



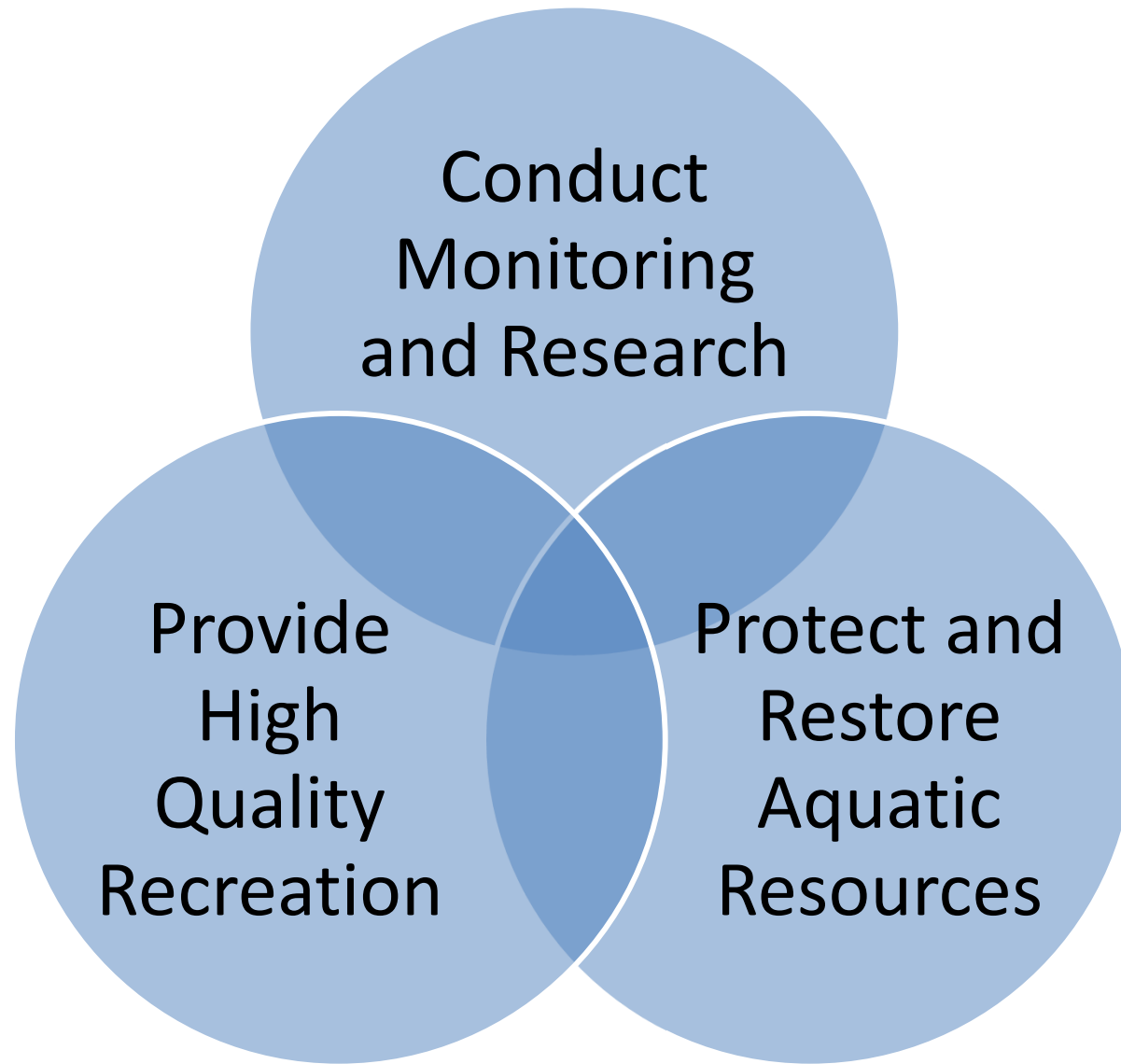
MASS**W**ILDLIFE

# Fisheries Program Overview

Todd Richards, Assistant Director for Fisheries  
Water Resources Commission Meeting

