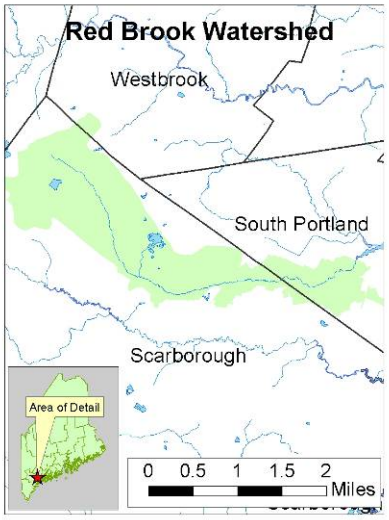
Red Brook Watershed Based Management Plan

#2009SP03

Waterbody Name:	Red Brook
Location:	Scarborough, South Portland – Cumberland County
Waterbody Status:	Urban Impaired Stream
Project Grantee:	Town of Scarborough
Project Duration:	August 2009 – June 2011
ARRA (604b) Grant:	$48,605
Local Match:	$38,829



PROBLEM:

Red Brook is a small (7.15 mile long) stream that flows into Clark's Pond and the Fore River. The 3.2 square mile watershed includes a relatively undeveloped upper watershed, sections of the Maine Turnpike and I-295, a regional waste incinerator, and a high-density commercial area at the base of the watershed.

Water quality in the upper portion of the stream is considered to be relatively stable, and the stream supports a brook trout population. However, the stream does not meet Class C standards and is impaired due to habitat degradation and PCB contamination. A PCB-contaminated site in the upper watershed was sealed in 2009, and levels in fish tissue are expected to decrease over time. Habitat degradation is found primarily in the lower sections of the stream due to past channel alterations and near-stream development.

PROJECT DESCRIPTION:

The purpose of the project was to develop a locally-supported watershed management plan that outlines a strategy to restore Red Brook. The project was coordinated by Cumberland County SWCD and the Town of Scarborough and guided by a steering committee. Information about Red Brook was compiled from past studies, and extensive additional information was also collected. A fluvial geomorphologist evaluated restoration needs; a local engineering firm volunteered to develop preliminary retrofit designs for six commercial properties; data sondes were deployed to collect continuous water quality data; EPA collected and analyzed soil samples to help rule out potential ongoing PCB sources to the stream; DOT staff conducted a brook trout survey; and project staff documented fish barriers and erosion problems.

A project web site was created and a mailing was sent to watershed residents at the start of the project. Nearly 50 people attended a kick-off meeting in May 2010, and 30 people participated in Technical/Road and Land Use Development Workgroups that helped develop plan strategies and priorities. Project staff incorporated new data and workgroup input into a draft plan that was shared with stakeholders and presented at a community meeting. The final plan was unanimously endorsed by the Scarborough Town Council in June 2011.

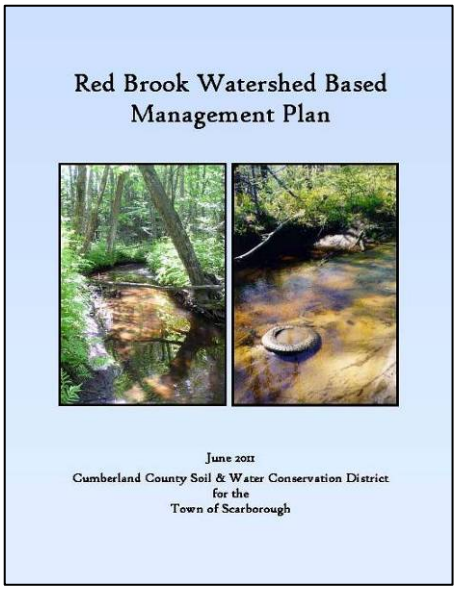
PROJECT OUTCOMES:

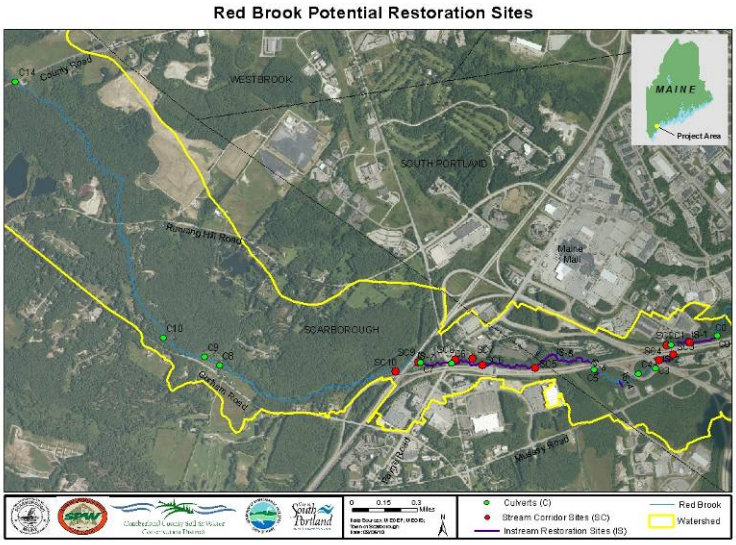
- The project identified and prioritized 36 stream habitat and water quality improvement projects. After learning about the problem sites, Maine Department of Transportation (DOT) took the initiative to fix one of the sites, and several other projects have also been incorporated into future work plans by the Town of Scarborough, DOT, and the Maine Turnpike Authority.

- The Land Use Development workgroup provided input to guide future development in the upper portions of the watershed and recommended an ordinance that would expand the 75' stream buffer protection zone to include all important feeder streams.

- The *Red Brook Watershed Based Management Plan* was completed in June 2011. The plan includes background information, results of stream and watershed assessments, maps and an action plan. Available at www.cumberlandswcd.org/redbrook .

- The Scarborough Town Council unanimously endorsed the Red Brook Plan in June 2011.





PROJECT PARTNERS:

Casco Bay Estuary Partnership
City of South Portland
Cumberland County SWCD
Deluca Hoffman
FB Environmental
Field Geology Services
Maine Department of Transportation
Maine Turnpike Authority (represented by GZA)

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Suggested Citation:
Maine Department of Environmental Protection (2012) "Nonpoint Source Management Program 2011Annual Report," Document # DEPLW-1237. Augusta: MDEP.