

# Riverwatcher Report

## 2020

As operators and owners of small hydropower plants, we spend more than 50,000 hours on the rivers each year and care deeply about their health. We also care about the health of the people, plants, and animals that depend on them. We view the work we do, whether it is debris removal or fish management, as crucial to the vibrancy of watersheds.

As we enter this new decade, we are keenly aware that America's rivers are caught between the past and the future. Thousands of obsolete and deteriorating dams, vestiges of the industrial revolution, challenge wildlife and public safety at precisely the same moment that the climate crisis is increasing pressures on a variety of natural and man-made systems. It is not lost on us that the very hydropower we operate has contributed to this past history. At the same time, we believe these places can play a positive role in a better, more sustainable future.

That is why we are pleased to present our second annual Riverwatcher Report, focused on Gravity's work in three areas: Science, Strength and Solutions. Each reflects Gravity's commitment to contributing to healthy river systems and healthy communities. We hope you enjoy this report and that it inspires you to spend more time on the rivers we share.

Thank you,

*Ted Rose*

Chief Executive Officer  
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## Fish Spotting

Anglers around the world recognize Vermont's Clyde River as a salmon fishing destination not to be missed. This is due in large part to the salmon restoration efforts at Gravity's Newport hydroelectric station.

Since 2007, the Project has partnered with Vermont Fish and Wildlife to operate an upstream fish ladder, trap and truck system and a downstream passage system. These facilities assist migrating landlocked Atlantic salmon and other migratory species to complete their life cycle. Since commissioning, nearly 1,000 salmon have passed through the system en route to spawning grounds upstream. For years, our regional manager, Mark Hinton (pictured right), noticed school groups and other spectators trying to catch a glimpse of the salmon awaiting transport in the holding tank above the plant. In 2019, Mark decided to literally open a window on the fish journey by installing a 12-inch diameter viewing portal in the tank. Now curious people and migrating salmon can see eye-to-eye.



## Riverwatching 2019 by the Numbers

**18**  
hydropower  
projects

**14**  
rivers

**10,000**  
square miles of  
drainage area

**9**  
fish and eel  
passage  
systems  
operated &  
managed

**20**  
recreational facilities  
maintained,  
from boat launches  
& trails to  
interpretive signage

**8+**  
tons of trash  
& debris  
removed  
from rivers

**250+**  
students &  
citizens led  
on facility  
tours

# Science. Strength. Solutions.

Each reflects Gravity's commitment to contributing to healthy river systems.

## Science

At Gravity, we use the power of observation and scientific study to guide our actions.

In 2019, we worked closely with resource agencies to conduct in-depth studies related to fish habitat, fish and eel populations, freshwater mussels, wildlife and botanical communities, and water quality. These studies inform how our existing and future operations can best complement river ecosystems.

We are also proud to have added two new hydropower sites to our growing fleet of Low Impact Certified Hydropower Projects. These projects go through a rigorous, independent environmental evaluation by the Low Impact Hydropower Institute (LIHI). Nearly half of our portfolio annually meets LIHI's science-based criteria, a standard met by less than 9% of all U.S. hydropower.

## Strength

Rivers channel the enormous strength of flowing water. Conveying that water effectively is often critical to ecosystem health and public safety, especially during periods of high flows. We invest, operate and maintain our civil works to be prepared and stay strong when high water events come our way.

In 2019, Gravity continued to strengthen its trash removal systems. Debris and invasive species are a serious problem on rivers. They can prevent the flow of water and weaken natural systems which in turn can exacerbate flood conditions. By improving debris removal at our stations, we not only optimize the renewable power generated at our facilities, we also ensure a better river flow for all.

Investing in strength goes beyond physical infrastructure. Gravity has worked to strengthen its relationships with local stakeholders. We collaborate annually with dozens of first responders by engaging in emergency drills and scenario planning at our sites.

## Solutions

At Gravity, we talk a lot about exceeding the expectations of a hydropower owner and operator. We pride ourselves on creating and implementing solutions that benefit more than just our operations.

When river users started visiting a Vermont project to see migrating fish, we designed a public-friendly fish viewing area (See "Fish Spotting.") When a beaver mistakenly went into our bypass channel in Connecticut, our operator drove to the local hardware store to buy lumber to build an exit ramp. When visitors to our Pawtucket, Rhode Island, project couldn't get a good view of the turbines, our operators installed a hatch door to increase visibility.

In 2019, Gravity staff worked with fish agencies in Vermont to tag fish. We partnered with local municipalities to create power purchase agreements that provide more than just nameless power; they provide a link to a project that continues to provide economic benefits to the region. Implementing solutions both big and small helps us be better river stewards.