September 8, 2022

# Fisheries Program Goals



# Fish Community Surveys

- Use the best gear for the conditions to get a representative sample in all habitats
  - Backpack electrofishing for small streams and shallow water
  - Barge electrofishing for wadable streams a bit larger



# Fish Community Surveys

- Gillnets
- Quabbin and Wachusett
- Target bottom-dwelling species

Monitoring  
and  
Research







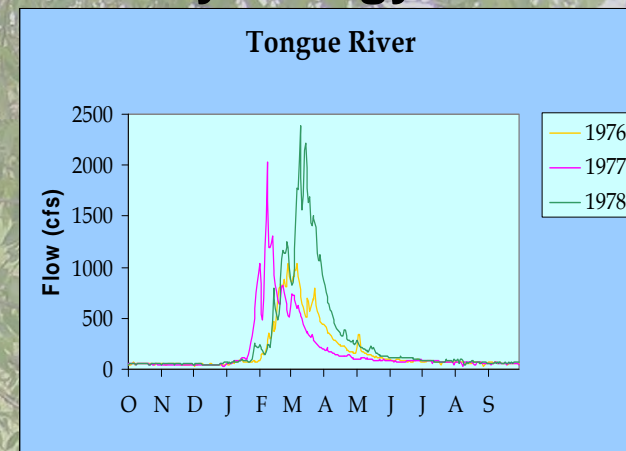
Monitoring  
and  
Research



# Geomorphology



# Hydrology

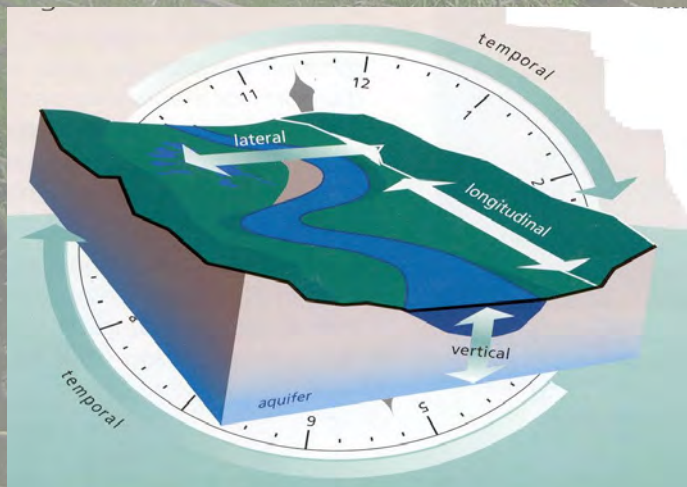


# Biology



# Connectivity

# Water Quality





# Research



Monitoring  
and  
Research

- Coop Unit Involvement
  - Lake and pond drawdowns
    - In-lake
    - Downstream
  - Dam removal & ecological response
  - Regional aquatic biodiversity assessment
- NECASC
  - Coldwater climate refugia
  - Stream and air temperature modeling
- Human Dimensions
  - Cold- and warmwater angler survey

