# GREENSCAPES

works with Massachusetts communities to promote and protect beautiful landscapes for clean and plentiful water and provide a unified voice and consistent environmental outreach and education to our Greenscapes Municipal Partners, their residents, commercial businesses, developers and industrial institutions..









### Brown Bag Lunch: Wenham's Water

Wenham, once called "Enon" in a Biblical reference to a place with much water, has always had a close relationship with its water resources. From ice harvesting on Wenham Lake to the Great Wenham Swamp and the Canal, our water remains important to our past, present, and future. As climate change and recent drought put pressure on our watershed, learn from the history of our water usage and how we can best steward this critical resource now and in the years to come.



#### **Erin Bonney Casey**

Planning and Resiliency Program Manager Ipswich River Watershed Association

#### What is the Ipswich River Watershed?

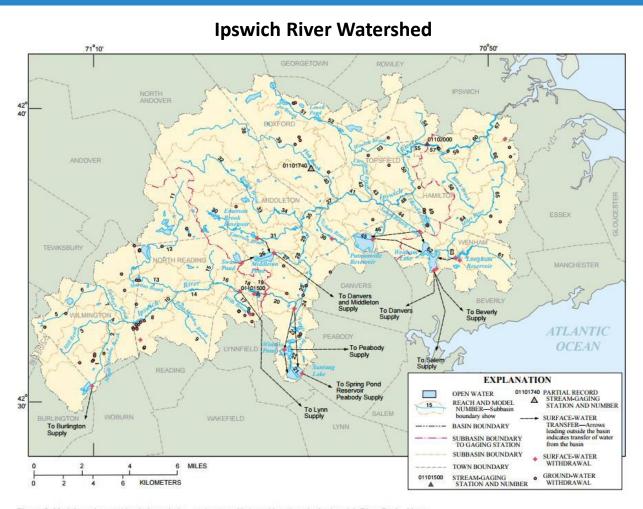


Figure 8. Model reaches, subbasin boundaries, and water withdrawal locations in the Ipswich River Basin, Mass.

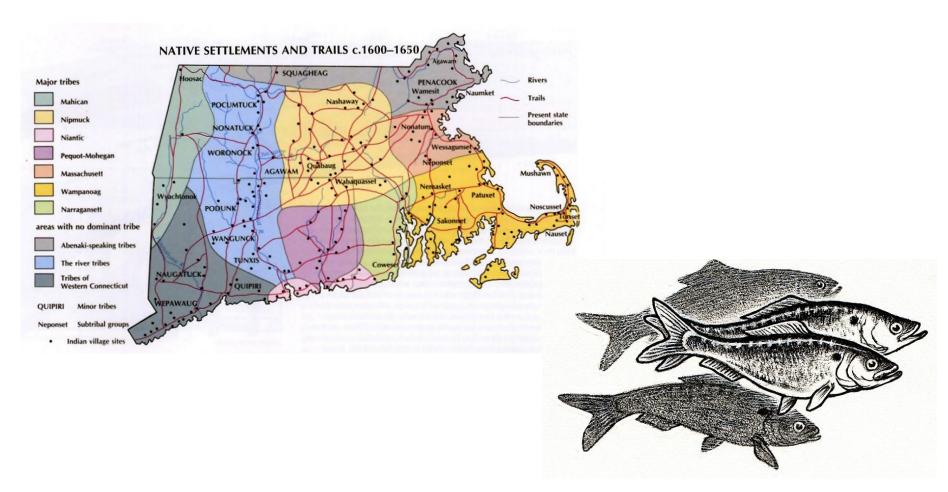


#### How is Wenham's water connected to the Ipswich River?

#### **Ipswich River Watershed**



#### The History of Wenham's Water: Pre-Colonial Times



Images from Historic Ipswich and Coastal Rivers Conservation Trust



#### The History of Wenham's Water: Colonial Times and the Founding of Wenham

### The Lake was at the heart of the establishment of colonial settlements in the area and in the eventual establishment of the Town of Wenham.



1630s: Salem gave land grants around what was then called the Great Pond.

1638: Hugh Peter preached a sermon, drawing from John III. From this sermon, the area was originally called Enon, and the lake, Enon Pond.

1643: The town was incorporated and renamed from Enon to Wenham.

1649: Great Ponds (>10 acres) were declared to be essentially community property. A man could cross another's land to read a Great Pond for the purpose of fishing and

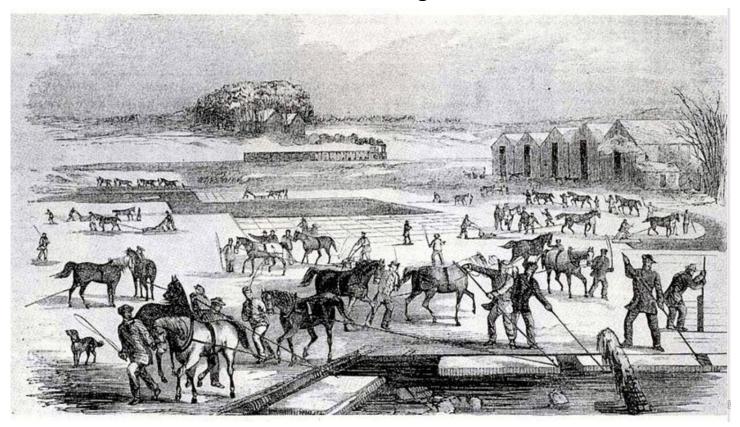
fowling.





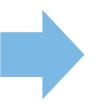
#### The History of Wenham's Water: Ice Harvesting

Wenham Lake's claim to international fame: For nearly 100 years, Wenham Lake ice circulated the globe.



