
Sasco Brook Watershed

**A Cooperative Project to
Reduce Pollution and
Protect the Environment**



L. Donahue

**Sasco Brook
Pollution Abatement Committee**

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Sasco Brook Watershed

Sasco Brook Watershed is all of the land area that receives and drains rainwater and melting snow into Sasco Brook and ultimately into Long Island Sound. The watershed covers 6,600 acres or a little more than 10 square miles. A significant part of the watershed (19%) is in the Town of Westport, although most (78%) is in the Town of Fairfield, and 3% is in the Town of Easton.

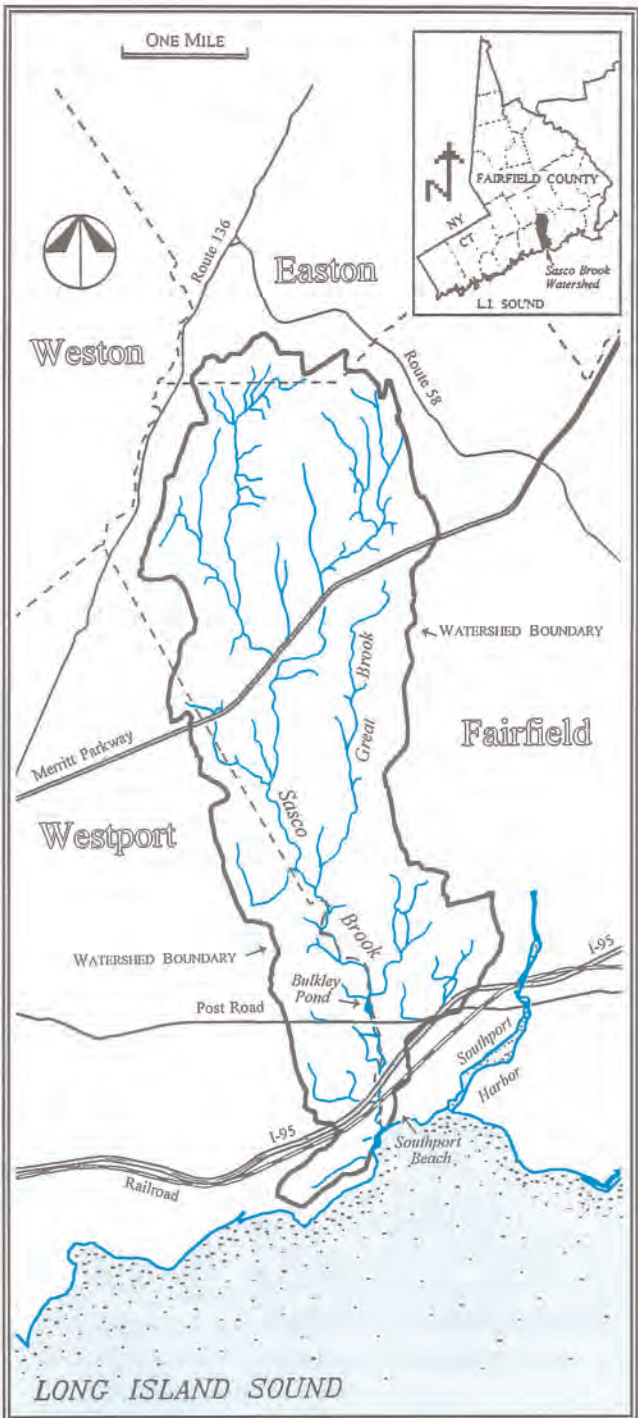
Sasco Brook is six miles long. It begins in northwest Fairfield and forms part of the boundary between Westport and Fairfield before flowing into the Sound. The brook and its watershed have important natural values and ecological functions, and there's a fundamental relationship between the watershed, the brook, and Long Island Sound. Sometimes, that relationship can be overlooked or not fully appreciated. ***Long Island Sound greatly depends on the environmental quality of its many tributaries and watersheds. If water flowing into the Sound is polluted, the water we swim in and the fish we eat will be polluted too.***

Downstream of the Bulkley Pond dam at the Post Road (Route 1), Sasco Brook is sometimes called Sasco Creek because it's influenced by the tide. Here, fresh water from the brook and watershed mixes with salt water from the Sound to create a small estuary. The wetlands and mudflats dilute, stabilize, and partially decompose pollutants. This estuary and the others along the Sound have rich biological productivity; they are the foundation of the food chain upon which the Sound's fish, shellfish, wildlife, and waterfowl depend.



L. Donahue

Sasco Brook Estuary



Sasco Brook watershed and network of tributaries.

Runoff Pollution

Runoff pollution, also called nonpoint source pollution, doesn't come from a single, easy-to-identify "point" such as an industrial discharge pipe. Of concern in all watersheds, runoff pollution occurs when water runs off roads, parking lots, driveways, lawns, hillsides, paddocks, and other surfaces. Many contaminants (including oil, sand, pesticides, nutrients from fertilizer, and bacteria from animal waste) are picked up as the water runs over the ground, into storm drains, sometimes through the soil, and eventually to Sasco Brook. Poorly functioning septic systems that leak bacteria and excessive nutrients into the watershed are another source of runoff pollution. Even cleaning the house, driving to work, and walking the dog can generate polluting substances.

Alone, each source of pollution has only a small impact. One car leaking a few drops of oil, for example, isn't much of a problem. The cumulative impact of many cars is another story. Runoff pollution gets washed through the watershed, to the brook, and into the Sound. ***It comes from just about everywhere and it all adds up!***

"So what?" we may be tempted to say. "The pollution gets washed out and the Sound is big enough to dilute it." That may have been true long ago when there wasn't as much development to contribute to runoff problems, but it's not true now.

