

Town Committees Sudbury, Massachusetts



Ponds and Waterways Committee

Master Plan Appendix 1 – Activities

Activity	Assessment	Education	Remediation	Recreation
Report on Pond Committees	✓			
Watershed Identification	✓			
Comprehensive Map Suite	✓	✓		
Water Body Inventory	✓			
Eco-friendly Lawn Seminar		✓		
Eco-friendly Lawn Program		✓		
Middle School Class Seminar		✓		
Town Crier Articles		✓		
PWC Website		✓		
Sudbury Day		✓		
Riverfest		✓		✓
Monitor Hop Brook Remediation	✓		✓	
Adopt-A-Pond	✓	✓	✓	✓
Invasive Species Identification		✓	✓	

Report on Pond Committees

This document is included as Appendix 1. It was submitted by the PWC to the Sudbury Board of Selectmen on December 19, 2006 to fulfill a requirement to identify, summarize, and evaluate similar ponds and waterway groups in other towns in Massachusetts (or elsewhere if applicable). An updated report may be created from time to time as these groups evolve.

Watershed Identification Project

To facilitate the assessment of the Town's ponds and waterways, the PWC divided the town into watersheds. A watershed is a region draining into a river, river system, or other body of water. The watershed delineation provided Committee members with a means to focus on a manageable area and bring to light any issues and opportunities. Then, working as a group, the Committee can develop a cohesive plan that takes into account the unique features of each watershed.

All of Sudbury is in the 5,000 square mile Merrimac River watershed which flows into the Atlantic Ocean at Newburyport, Massachusetts. The Merrimac watershed includes the Nashua River, Wachusett Reservoir, Souhegan, and Contoocook rivers, Lakes Winnepesaukee and Squam, the Pemigewasset River and Franconia Notch. The Sudbury, Assabet, Concord River (SuAsCo) subwatershed covers 400 square miles. The Town of Sudbury covers approximately 24.4 square miles.

Using geographic data supplied by the Commonwealth of Massachusetts, the PWC has divided Sudbury into nine watersheds, detailed descriptions of which are provided in Appendix 2. Ponds and waterways may be named (e.g., Hop Brook and Carding Mill Pond) but most do not have names. They may be partially or entirely contained on public

or private land.

- Sudbury has nine watersheds.
- All but one watershed (Goodnow) cross into neighboring towns.
- Two watersheds (Cutting and Powder Mill) flow into the Assabet River.
- The remaining watersheds flow into the Sudbury River.
- There are approximately 188 ponds and 45 streams in Sudbury.
- Approximately 36% of unnamed ponds are on public lands.

