

Friday, April 12th, 2019
MA Congress of Lakes and Ponds



City of Worcester Department of Public Works & Parks presents
Worcester's Blue Spaces Initiative:
The Case for a Municipal Lakes and Ponds
Management Program



History of the City of Worcester



Coes Wrench Company - Worcester, MA, c. 1891



- 💧 Headwaters of the Blackstone River
- 💧 Incorporated as a city in 1848
- 💧 Over 20 lakes with 30+ miles of frontage
- 💧 Rich industrial history

Worcester Today



Downtown Worcester

Opportunities

- 💧 2017 Population: 185,677
- 💧 38,000 college students
- 💧 Diverse population
- 💧 Highly accessible

EcoDev Projects

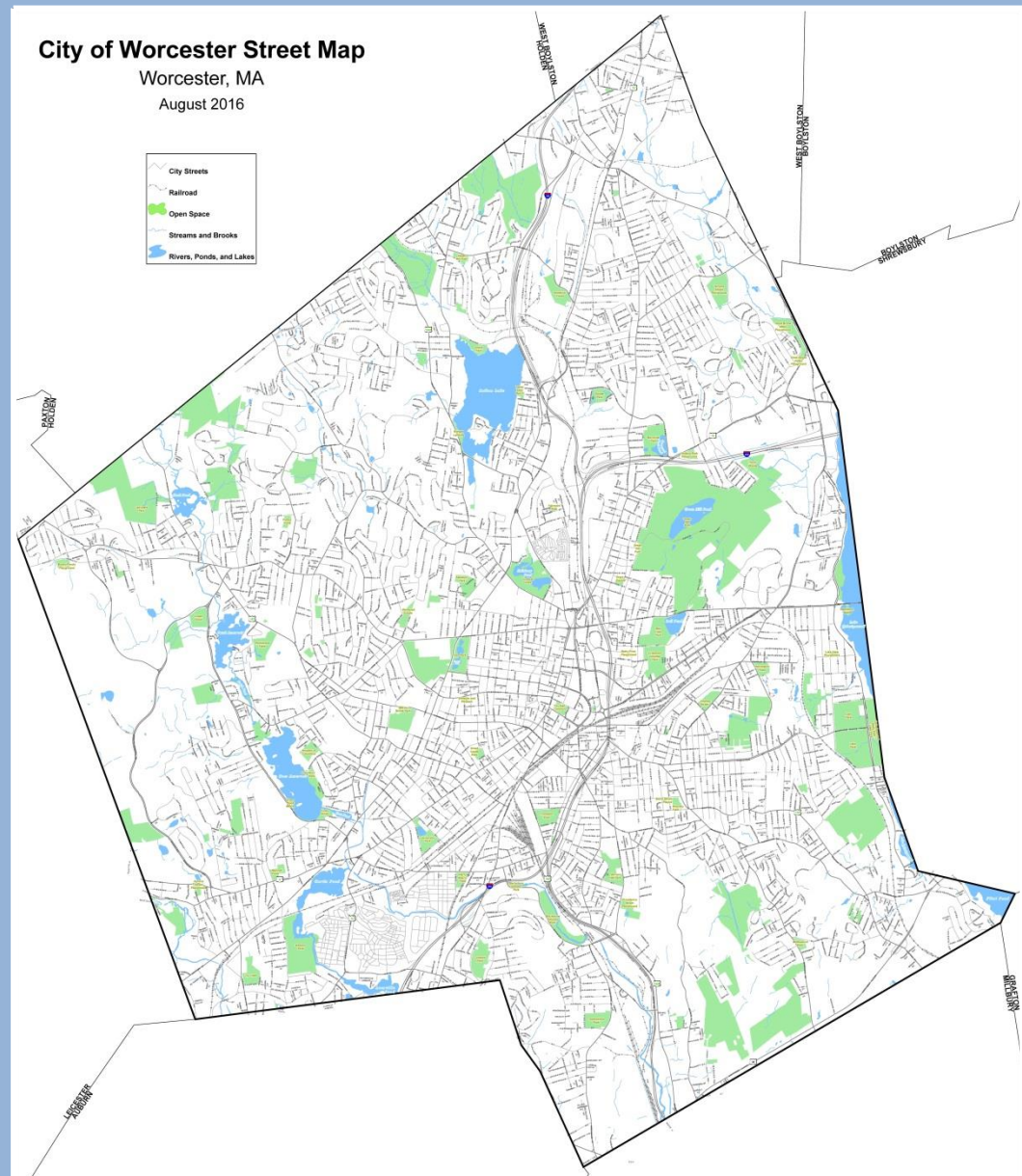
- 💧 Redevelopment projects for parking, hotels, apartments, office space and a *baseball stadium!*
- 💧 *Goals:* 18 hr day, diversity, live, learn, work, visit, and play