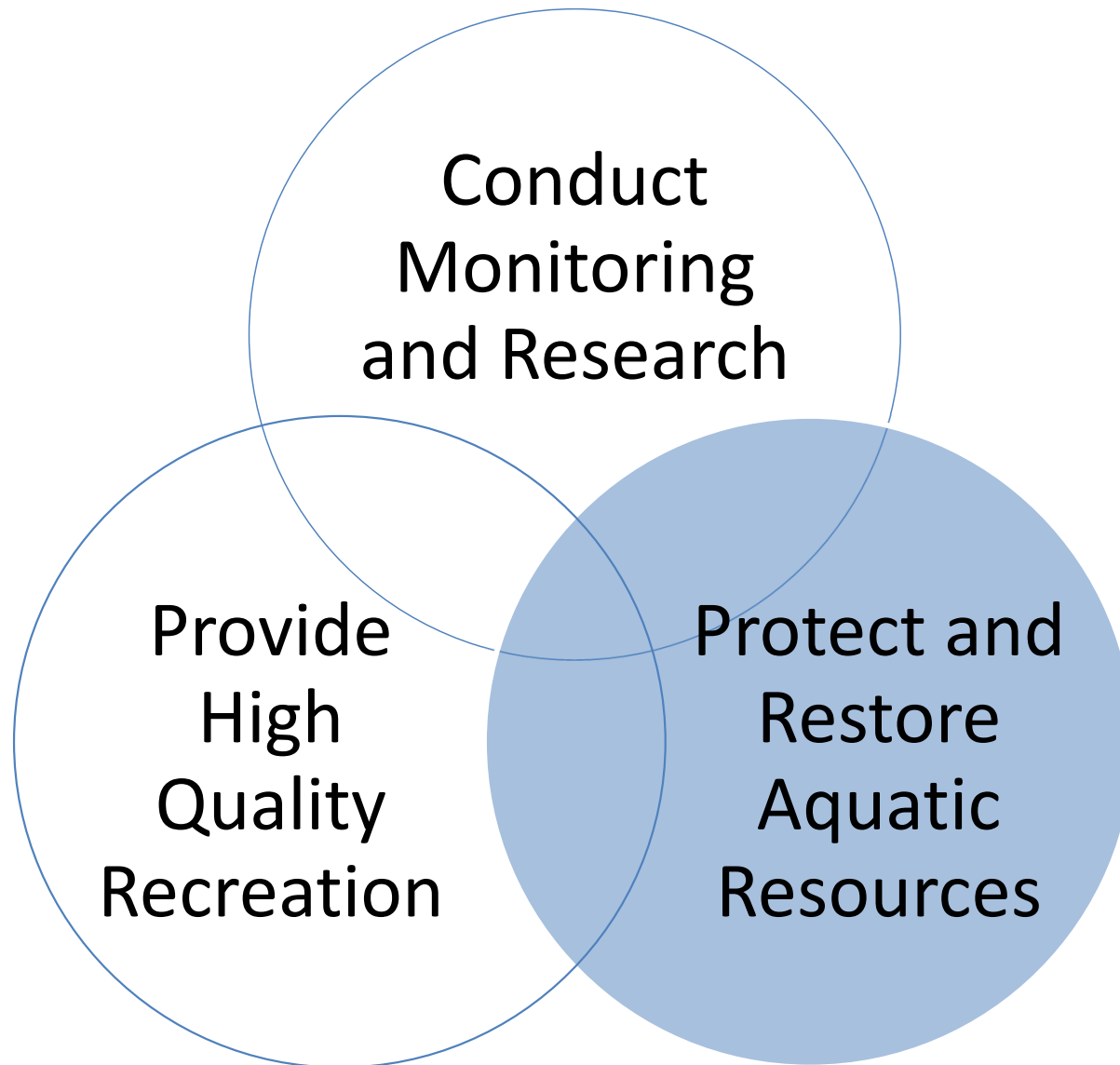
# Deerfield River Research



Monitoring  
and  
Research



# Fisheries Program Goals



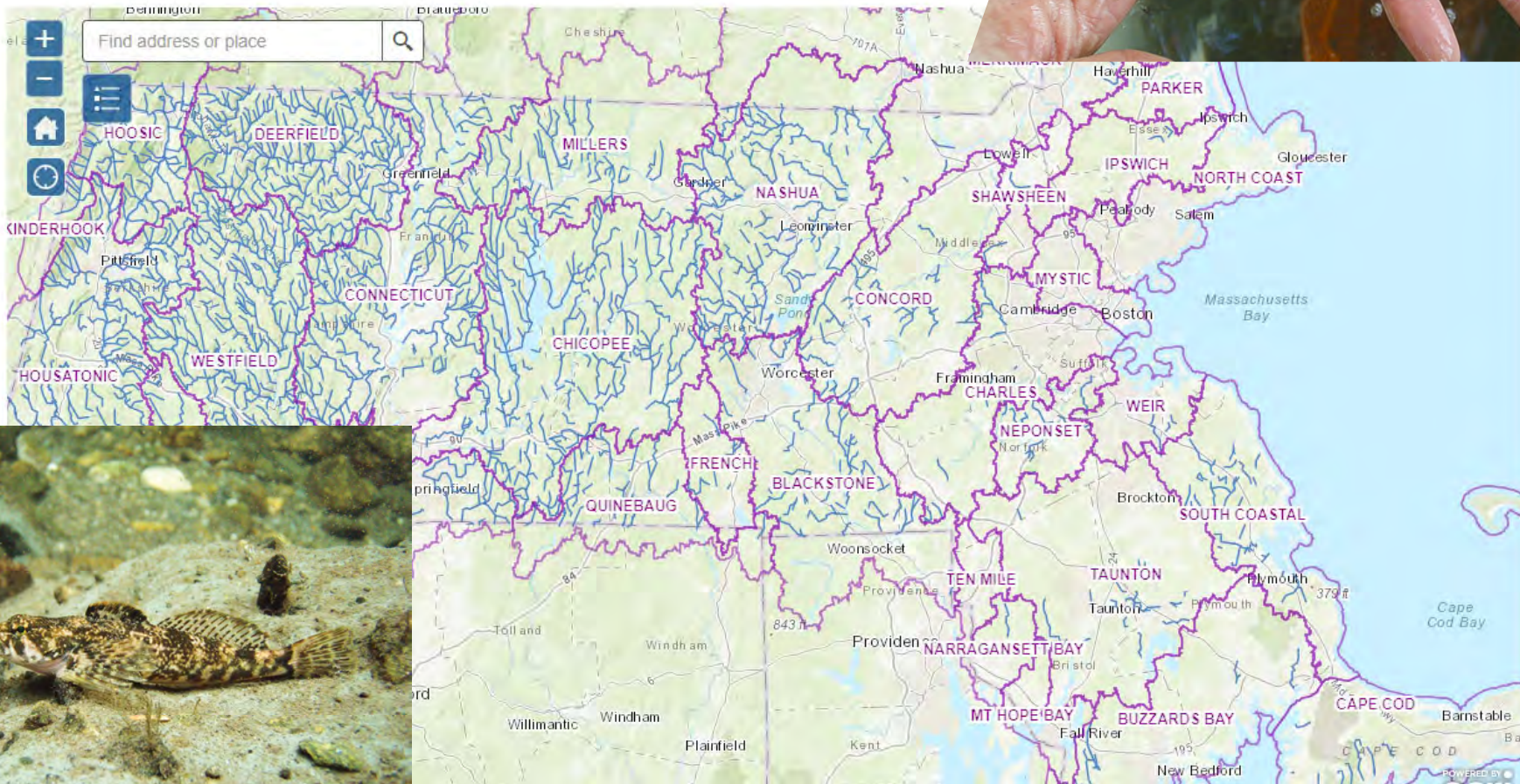
# Protect and Restore Aquatic Resources

- Regulations
- Coldwater Fish Resources
- Wild Trout Management Plan
- Land Acquisition/Biomap
- Policy Development
- Climate Resilience/Refugia
- Active Habitat Management



# Coldwater Fish Resources

A Coldwater Fish Resource (CFR) is a stream, river, or tributary in which reproducing coldwater fish are found. Conservation/planning commissions, land trusts, consultants, and town open space committees will find this information useful for conservation planning. To get started, find your town using the search box in the map below. CFRs are shown in blue, click on a stream for more information.





