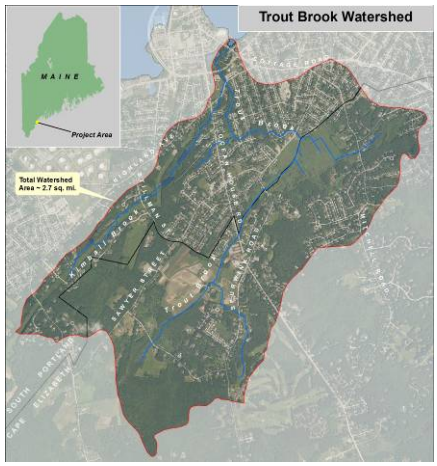
What Do You Know about Trout Brook?

Where is Trout Brook?



Trout Brook is a 2.9 mile stream that runs through South Portland and Cape Elizabeth and drains into Casco Bay at Mill Cove (next to Hannaford). Trout Brook has three major tributaries including Kimball Brook, which flows through Hinckley Park in South Portland.

All the land that drains into Trout Brook is called its watershed (see map). Trout Brook's watershed covers 2.7 square miles and includes wooded and agricultural rural areas and a mix of more heavily developed areas. Moderate and high density residential areas cover approximately half of the watershed. Roads, commercial areas and industrial properties make up another 7% of the watershed.

How does land development affect Trout Brook?

Development increases the amount of impervious areas in a watershed. Impervious areas including rooftops, roads, driveways and parking areas do not let water soak into the ground. Instead, stormwater runs off these surfaces and carries pollution with it. In Trout Brook, these pollutants include fertilizers, pesticides and metals such as aluminum, copper, and zinc. In addition to increased pollution, more water quickly runs off impervious areas during rainstorms, making Trout Brook subject to sudden increases in flow. This increased flow causes flooding, damages stream habitat and erodes the stream banks and channel. Research shows that healthy streams generally have watersheds with less than 10% impervious. Trout Brook is currently 15% impervious. In addition to these problems, some sections of Trout Brook's stream channel have been straightened and widened, and lawns and invasive plants have replaced natural streamside plants. These changes cause habitat problems and reduce food sources for the fish and other organisms that live in the stream.

Who monitors Trout Brook?

The Maine Department of Environmental Protection (DEP) monitors Trout Brook, Kimball Brook and other Maine streams. DEP biologists collect and analyze the macroinvertebrates (bugs) that live in the streams since they are excellent indicators of stream health and problems. Since 1997, DEP monitoring shows that Trout and Kimball Brooks have not met State standards for aquatic life, which means that the bugs that should live in Class C streams like Trout and Kimball are not there. Both streams are also listed as impaired because of stream habitat problems.

Is there any good news?

Despite these problems, Trout Brook has a lot going for it. First and foremost, Trout Brook has a healthy brook trout population. Brook trout are a prized coldwater species, and past surveys indicate that they are able to reproduce in the stream. In 2001, Maine Inland Fish and Wildlife surveyed a 250' section of stream and found 36 fish, including 25 fry and one fish over 10 inches long. Past monitoring also shows that the stream has cool temperatures and relatively low

nutrient levels, and some sections have good oxygen levels, stream habitat and streamside vegetation. In 2005, the City of South Portland also removed a Combined Sewer Overflow that periodically overflowed untreated waste into the stream. Because of all these factors, DEP rated Trout Brook as having "high restoration potential."

What's being done to protect Trout Brook?

There has been growing local interest in Trout Brook and its restoration. The South Portland Land Trust (SPLT) and school groups have held stream clean-ups, and the SPLT led a watershed survey in 2003 to identify sources of problems to the stream. Cape Elizabeth and South Portland are focusing on Trout Brook as part of their municipal stormwater programs. Citizen groups associated with Mill Creek Park and the Trout Brook Preserve have developed park plans with stream health in mind. The South Portland Conservation Commission has also been very involved in helping to develop the restoration plan for Trout Brook.

Now a new project is underway to help improve the stream's water quality. The City of South Portland was recently awarded a DEP grant to develop a watershed management plan. The plan will outline strategies to fix existing stormwater and habitat problems in developed parts of the watershed and to reduce stream impacts from future development in planned growth areas. A community watershed meeting is planned for **June 9th from6:30– 9:00pm** at the South Portland Planning Department on Sawyer Road in South Portland to kick off the project.

What can I do to help?

If you live next to Trout Brook or another stream, leave a natural buffer of trees and shrubs along the stream. This buffer filters runoff from lawns and paved areas, anchors the stream bank and provides food and habitat for stream life. Bring leaves and yard waste to the transfer station or pile in areas outside of this buffer. Even if you don't live right on the stream, everyone has a role to play in helping to protect clean water. Go to www.thinkbluemaine.org for stream-friendly lawn care advice and other stream protection tips.

Where can I learn more?

If you are interested in learning more about the project, would like to get involved, contact (Betty Williams) at the Cumberland County Soil & Water Conservation District at (207) 892-4700 or betty-williams@cumberlandswcd.org. More information is also available at the Trout Brook project website at http://www.cumberlandswcd.org/troutbrook.