Worcester's Green Spaces

Apricot Street Playground
Bailey-Prouty Playground
Ball Property
Banis Street Playlot
Beaver Brook Park
Bell Hill (Chandler) Park
Bennett Field
Betty Price Playground
Blackstone Gateway Park
Blithewood Park
Boynton Park
Burncoat (North) Park
Burncoat Street Playground
Cascades Park
City Hall Common
Coes Pond Parks
Cookson Field
Cristoforo Colombo (East) Park
Crompton Park
Dodge Park
Elm Park
Fairmont Park
Farber Field
Grant Square
Great Brook Valley Playground
Green Hill Park
Greenwood Park
Hadwen Park
Harrington Field
Harry Sherry Field (S. Worcester Playground)

Holland Rink Playground
Holmes Field
Indian Hill Park
Indian Lake Beach
Institute Park
Kendrick Field
Korean War Memorial
Lake Park
Lake View Playground
Logan Field
Morgan Landing
Mulcahy Field
Oakland Heights Playground
Oread Castle Park
Providence Street Playground
Ramshorn Island
Rockwood Field
Salisbury Park
Shore Park
Tacoma Street Playground
Ty Cobb Park
University (Crystal) Park
Vernon Hill Park
Wetherell Estate Park (Duffy Field)
Winslow & Pleasant (Peace) Park

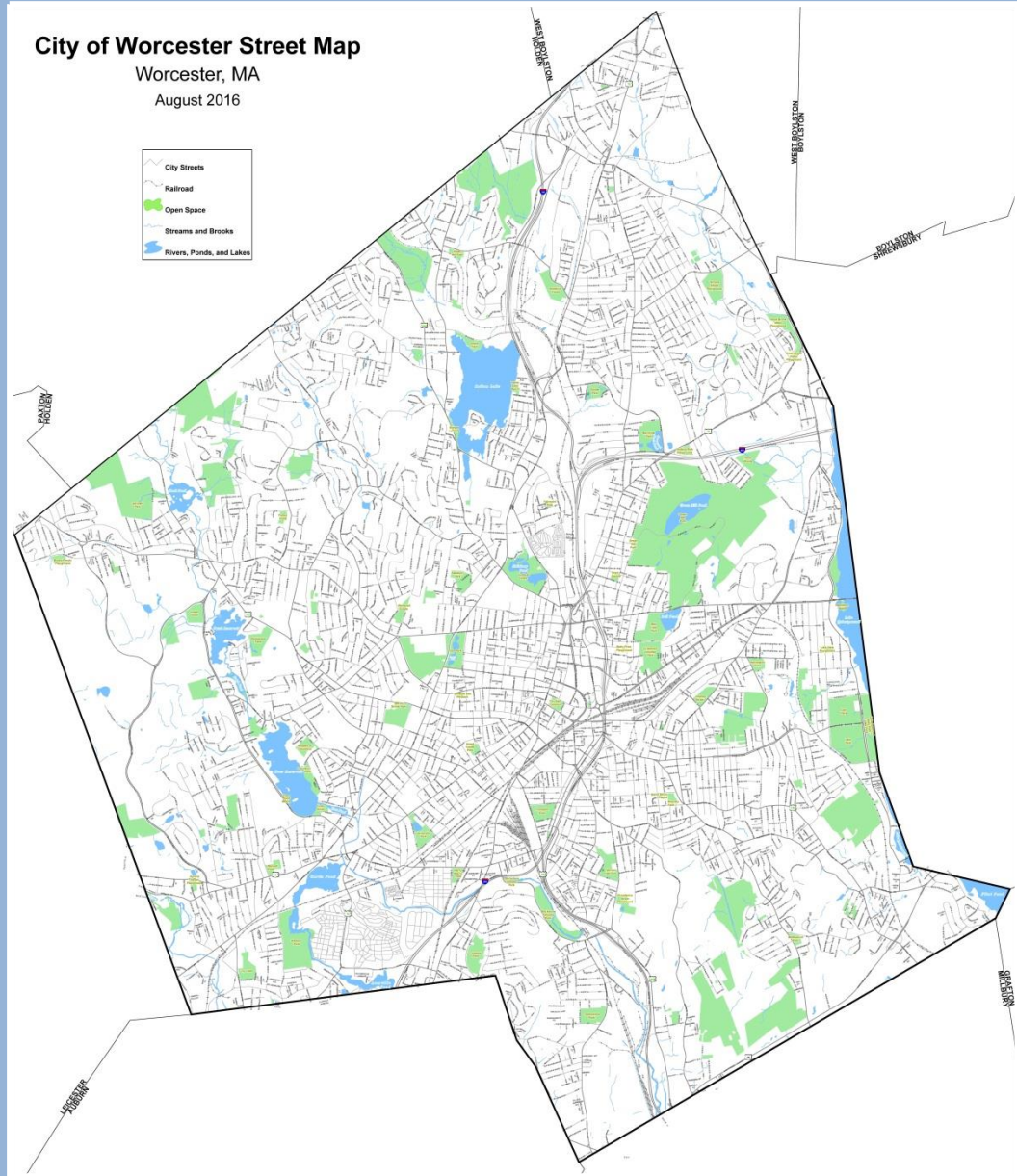
55+
Parks!