# Wild Trout Management Plan

- Summarize knowledge of wild trout resources
- Identify monitoring and research needs to improve our ability to manage wild trout
- Outline goals/objectives for wild trout management
- Develop products for both conservation of wild trout resources and for recreational anglers to better use these resources

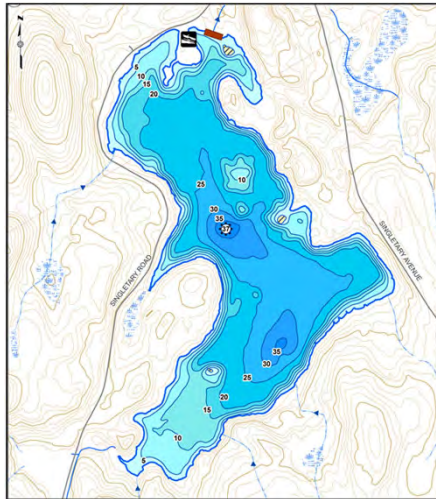




# Lake and Pond Management

- Interagency Collaboration
- Environmental Review
- Bathymetry
- Condition Factor

Protect and  
Restore



## **The Practical Guide to Lake Management in Massachusetts**

A Companion to the Final Generic Environmental  
Impact Report on Eutrophication and Aquatic Plant  
Management in Massachusetts



Commonwealth of Massachusetts  
Executive Office of Environmental Affairs

2004

# Inter-agency Policy Development

- Water Resources Commission - ITA
- Water Management Act
- Drought Management Task Force
- Interagency Fish Toxics Committee
- Fish Kill MOU



