

# How Can You Get Involved?



Clean Water. Healthy Habitats. Resilient Communities.

## Connecticut River Conservancy

### Learn:

The Massachusetts Department of Environmental Protection (MassDEP) is hosting a series of informational meetings. Attend these sessions to learn about the projects and the proposed protection mitigation and enhancement measures. You can also review MassDEP's page on FirstLight's 401 application here:



### Comment:

Make sure your voice is heard! An essential part of the 401 certification process is the public commenting period. A public notice will be issued when a draft decision has been reached for the dam projects. Read the draft certification, and plan to submit your comments at the public hearings or online within 30 days. Visit our website for more details:



### About us:

The Connecticut River Conservancy (CRC) restores and advocates for clean water, healthy habitats, and resilient communities to support a diverse and thriving watershed. Through collaborative partnerships in New Hampshire, Vermont, Massachusetts, and Connecticut, CRC leads and supports science-based efforts for natural and life-filled rivers from source to sea.

Contact Nina Gordon-Kirsch,  
Massachusetts River Steward

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### Your River Stewards!



Left to right: Nina Gordon-Kirsch (MA), Rhea Drozdenko (CT), Kate Buckman (NH), Kathy Urffer (VT)

## 401 Water Quality Certifications for the Turners Fall Dam & Northfield Mountain Pumped Storage Station

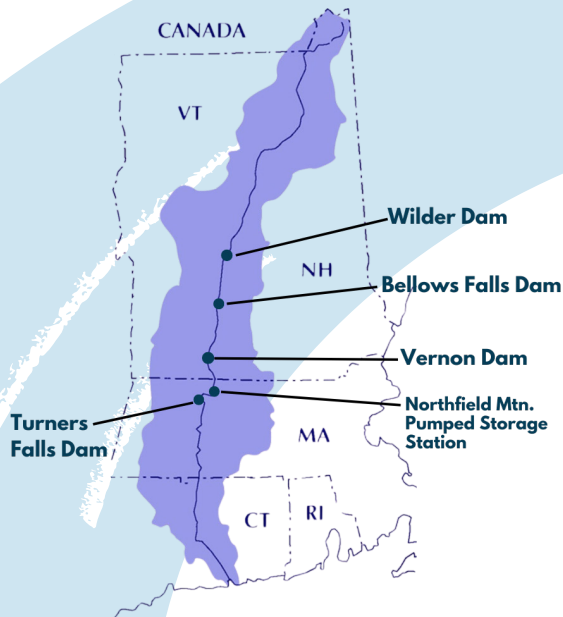
### A Guide for Massachusetts Residents



Turners Falls Dam photo by Douglas L. Engel

## Background Information

FirstLight Power is applying to relicense the Northfield Mountain Pumped Storage and Turners Falls hydroelectric facilities located on the Connecticut River. As part of the relicensing process, they must apply for a Section 401 water quality (WQ) certification from the State of Massachusetts. These certifications last up to 50 years and will affect 124 miles of the river! The public commenting period of the 401 application is your opportunity to make your voice heard about the impacts of these hydroelectric dams on river ecology and recreation opportunities: these dams generate significant profits by harnessing our river's power, so it's only fair that some of those profits are reinvested to protect and provide access to the river!



Source: FERC (2013)

## What is the 401 Process?

Under the Clean Water Act, the State of Massachusetts has the right to protect water quality in the face of a federal action. The Northfield Mountain Pumped Storage and Turners Falls hydroelectric facilities are about to receive a new license from the federal government to operate for the next 40 years. As part of this process, FirstLight was required to apply to MassDEP for a 401 WQ certification. Whatever MassDEP requires as a condition in this certification automatically becomes part of the federal license.

## Water Quality Standards in MA

In Massachusetts, waters are classified based on their designated uses to ensure they meet specific quality standards for each use. Broadly, MA standards are designed to protect ecology, recreation, and aesthetics of its waters:

- **Ecology:** Ensures the health of aquatic ecosystems, supporting diverse fish and wildlife.
- **Recreation:** Maintains water quality for safe and enjoyable recreational activities, such as boating and swimming.
- **Aesthetics:** Waters should be managed to achieve and maintain aesthetic quality.

You can learn more about MA water quality standards here:

<https://www.mass.gov/regulations/314-CMR-4-the-massachusetts-surface-water-quality-standards>

Source: Mass.gov

## Hydroelectric Dam Impacts on Water Quality

### Ecology

- **Dissolved Oxygen:**  
Dams can reduce dissolved oxygen (DO) by slowing water down and trapping organic materials and sediment. DO is essential for the growth and reproduction of aerobic aquatic life, such as fish and invertebrates.
- **Thermal Pollution:**  
Dams can cause thermal pollution in rivers by altering water temperature patterns and releasing cold or warm water. Water temperature is a critical environmental parameter for aquatic habitats.
- **Sedimentation:**  
Because dams are built to store water, they also store the sediment that all rivers carry. Managing this sediment is a significant challenge for dam operators.

### Recreation

Dams can impede access to recreational opportunities. FirstLight should create comprehensive improvements to recreation access and provide ADA-compliant recreation amenities.



### Aesthetics

Dams can alter the aesthetic value of a river. This effect can be mitigated by intentional land management practices.

Source: EPA, *Riverine Ecosystem Management*