Worcester's Blue Spaces

**20+ lakes
and ponds!**

Bell Pond
Burncoat Pond
Cider Mill Pond
City Farm Pond
Coes Pond
Coes Reservoir
Cook Pond
Curtis Pond
Elm Park Pond
Flint Pond
Green Hill Pond
Indian Lake
Little Indian Lake
Lake Quinsigamond
Leesville Pond
Patch Pond
Patch Reservoir
Smith Pond
Salisbury Pond
Williams Mill Pond



Blue Space = Recreational Space



- 💧 6 public beaches, 1 public boat ramp
- 💧 Easy access from major roads
- 💧 ½ within walking distance from neighborhoods
- 💧 Waters support: fishing, boating, rowing, ice hockey, jet skiing, dragon boat racing
- 💧 Perimeters support: trails, beaches, parks, fishing piers, restaurants

Our Urban Water Quality Impairments

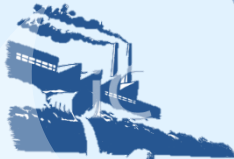
Sediments



Litter



Industrial
Contaminants



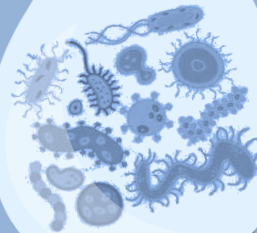
Nutrients



Invasives



Bacteria



Existing Watershed Associations

Indian Lake Watershed Association

Friends of Institute Park