# Active Habitat Management



Protect and  
Restore



# Active Habitat Management



Protect and  
Restore

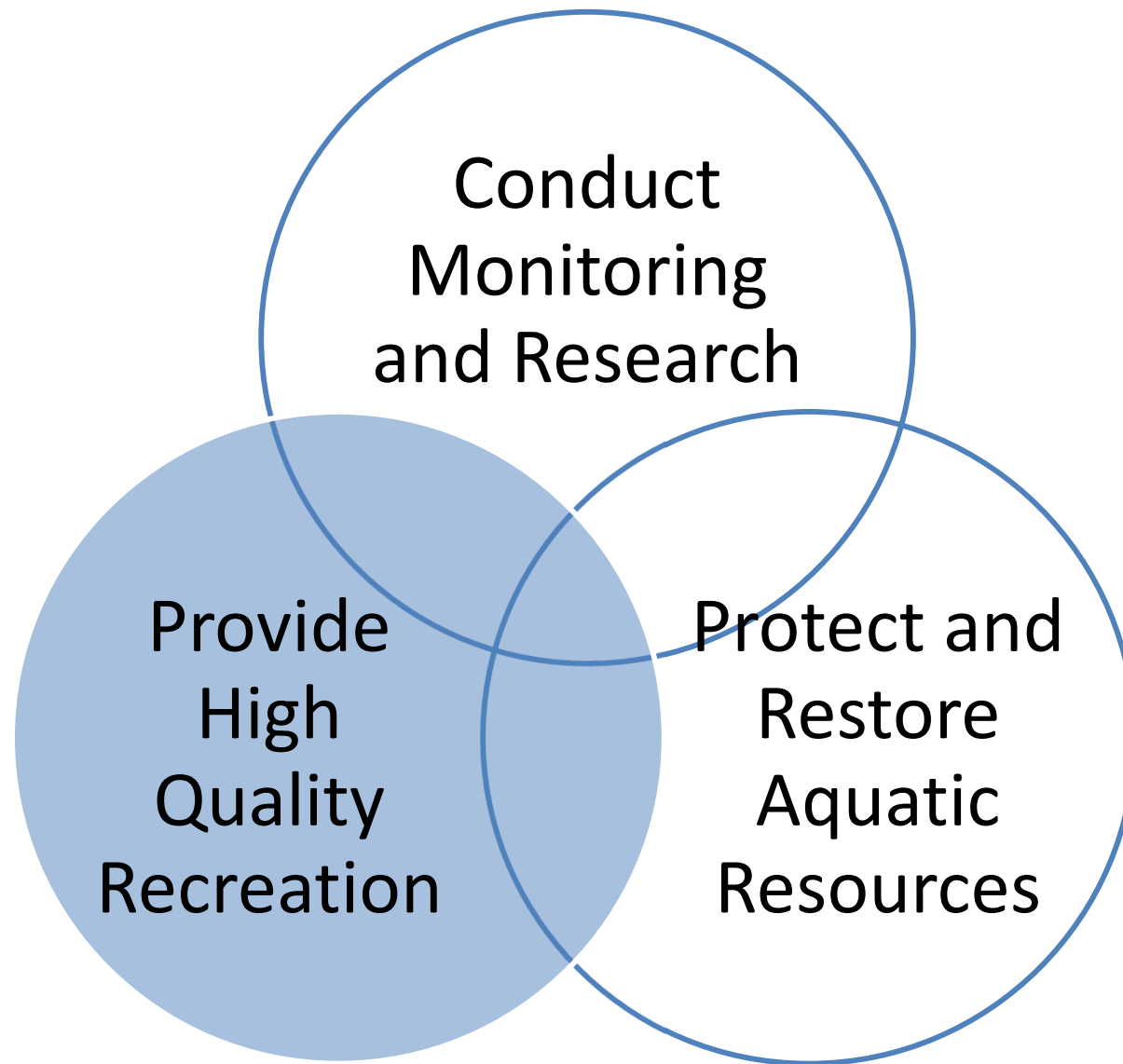


Protect and  
Restore



Gulf Brook

# Fisheries Program Goals





Recreation



# FISHING BY THE NUMBERS IN MASSACHUSETTS

801,273 ANGLERS SPENT  
\$475.5 MILLION IN MASSACHUSETTS

## Statewide CONTRIBUTIONS by Massachusetts Anglers



**829.9**  
MILLION  
economic output



**7,212**  
jobs supported