# The History of Wenham's Water: Establishment of the Salem-Beverly Water Board

The Salem and Beverly Water Supply Board sources water from the Ipswich River, treats it, and sells it wholesale to the cities of Salem and Beverly.







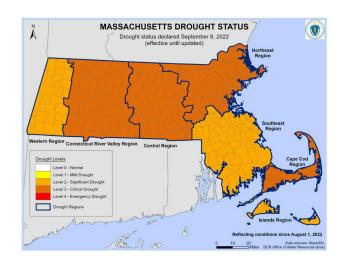




### The Water Management Act of 1986: Why are there different rules for different stakeholders?

Prior to implementation of the Water Management Act, existing large water uses had the ability to register their existing water withdrawals. These registered users were largely grandfathered in and exempt from future regulation.

State Drought Condition (by Region)	Nonessential Outdoor Water-Use Restrictions
Level 1 (Mild Drought)	1 day per week watering, after 5 p.m. or before 9 a.m. (to minimize evaporative losses)
Level 2 (Significant Drought)	Limit outdoor watering to hand-held hoses or watering cans, to be used only after 5 p.m. or before 9 a.m.
Level 3 (Critical Drought)	Ban on all nonessential outdoor water use
Level 4 (Emergency Drought)	Ban on all nonessential outdoor water use



<sup>\*</sup>Essential uses are defined by MassDEP as uses required: a) for health or safety reasons; b) by regulation; c) for the production of food and fiber; d) for the maintenance of livestock; or e) to meet the core functions of a business. Nonessential uses are those other than essential uses.



#### **Challenges to the Ipswich River Today: Dams**

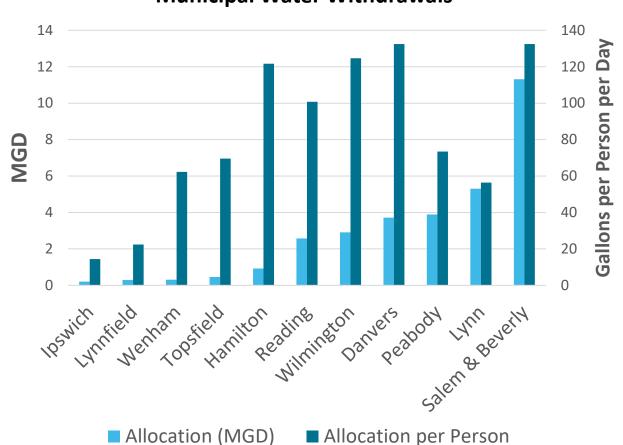
#### **Ipswich Mills Dam**





#### Challenges to the Ipswich River Today: Over-extraction

#### **Municipal Water Withdrawals**

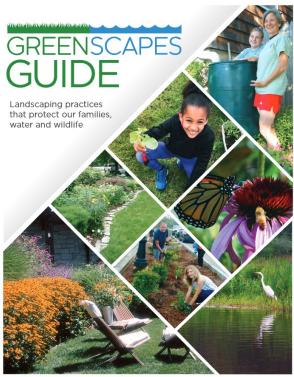




Miles River, Summer 2022

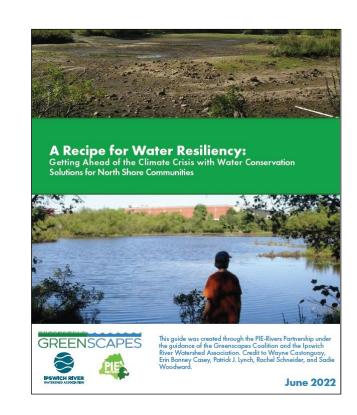
#### **Possible Solutions: Water Conservation**

#### **Individual Actions**



GREENSCAPES NORTH SHORE COALITION

#### **Community Actions**





#### **Possible Solutions: Rule Changes**



MassDEP works towards amendments to the Massachusetts Water Resources Program by the end of the 2022

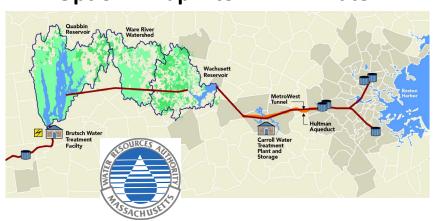
The amendments will require restrictions on nonessential outdoor water use by Water Management Act registrants during times of drought declared by the Secretary of Energy and Environmental Affairs.

#### **Possible Solutions: Collaboration and New Supplies**

**North Shore Water Resiliency Task Force** 



**Option 1: Tap into MWRA Water** 



**Option 2: New Reservoir in Topsfield** 





## How can Wenham Residents get Involved in Addressing Wenham's Water Challenges?

#### **Engage with State Decision Makers**

Voice support for the Water Management Act amendments during their public Comment period, now through Nov 7<sup>th</sup>.

Proposed Amendments & Public Comment

Voice support for future Drought Bills

Sign up for email notifications

#### **Engage with Town Decision Makers**

Push for and support town efforts to implement water neutral growth and green infrastructure implementation.

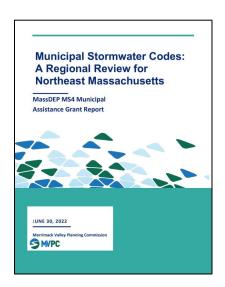
Bylaw revisions often require a vote at town meeting. Public support is critically important.

Write letters, speak up at board and commission meetings, and make sure your town is engaged on these issues.



#### **Leveraging Greenscapes Northshore Coalition**

#### **Bylaw Review and Revision**



Click <a href="here">here</a> to read Greenscape's assessment of Weham's existing bylaws as it related to low-impact development

#### **Public Education**



#### **Additional Resources**











#### **Contact Us**

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