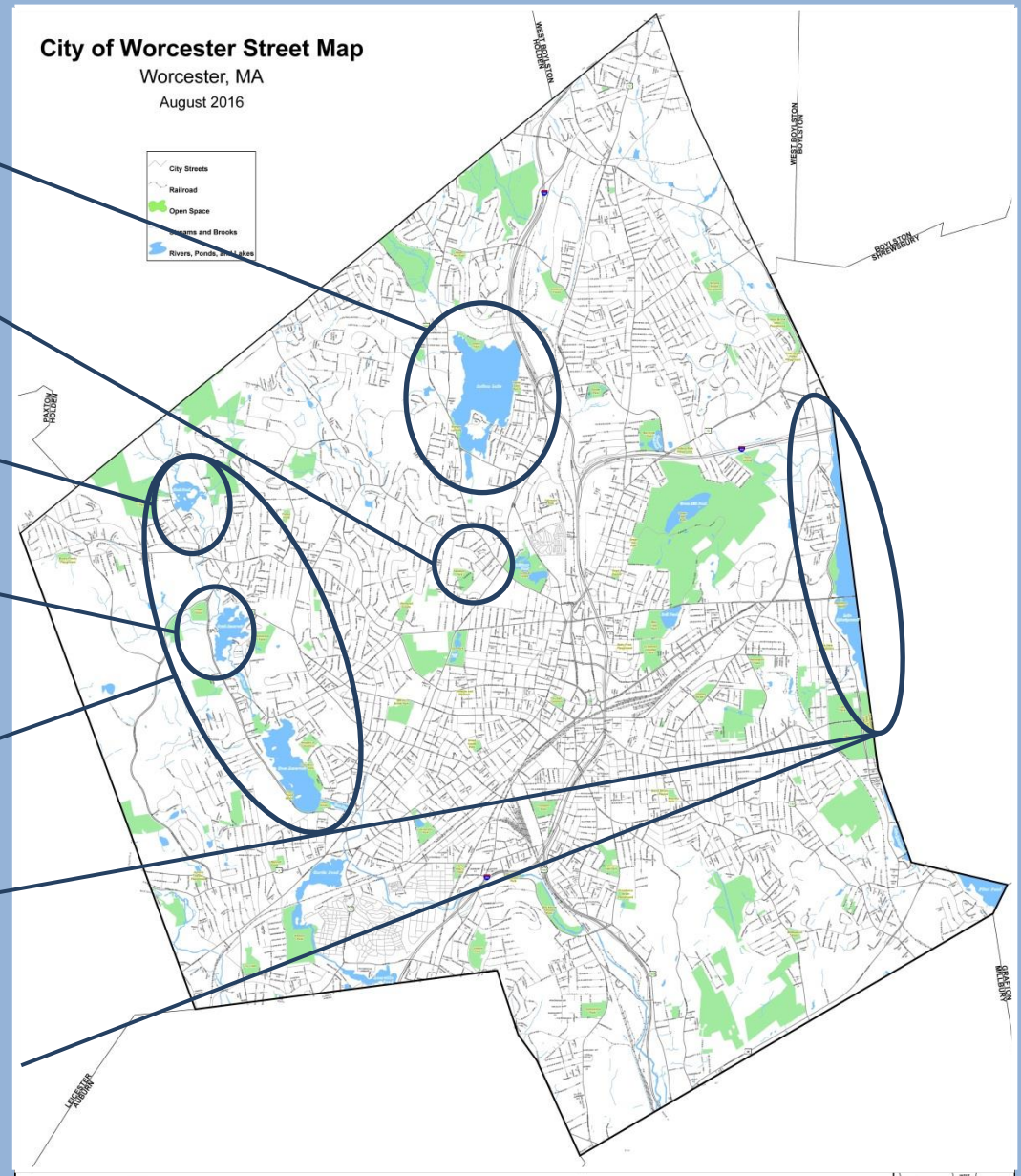
Smith's Pond Corporation

Friends of Patch Reservoir

Tatnuck Brook Watershed Association

Lake Quinsigamond Commission

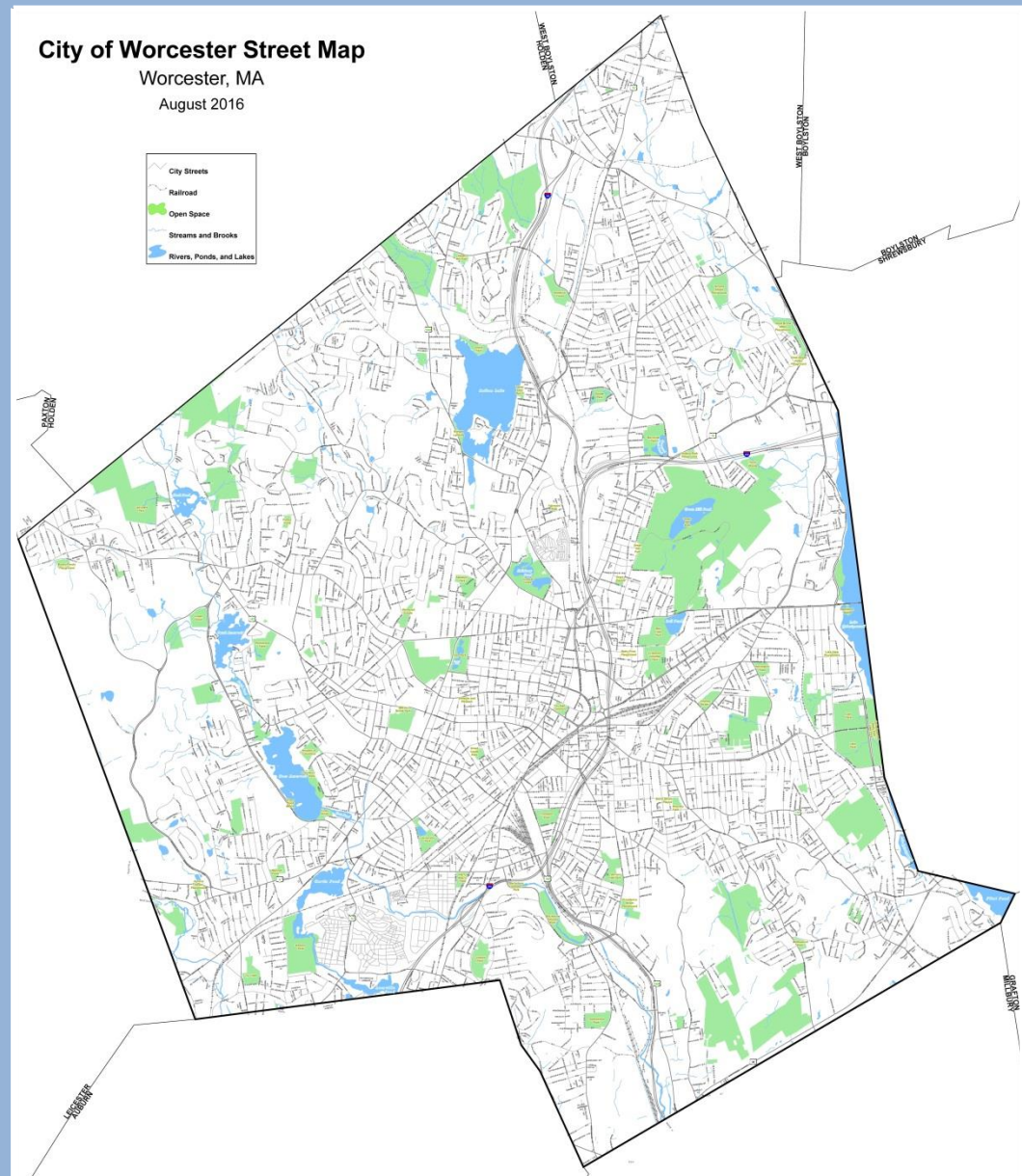
Lake Quinsigamond Watershed Association



Worcester's Blue(?) Spaces

"It is time we treat our blue space as we treat our green space...The city of Worcester is blessed with a lot of waterways, and I think this adds to the quality of life for residents, it brings people to the city through tourism and adds other economic benefits."

*- Mayor Joseph M. Petty
(Jan 2016)*



City of Worcester Lakes and Ponds Program



Indian Lake

Position: Senior Environmental Analyst

Location: Department of Public Works Water Operations Division

Reports to: Environmental Systems Manager

1st Years Budget: \$150,000

2nd Years Budget: \$220,000

3rd Years Budget: ???

Program Tasks



Bell Pond

Goal: Efficiently maintain and improve water quality for recreational and economic development purposes