## National CONTRIBUTIONS by U.S. Anglers



**114.5**  
BILLION  
economic output



**828,133**  
jobs supported

## Contributions to CONSERVATION by U.S. Anglers

**\$653**  
MILLION  
IN LICENSE SALES

**+ \$618.4**  
MILLION  
IN EXCISE TAXES

**+ \$403.3**  
MILLION  
IN DONATIONS

**= \$1.7**  
BILLION





Recreation

Warm

Streams

Stocked

Lakes

Cold

Wild

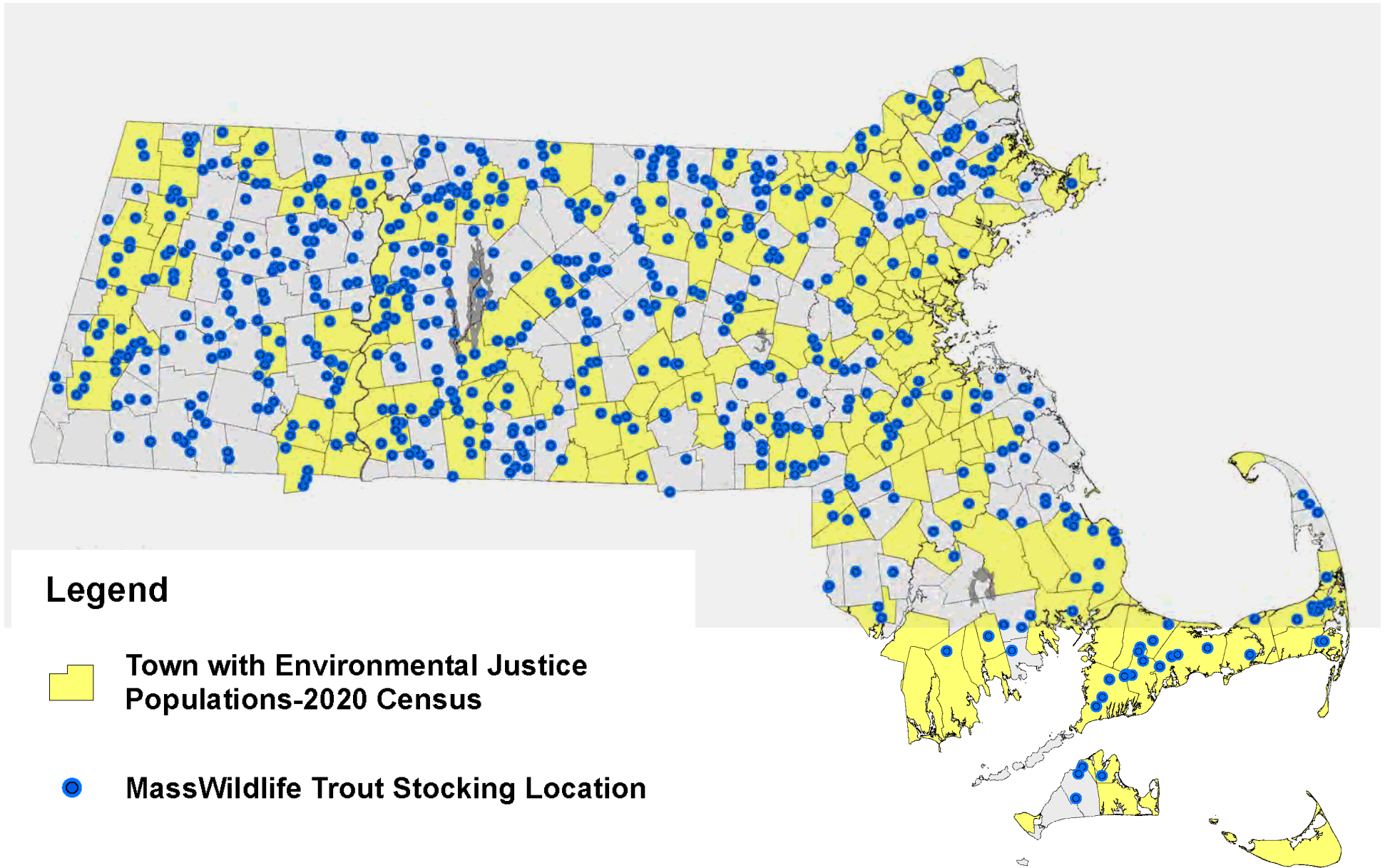
Ponds

Rivers





# Trout Stocking in Towns with EJ Populations





## Recreation



Connect people with nature





