



JUNE 2022

REGION 2

Project Activities

Arconic Inc. (formerly Alcoa) will be working through the summer to continue to reconstruct habitat areas impacted by the dredging and capping required by the U.S. Environmental Protection Agency (EPA) at the Grasse River Superfund site (aka Alcoa Aggregation) in Massena, New York. Nearly a quarter million cubic yards of sediment contaminated with polychlorinated biphenyls (PCBs) were removed from a 7.2-mile stretch of the lower Grasse River and about 250 acres of river bottom were capped.

EPA is requiring monitoring of fish, water and habitat to track the recovery of the river over time. The caps placed on the river bottom are also being monitored to ensure that the caps remain intact. Based on the results of this monitoring work, repairs to the cap will be made as necessary.

The capping material includes sand and powdered carbon, which works to capture and chemically bind pollutants in place, as well as some stone and gravel. Three different types of caps were installed, depending on river location (see Figure 1: *Grasse River Remedy Overview* which shows dredged areas, capped areas and type of cap installed).

The advisories on eating fish from the Grasse River, established by the New York State Department of Health, will remain in effect until PCB concentrations in fish are reduced to the point where the advisories are relaxed or lifted by the state. As part of the long-term monitoring plan, the next fish sampling event is scheduled for August/September 2022.

Arconic conducted the dredging and capping work and is performing the associated monitoring and habitat reconstruction work under EPA oversight.

Ice Jam Investigation

An ice jam event occurred in March 2022 which resulted in limited scouring of the cap and sediment immediately upstream of the Route 131 Bridge in Massena. In order to repair the damaged cap in this section of the river, additional work in the river will be necessary this year. River sections downstream of the damaged section will also be tested and addressed, as necessary.

Historically, ice jams have not occurred this far down river and the construction of the cap in the damaged area was not designed for the forces resulting from the jam. The armored cap constructed in the river upstream of the area, which was designed to withstand ice jam forces, was not damaged.



Consistent with plans that were developed to monitor the site after cleanup, water sampling and bathymetric surveys (measurements of the river bottom) were conducted to identify areas that have eroded or where the eroded capping material and sediment deposited, and to evaluate the extent of impact.

Arconic began additional investigations in mid-June, which will result in the development of a workplan to address next steps, including repairs to the cap and/or modification to cap design in the area where erosion has occurred. It is anticipated that any necessary repairs will begin in late summer and be completed this year.

The results of the investigation and details of the workplan will be shared with the community before the start of repair work.

Habitat Reconstruction

During summer 2022, Arconic will plant 9,000 additional plants, consisting of nine different plant species, in the habitat areas where the plants did not grow as well as expected after the initial planting in 2020.

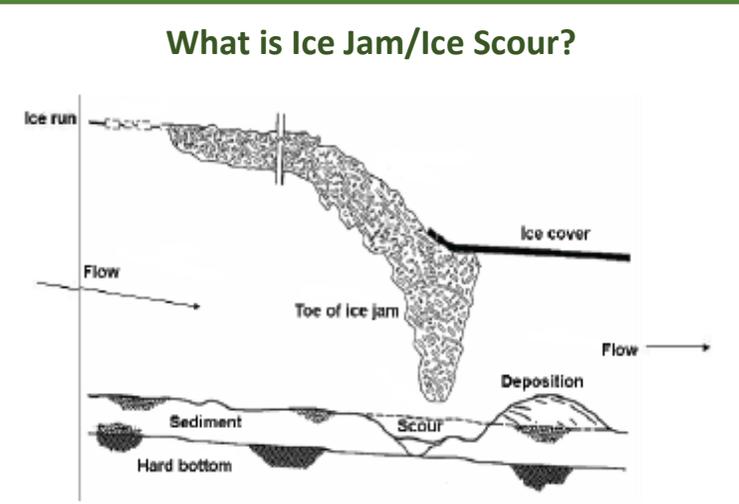
Planting activities will occur mostly by boat. After planting is complete, the newly planted areas will be monitored weekly. Fencing to protect the newly planted areas is expected to be removed in October 2022.

EPA has been working with the Saint Regis Mohawk Tribe (SRMT) at the Grasse River site to incorporate Traditional Ecological Knowledge (TEK) into the habitat reconstruction work.

Tobacco burning ceremonies and seed ceremony songs have been incorporated into the reconstruction process as specified by the tribe. Seed selection and seed sources/ nurseries were also selected on the basis of their ability to provide the species of cultural plants used for traditional foods, medicines, utility, ceremony, etc. specified by the tribe as well as seeds adapted to the site-specific growing conditions.

Before the start of the 2022 planting season, SRMT requested 24 plants to use as part of a TEK beginning of planting season ceremony, which was conducted by the Saint Regis Mohawk Tribe's TEK specialist. The plants used in the ceremony were then returned to the site for planting by Arconic's contractors.

What is Ice Jam/Ice Scour?



An ice jam is an accumulation of ice in the river channel that causes an ice jam toe to form, creating a very high-water flow rate and turbulence under the ice jam toe.