- 💧 Work alongside stakeholders to respond to ongoing and up-and-coming water quality issues
- 💧 Provide educational opportunities to the public to increase the awareness of how to care for these resources
- 💧 Create and implement sustainable, long-term management plans

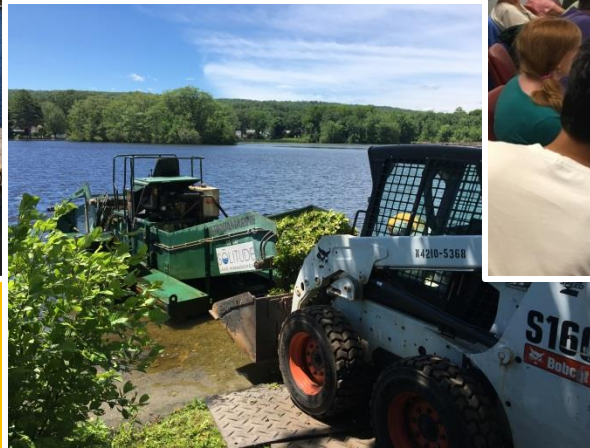
Program Focus

Manage

Promote

Monitor

Educate



City of Worcester Department of Public Works & Parks presents

State of the Lakes

Water Quality and Initiatives at Worcester's Blue Spaces



Thursday, March 7th, 6:00 pm

Blackstone Heritage Corridor Visitor Center

115 McKeon Road

- Attend watershed meetings to learn of ongoing issues
- Wrote and approved a program QAPP
- Collect water quality samples and evaluate lake and tributary water quality
- Implement and run a volunteer citizen science program
- Assist in the identification of water quality monitoring priorities at other lakes and ponds