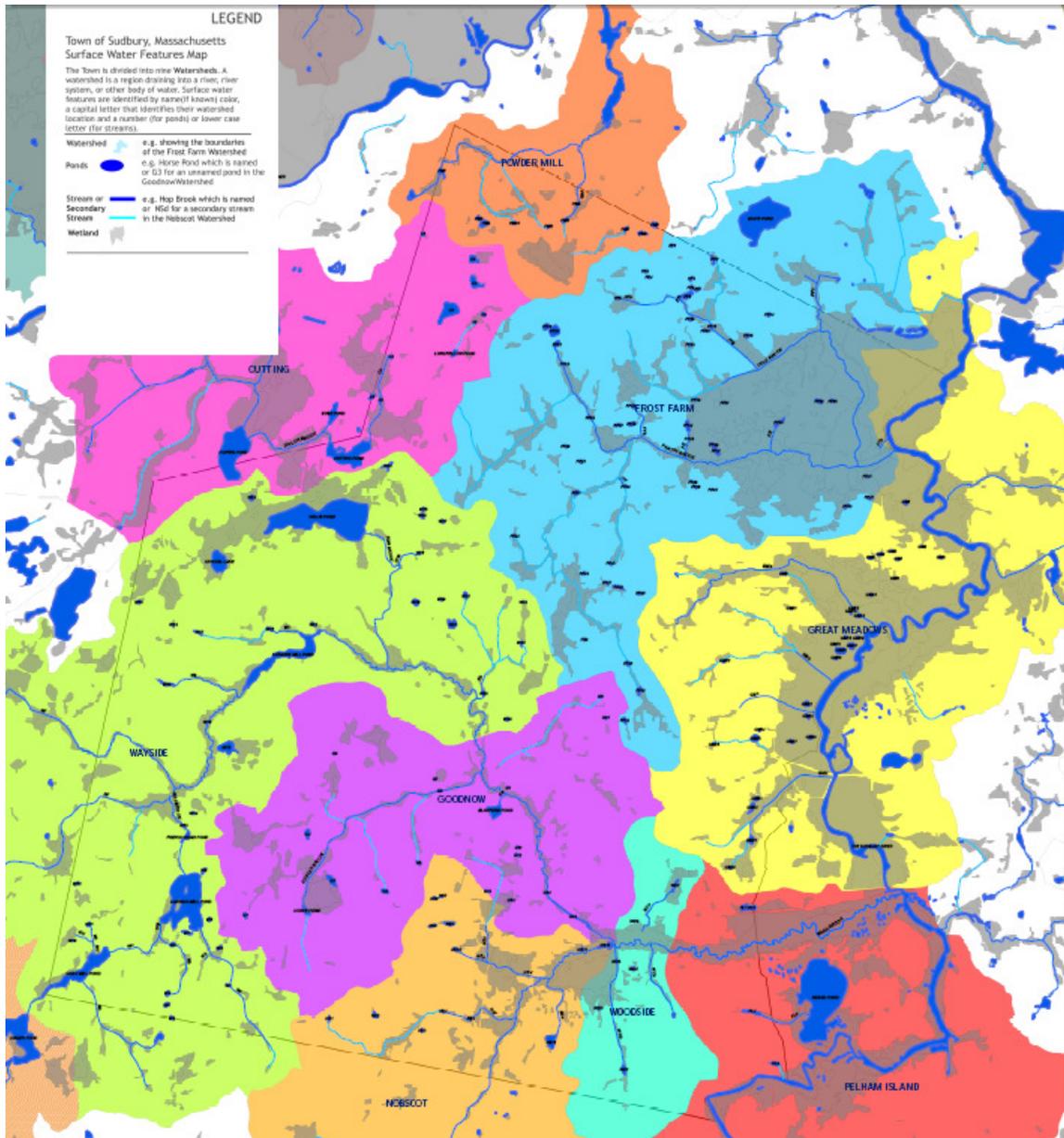
Watershed	Unnamed Ponds	Unnamed Streams	Named Ponds	Named Streams	Unnamed ponds on private land
Cutting	9	1	3		8
Frost Farm	51	11		2	27
Goodnow	15	1	2	1	12
Great Meadows	32	4			17
Nobscot	13	6			12
Pelham Island	4	0			2
Powder Mill	10	1			10
Wayside	36	13	6	2	22
Woodside	7	3			4
Totals	177	40	11	5	114

Note: All numbers are approximate since the process of identifying and cataloging is ongoing. The term unnamed refers to ponds that have no official name and have been assigned watershed and number reference.

Comprehensive Map Suite

With a grant from The Sudbury, Assabet, & Concord Wild & Scenic River Stewardship Council in 2007, an intern developed a geographic database and produced maps of the Town's water bodies.

Several maps were developed and published on the PWC's website. Ten maps are being printed and framed to be hung in the schools, library and town offices. Ten laminated maps were also produced, seven were given to the middle school; one was given to the Conservation Committee.



The nine watersheds comprising Sudbury

Water Body Inventory

In 2007, PWC members began development of an on-going water body inventory and assessment. Structured by watershed, this extensive compilation of photographs and notes on the Town's approximately 233 ponds and waterways is a valuable resource for understanding the relationships among water bodies and identifying the issues needing attention. Options for publishing this information will be discussed. The inventory is included in the Master Plan as Appendix 3.

Eco-friendly Lawn Seminar

The PWC sponsored an Eco-Friendly Lawn Seminar at Goodnow Library on June 14, 2008, which was open to the public. The seminar featured three speakers who discussed

ways to maintain a lawn while minimizing the impact on surrounding water bodies. A similar seminar may be offered in future years.

Eco-friendly Lawn Program

The Eco-friendly Lawn Program will help protect Sudbury's ponds and waterways by minimizing the impact of lawn care on the surrounding environment. It is supported by River Stewardship Council grant monies to fund lawn signs for the program, designed to promote organic lawn care and water conservation.

Why?

Chemicals used to promote growth and make lawns green can wash into nearby ponds and waterways and turn them green by promoting growth of unwanted algae and aquatic plants. Dense weeds and algae reduce oxygen in the water, which can harm fish and other aquatic life. "Green water" is also unattractive for scenic and recreational uses.

How?