# MASSACHUSETTS WILDLIFE

No. 1, 2022

\$3.00

**SPECIAL ISSUE:  
Fisheries & Aquatics**

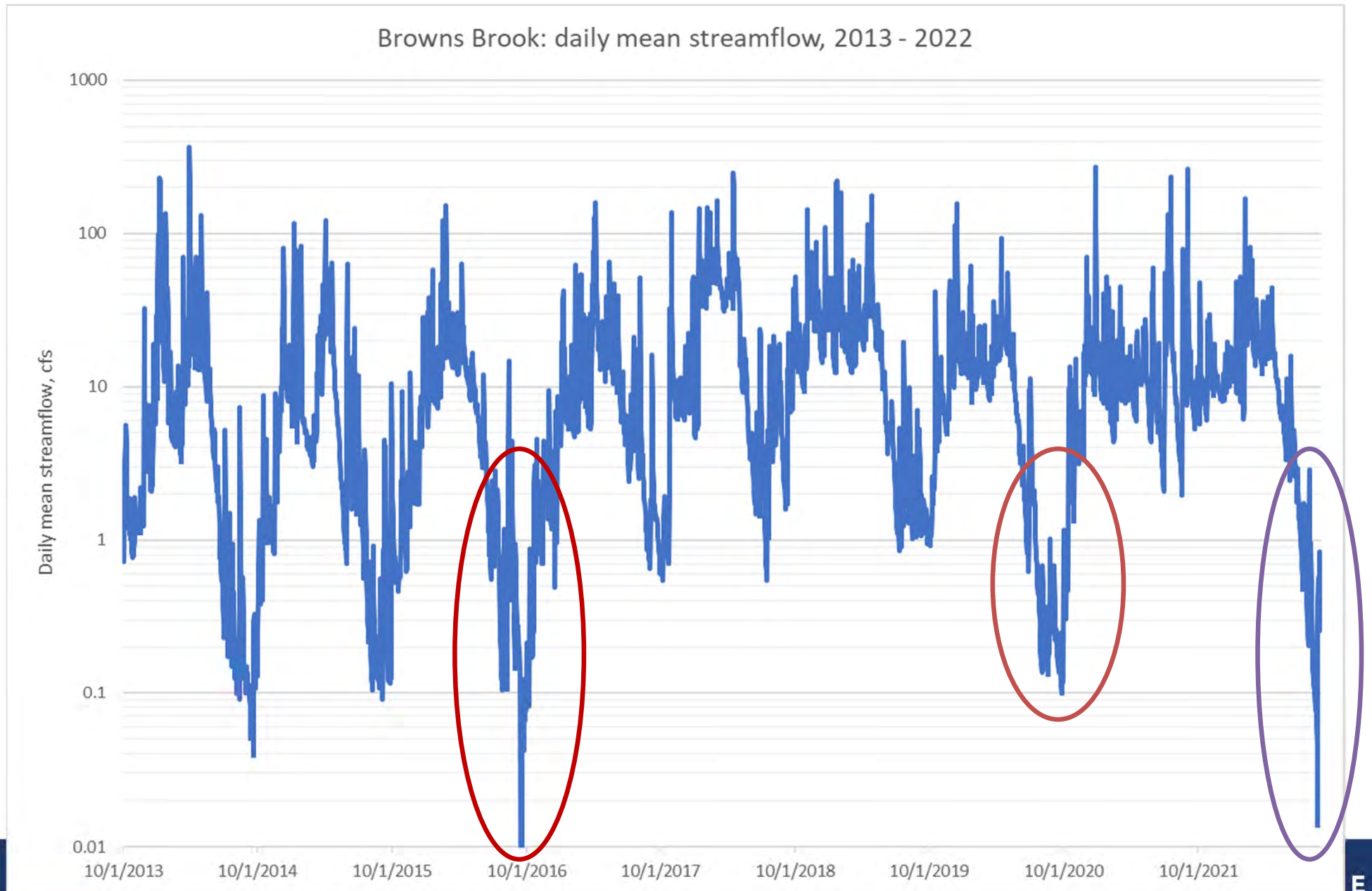
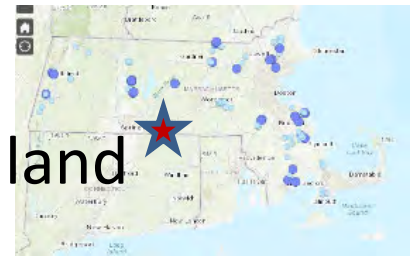


# Drought





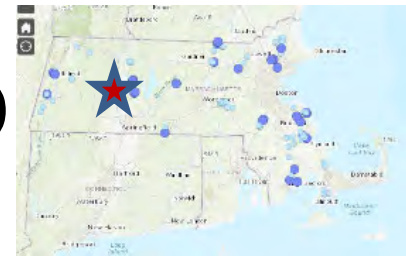
# Central region – Browns Brook, Holland





# Connecticut River Valley regio

Nashawannuck Brook, Northampton



Photos from August 18, 2022, but conditions were the same on August 31, 2022







Fallfish Nest













Gulf Brook, Pepperell