Program Focus

Manage

Promote

Monitor

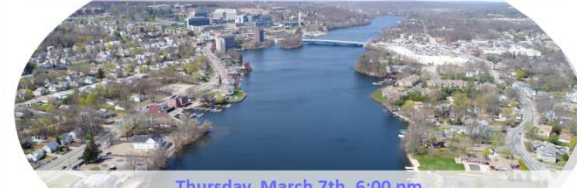
Educate



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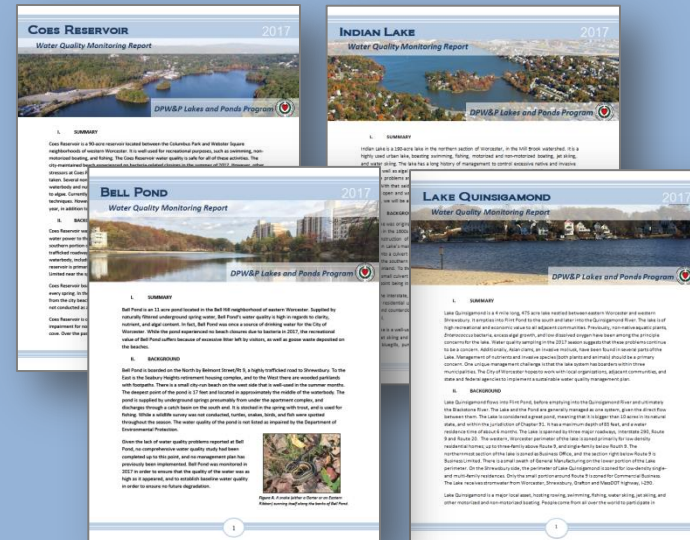


Thursday, March 7th, 6:00 pm

Blackstone Heritage Corridor Visitor Center

115 McKeon Road

- Identify and prioritize water quality threats across lakes
- Write water quality reports and management plans
- Obtain and manage local permits
- Contract and coordinate water quality improvement projects



Program Focus

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State of the Lakes

Water Quality and Initiatives at Worcester's Blue Spaces



- 💧 Develop educational materials (pamphlets, kiosks, posters, etc)
- 💧 Collaborate with local universities
- 💧 Hold educational workshops on relevant water quality issues
- 💧 Create and manage a citizen science program

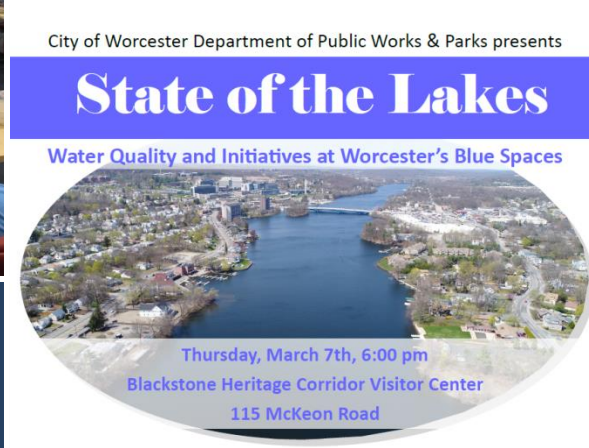
Program Focus

Manage

Promote

Monitor

Educate



- Hold public presentations on water quality and its implication for recreation
- Work with citizen groups to develop and promote new water-based recreational activities for the public

Program Successes



Elm Park Pond

- 💧 MA DEP approved QAPP, entering 3rd year of in-house sampling
- 💧 City-sponsored management plans for 4 waterbodies
- 💧 Greater communication between watershed groups and city
- 💧 A volunteer cyanobacteria monitoring program
- 💧 More public education on water quality issues
- 💧 Elevation of water quality improvement projects
 - 💧 Support of novel water quality improvement projects