Voluntarily comply with the following tips for creating a green lawn without creating green ponds and waterways:

1. Use fertilizer sparingly, sweeping any overspray back onto the lawn to prevent runoff.
2. Use pesticides and herbicides sparingly, spot treating affected areas only.
3. Try using organic lawn care products and methods.
4. Mow 2.5 to 3 inches high with a sharp blade to encourage dense growth and deter weeds.
5. Mulch lawn clippings on the lawn to lessen the need for fertilizer; in autumn compost the clippings for use the following year.
6. Do not over-water your lawn; instead water deeply and less frequently, timing watering to avoid evaporation and directing spray to avoid runoff.
7. Re-seed bare spots with drought-tolerant varieties of grass to minimize the need for watering.

Display a lawn sign to show your participation in the program and encourage your fellow Sudbury residents to do likewise.

When?

A limited number of lawn signs will be available on a first-come, first-serve basis. They have been approved for display beginning Earth Week, from Saturday, April 18 through Sunday, May 31, 2009 and again at the start of autumn, from Tuesday, September 1 through Wednesday, September 30, 2009.

Middle School Class Seminar

(Paul insert description here)

Town Crier Articles

In 2008, the PWC began running a series of articles in the Sudbury Town Crier to raise awareness of water quality issues. Three articles have been published including "[Why](#)

[stormwater matters, and how you can keep it clean,](#)” [“Going green on lawn care,”](#) and [“Take me to the river,”](#) an article about recreational uses of the Town’s ponds and rivers. More articles are planned.

PWC Website

The PWC maintains a website on the town website with several informational resources, including the comprehensive map suite, a set of FAQs, links to the Town Crier articles, and information on other committee programs.

Sudbury Day

The PWC participates each year in the annual Town event “Sudbury Day” with an educational display.

Riverfest

The PWC participates each year in the Sudbury, Assabet, & Concord Wild & Scenic River Stewardship Council’s Riverfest, promoting recreational uses of the Town’s water bodies with such events as kayaking, trout fishing and a rubber duck race for kids.

Monitor Hop Brook Remediation

Frank Lyons, a PWC associate member, represents the Hop Brook Protection Association. The committee will monitor ongoing remediation efforts and make recommendations to Town boards, committees, and departments.

Adopt-A-Pond Program

The Sudbury Adopt-A-Pond program is a community involvement program designed to benefit Sudbury’s ponds and streams and to be rewarding and educational for the volunteers involved. The program gives residents hands-on experience in improving our environment.

Why Adopt?

The Sudbury Adopt-A-Pond program has one main purpose: to protect and enhance the beautiful natural environment of Sudbury and protect its water resources.

Program goals are to:

- Promote water education activities.
- Advocate pollution and invasive plant prevention through personal stewardship projects.
- Encourage partnerships involving individuals, schools and companies.
- Acknowledge the water quality education/improvement efforts of individuals and groups.

Who Can Adopt and Where?

Any individual, school class or group can adopt a public (or private, with owner’s permission) surface water resource, such as a lake, pond, stream, or wetland.

What's Involved?

Adoption means making a commitment to become an active steward for a specific resource area. Groups can take care of a water resource in a variety of ways, such as:

- Organizing a cleanup day.
- Monitoring water quality and performing water analyses.
- Cataloging water resource characteristics (as it varies from season to season) such as:
 - Size
 - Depth
 - Color
 - Plant life (trees, bushes, invasive and non-invasive plant life)
 - Birds, animals
 - Aquatic life (fish, amphibians, reptiles, insects)
- Mapping pollution sources in the watershed.
- Writing educational articles.
- Organizing a Clean Water Fair.
- Stabilizing stream banks with vegetation

Invasive Species Identification Guide

An important component of invasive species remediation is to increase awareness of the issues and to increase the numbers of those able to identify these plants. There are several excellent identification guides currently available for our specific region. The best printed guide is “A Guide to Invasive Plants in Mass.” published by the Division of Fisheries & Wildlife (1998 edition and 2nd edition, revised in 2008) – available at the New England Wildflower Society bookstore for \$5.00. An excellent online version published by the USDA may be found at: <http://www.invasivespeciesinfo.gov/aquatics/main.shtml> The SUASCO CISMA described above will be paying close attention to existing and new populations of current invasive species as well as to any that may be new to the area. The PWC will use it’s website, Town Crier articles, Middle School seminars and the Adopt a Pond program in these educational efforts.