Runoff is now the number one pollution problem in the nation's coastal waters and has a major impact on Long Island Sound.

What are some impacts of runoff pollution in the watershed and Long Island Sound? A big problem is low dissolved oxygen (hypoxia) that suffocates fish and other aquatic life and is caused primarily by excessive nitrogen and phosphorous. Disease-causing bacteria, trash, and floating debris are also concerns, as are metals, plastics, and chemicals that collect in the water and bottom sediments. As a result of runoff pollution, recreational shellfishing has been prohibited in Long Island Sound near the mouth of Sasco Brook, and Southport Beach is sometimes closed for swimming.



L. Donahue

Sasco Brook follows a gently sloping course.

A Watershed Project To Reduce Pollution

In 2008, the Town of Westport received a grant from the U.S. Environmental Protection Agency (EPA) and Connecticut Department of Environmental Protection (CT DEP) to prepare a watershed plan to help reduce runoff pollution in the Sasco Brook Watershed. The plan is building on the many programs for improving water quality that have been established in the watershed over the past 15 years.

For example, a program of water quality monitoring has been established, and many previous sources of pollution have been eliminated through the efforts of the Sasco Brook Pollution Abatement Committee. The Committee is a volunteer group of Westport and Fairfield town agencies, the CT DEP, Westport-Weston Health District, U.S. Department of Agriculture's Natural Resources Conservation Service, and private organizations such as Earthplace and the Fairfield County Hunt Club.

The watershed plan will describe existing environmental conditions in the watershed as well as the interests of the different watershed "stakeholders," including town, state, and federal agencies, not-for-profit organizations, and property owners. In addition, it will identify environmental problems in the watershed, establish town goals and policies to protect and improve water quality, and develop best management practices (called BMPs) to implement the goals and policies. The plan will encourage interested citizens and watershed property owners to be good stewards of the environment.



L. Donahue

This Post Road catch basin drains to Sasco Brook.

Watershed Features and Conditions

Sasco Brook Watershed, shaped thousands of years ago by the last glacier, has been influenced in more recent history by human activities. The gently rolling landscape was cleared for agriculture in the 1700s. Today, much of the watershed is a pattern of well-kept homes, open fields and pastures, mowed lawns, and tree-lined roads. Important man-made features include four major transportation routes—the Merritt Parkway, Connecticut Turnpike, Post Road, and Metro-North Railroad—used by tens of thousands of people who pass through the watershed each day.

Sasco Brook follows a mostly narrow and gently sloping course for much of its length; it widens somewhat in its lower reaches and at Bulkley Pond just north of the Post Road. The pond's dam marks the upstream extent of tidewater. It also blocks spawning runs of river herring, fish that could swim upstream as far north as Cross Highway. A network of small streams and wetlands feeds the brook; the largest stream is named Great Brook.

In the northern part of the watershed, development is relatively sparse, and streams and wetlands are mostly undisturbed. Significant drainage modifications have occurred in the southern, most developed part of the watershed, particularly in the urban corridor along the Post Road. Businesses along the Post Road, and some of the neighborhoods near it, are connected to sanitary sewers; the rest of the watershed is served by individual septic systems.

Woods, wetlands, and water surfaces cover about 3,600 acres (55% of the entire watershed); roughly 2,100 acres (32%) are used for low density residential or recreational open space purposes; about 480 acres (7%) are covered by impervious roads, parking lots, commercial facilities, and higher density residential development; and about 380 acres (6%) are used for agriculture and include pastures, animal paddocks, and fields.

In the entire watershed, including parts of Westport, Fairfield, and Easton, there are about 2,500 homes. Open areas include the Patterson Club golf course, the Fairfield County Hunt Club, and town-owned and privately owned conservation areas.

Solutions to Pollution

There are many easy, no-cost ways that citizens and homeowners can help protect and improve the environment. Reduced water consumption, watershed-friendly lawn care, stormwater management, septic system maintenance, and proper disposal of pet and animal waste are some examples. Information about these stewardship initiatives is available from the Westport and Fairfield conservation departments and on the town websites, and will be included in the watershed plan.

The plan's goals and recommendations for protecting and improving water quality are being prepared for inclusion in the Westport and Fairfield plans of conservation and development. In the meantime, we can all strive to increase awareness of watershed issues and the cumulative impacts that everyday activities can have on water quality in Sasco Brook and Long Island Sound.

Everyone can contribute to cleaning up and preventing pollution. Through the Sasco Brook Watershed Project, it's envisioned that a voluntary partnership of private landowners, governmental agencies, and concerned groups can do just that. You can help. Please think about runoff pollution and how you can maintain your property and otherwise act to protect and enhance the watershed.



G. Steadman

Sasco Brook empties into Long Island Sound.

**THE SASCO BROOK WATERSHED PROJECT
IS A COOPERATIVE EFFORT OF:**

TOWNS OF WESTPORT AND FAIRFIELD

WESTPORT-WESTON HEALTH DISTRICT

U.S. ENVIRONMENTAL PROTECTION AGENCY

U.S. DEPT. OF AGRIC. NATURAL RESOURCES CONSERVATION SERVICE

CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

EARTHPLACE - THE NATURE DISCOVERY CENTER

FAIRFIELD COUNTY HUNT CLUB

WATERSHED RESIDENTS

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**Town of Westport Conservation Department
110 Myrtle Avenue, Westport, CT 06880
(203) 341-1170**

www.westportct.gov

**Town of Fairfield Conservation Department
725 Old Post Road, Fairfield, CT 06824
(203) 256-3071**

www.fairfieldct.org

Some websites for homeowner land care:

www.ladybug.uconn.edu

www.organiclandcare.net

A website on watershed management:

www.ct.gov/dep/watershed