Enabling Factors

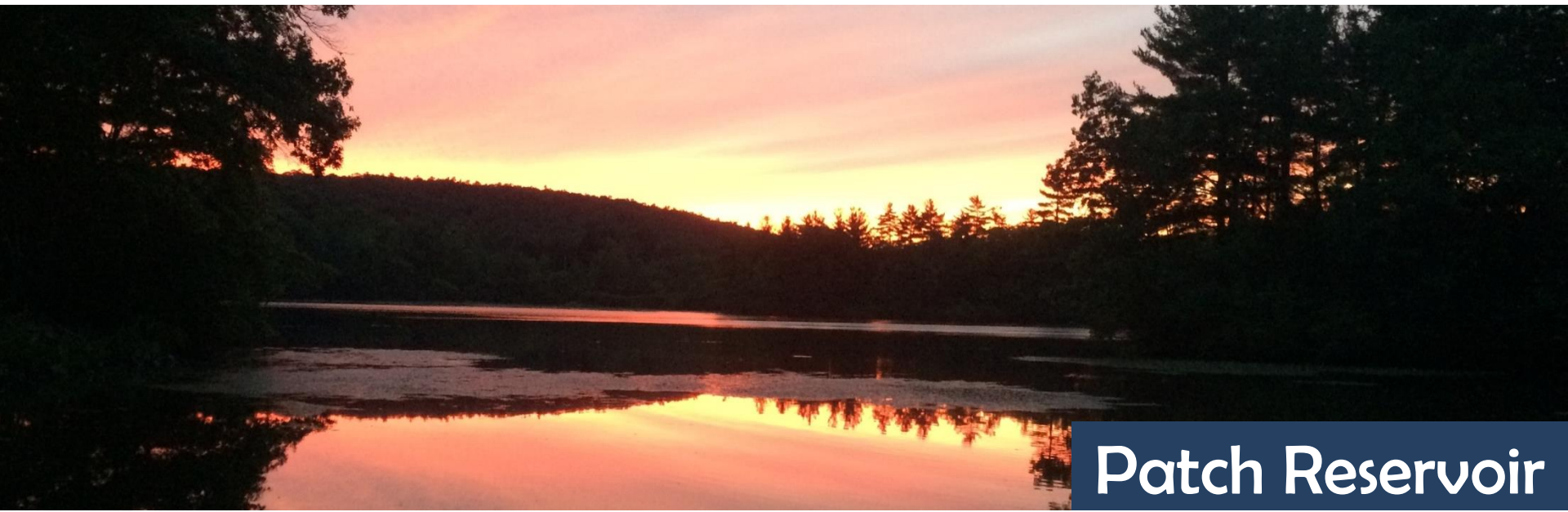


Coes Reservoir

Enabling Factors for *Program Creation*

- 💧 Engaged watershed associations
- 💧 Political champion
- 💧 Public access
- 💧 Framing as an economic development issue

Enabling Factors

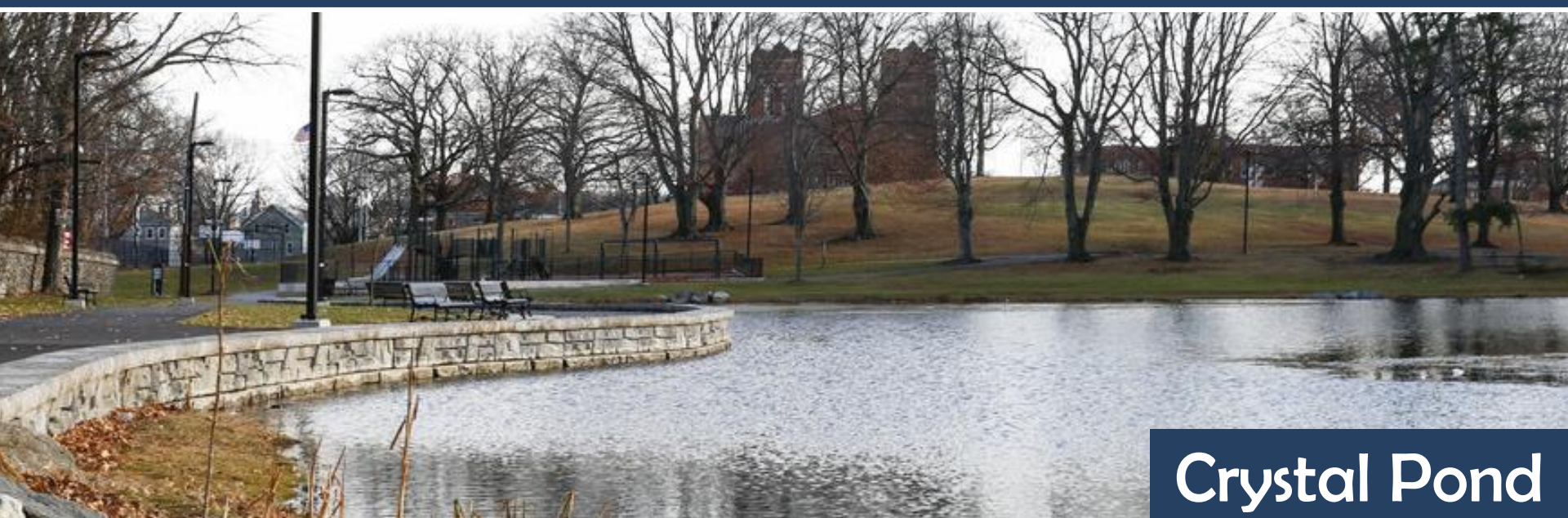


Patch Reservoir

Enabling Factors for *Program Success/Program Strengths*

- 💧 Working closely with watershed associations
- 💧 Holistic approach
- 💧 Outreach and engagement activities
- 💧 Working closely with other municipal departments
- 💧 A full time position commitment
- 💧 Supportive management
- 💧 Going beyond water quality

