



# River Watcher

## 2022 REPORT



### Historic Gem Inspires Modern Partnership

Rivers have played a critical role in the human experience from building communities and facilitating commerce to reminding us of the beauty and richness of nature. The impacts of climate change extend beyond extreme weather events and impacts on temperatures; our river systems are also at risk. However, rivers offer hope to combat some of the effects of climate change positively interacting with the people and ecosystems they flow through.

As hydropower operators we are natural river watchers. We are on rivers every day and attuned to subtle changes. We are pleased to present this snapshot of our ongoing efforts to contribute to healthy rivers, local communities, and positive climate action.

It is often said that we are stewards of our natural resources for future generations. In 2022, Gravity entered into an innovative agreement that makes the Pawtucket Hydroelectric Facility, a Rhode island project that first generated power in 1896, a source of both power and inspiration for a consortium of seven independent schools and one industrial arts education center. In addition to a 20-year net metering agreement for power from the facility, faculty and students from the schools now use the Blackstone River power plant as a classroom to learn about energy, water, and history. The partnership is so unique that the [Low Impact Hydropower Institute](#) featured it in a video about the benefits of hydropower projects that are certified to protect environmental, recreational, and cultural resources.

*Above. 5th graders from the Gordon School in East Providence, Rhode Island enjoying the hydropower tour where they learned about the importance of flow and head in making energy.*

*Right: [Watch video](#) about this project.*



## Clean River and Clean Energy



By layering technical and financial support from partners at the [Massachusetts Clean Energy Center](#) and the US Department of Agriculture, Gravity was able to complete work on a 100+ year-old project' located on the Housatonic River in Western Massachusetts. Investment in the water intake and penstock (pipe that delivers water to the turbines) brought many benefits including:

- The installation of a modern automated trash rake allowing us to capture and remove trash from the river while increasing our ability to respond to power needs with increased efficiency and output.
- The extension of the project's useful life enabling it to continue to contribute to the local economy and clean energy generation for decades to come.

## Fish Uber

We're excited to begin our partnership with resource managers to jump-start restoration of migratory fish to the Quinebaug River in Connecticut. Identified as a restoration target decades ago, progress toward providing access to the middle and upper reaches of the river has been slow. Over the next year, Gravity

will be establishing a fish transport program to move thousands of blueback herring, alewife and American shad to previously inaccessible spawning and rearing habitats every year. We're uber excited to begin transporting these fish to their up-river destinations, no app required!



## A New 40-Year Plan

Gravity's scientists and engineers worked collaboratively with state and federal resource managers over a 6.5-year period to develop a comprehensive agreement that will guide operations at our New York Chittenden Falls project over the next 40 years. Key elements of this agreement include:

- Installation of new upstream and downstream passage systems to increase the efficiency of American eel migration.
- Implementation of Invasive Species management protocols to protect native species diversity.
- Establishment of measures to protect rare, threatened and endangered species from disturbance during seasons critical to their life histories.

To learn more visit:

[GravityRenewables.com](https://GravityRenewables.com)