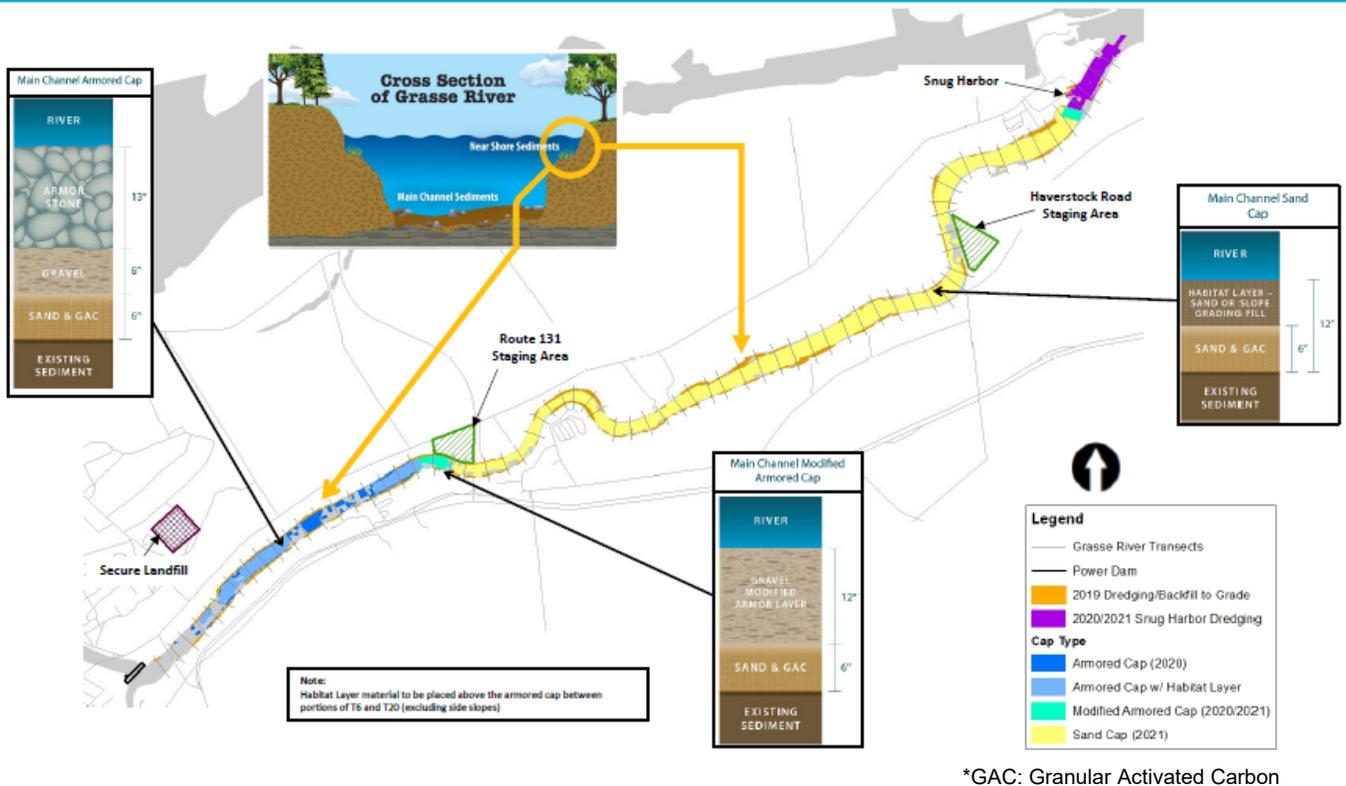
The higher water flow rates are created by the same amount of water being pushed through a smaller portion of the river channel. The high-water flow rate and turbulence under the ice jam toe can result in localized scour along the river bottom sediment and redistribution of sediment.



Vegetation that has been planted in the river as part of habitat reconstruction activities.

Figure 1

Grasse River Remedy Overview



Cleanup Action History

EPA selected a cleanup plan for the site in 2013 that called for removing contaminated sediment from near-shore areas in a 7.2-mile stretch of the lower Grasse River and placing a cap on the river bottom in the main channel. Additional dredging of contaminated sediment was added to the project in 2020 in the Snug Harbor area, which is a small embayment located on the north shore of the river, to accommodate a new, larger tugboat purchased by the St. Lawrence Seaway Development Corporation, which operates its tugboat out of Snug Harbor.

The dredging and capping work began in 2019 and was completed in fall 2021. During the cleanup, contaminated soil was also removed from two areas along the north shore of the river near the Alcoa Bridge in Massena.

Dredging and capping equipment has been removed from the river and from two shoreline support areas located on Route 131 and Haverstock Road. The Haverstock Road Staging Area, which was used for storing capping material, has been fully restored. The Route 131 Staging Area will continue to be used for river monitoring activities for the next few years.

EPA Five-Year Review

EPA completed its first five-year review of the Grasse River (aka Alcoa Aggregation) Superfund site in spring 2022.

The purpose of five-year reviews is to ensure that implemented cleanup plans at Superfund sites are functioning as intended and protective of human health and the environment.

A summary of cleanup activities completed at the site, and an evaluation of the protectiveness of the implemented cleanup plan is included in the five-year review report.

The report is available on the [EPA site webpage](#) and can be accessed directly via the following [link](#).

EPA Contact Information

Young Chang
EPA Remedial Project Manager
EPA Region 2
(212) 637-4253
chang.young@epa.gov

Larisa Romanowski
**EPA Community Involvement
Coordinator**
EPA Region 2, Hudson River Office
(518) 407-0400
romanowski.larisa@epa.gov

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