Advantages of a Municipal Program



Crystal Pond

Why a municipal level works for Worcester

- 💧 Reduced cost for permitting and monitoring
- 💧 Ability to manage on a watershed level
- 💧 Increased coordination of efforts
- 💧 Collaboration between municipal programs
- 💧 Ability to access more funding
- 💧 Increased awareness of city assets
- 💧 Good public relations for the city

Challenges



Lake Quinsigamond

Ongoing Challenges

- 💧 Community engagement
- 💧 Funding
- 💧 Communication
- 💧 Perception/media and public education
- 💧 Political dynamics

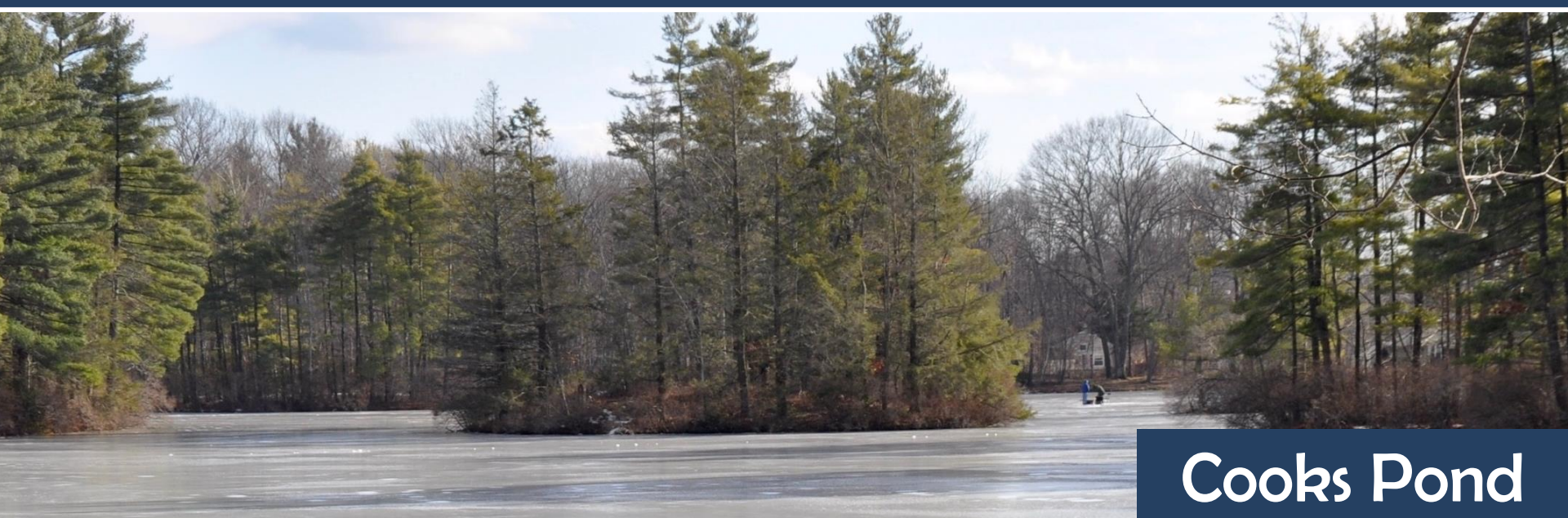
Going Forward



Salisbury Pond

- 💧 Increase outreach to new stakeholder groups (restaurants, fishing community)
- 💧 Improve outreach to current groups (including students and homeowners)
- 💧 Increase communication
- 💧 Increase intern experiences

Collaborators



Cooks Pond

Collaborators

- ▶ Lake Quinsigamond Watershed Association
- ▶ Lake Quinsigamond Commission
- ▶ Tatnuck Brook Watershed Association
- ▶ Coes Zone Task Force
- ▶ Friends of Patch Reservoir
- ▶ Smith's Pond Corporation
- ▶ Indian Lake Watershed Association
- ▶ Bancroft School
- ▶ Blackstone River Coalition
- ▶ Blackstone Headwaters Coalition
- ▶ Friends of Institute Park
- ▶ Mass Audubon
- ▶ Worcester Polytechnic Institute
- ▶ Clark University
- ▶ Worcester State University
- ▶ Assumption College
- ▶ University of North Carolina
- ▶ City of Worcester Department of Inspectional Services
- ▶ Worcester Conservation Commission
- ▶ Blackstone Heritage Corridor
- ▶ Mass Department of Conservation and Recreation
- ▶ Mass Department of Environmental Protection
- ▶ US Environmental Protection Agency

Questions?



Bell Pond

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