver Lake beach parking lot.

“Porous Pavers are permeable alternatives to concrete or asphalt.”

Low Impact Development (LID) techniques

will be used in three stormwater drainage areas.



Attractively landscaped “bioretention cells” and “raingardens” will be used to temporarily retain and filter stormwater using specialized plantings and soils. An important goal of the project is to control stormwater in ways that not only protect water quality, but are an attractive part of the Silver Lake neighborhood.



Raingardens will be constructed on selected residential properties in the Silver Lake neighborhood to promote infiltration and improve stormwater runoff quality.

A planted swale will be installed on the southeastern end of the Town Beach to filter and infiltrate runoff, replacing a stormwater pipe and preventing erosion during large rain storms.

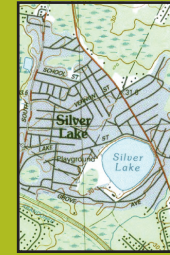
Porous Pavers are permeable alternatives to concrete or asphalt. Porous pavers allow stormwater to soak into the ground between paving units, reducing the surface runoff pollution while improving groundwater recharge.

Porous asphalt is similar to standard asphalt, except that the smallest particles have been screened out, allowing water to pass through. Undemeath the pavement is a bed of sand and gravel which allows stormwater to slowly percolate into the underlying soil.

Both of these porous paving systems will be part of the Silver Lake parking lot demonstration project.

A “pocket wetland” will be created to provide a natural filter where a stormwater pipe currently discharges directly to Silver Lake at Lake Street.

In addition to the above LID techniques, select catch basins in the Silver Lake neighborhood will be improved, including replacement with deep-sump catch basins and infiltrating devices to trap sediment and pollutants and recharge groundwater.



Silver Lake Facts

- Silver Lake is a 28.5 acre “kettlehole lake” formed approximately 15,000 years ago by an ice deposit from a retreating glacier.
- Silver Lake has a maximum depth of 29.5 feet and a volume of approximately 108 million gallons.
- The Silver Lake watershed (the land area that drains toward the lake) includes 132 acres in Wilmington and Tewksbury.
- Silver Lake flows to Lubbers Brook, a tributary of the Ipswich River.
- Silver Lake is located within the Ipswich River watershed, a 155-square mile area encompassing all or part of 22 communities in northeast MA. From its headwaters in Burlington, Wilmington, Andover, Reading and North Reading, this watershed eventually drains to the Atlantic Ocean in the town of Ipswich.
- Silver Lake was once a summer resort destination with its own railroad station. Today, the lake is still a popular local spot for fishing, swimming, boating, and ice hockey.