

2015-2016 Hogansburg Dam Removal Project

The Saint Regis Mohawk Tribe is restoring the natural flow of the St. Regis River, improving fish habitat and reclaiming Tribal lands.

On March 13, 2015, the Saint Regis Mohawk Tribe became a co-licensee of the Hogansburg Hydroelectric Project and took a lead role to decommission and remove this obsolete dam. The Environment Division has reviewed studies conducted over a five-year period that examined both license renewal and dam removal. The results support complete dam removal to restore the ecology of the St. Regis River. It is the first impassible barrier to fish from the St. Lawrence River and fails to meet State and Tribal water quality standards. The removal of this dam will open up 274 river and stream miles for fish species like walleye, muskellunge, Atlantic salmon, lake sturgeon and American eel.

In late-September of 2015, the water behind the dam will be drawn down, then gradually refilled in October. The drawdown is necessary to inspect upstream conditions prior to its removal in the summer of 2016. Dam removal is planned for July through September of 2016, when flow rates are lowest. The project lands will then be returned to the Tribe.

A series of public meetings will be scheduled to present study results, dam removal approach and post-removal conditions.

Why Remove the Hogansburg Dam?

- Federal operating license expires on September 30, 2015
- Cost to renew the license and retrofit is \$3.5 to \$5 million
- Requires extensive repairs and upgrades including fish passage
- Not in compliance with State/Tribal water quality standards
- Current annual losses are more than \$100,000 per year
- Removal increases spawning habitat for fish species
- Return of project land to the Tribe
- Ability to create a park and repurpose the powerhouse

Examining the Alternatives

The Saint Regis Mohawk Tribe examined a range of options on the future of the Hogansburg Hydroelectric Dam. Initially, the owner proposed to obtain a new operating license. The new license would require significant improvements to meet Tribal/State water quality regulations. The facility could never produce enough power to off-set this investment.

A range of project decommissioning options were examined, including removing some parts of the dam, but these options failed to meet safety and environmental standards. Leaving the dam in place was also examined, but this would violate the Federal Power Act. The best outcome, based on economic and environmental concerns, is total project decommissioning and removal. As a co-licensee of the dam, the Saint Regis Mohawk Tribe will oversee the dam removal, set restoration goals that advance Tribal resource management strategies and work with State and Federal agencies on the approval process.



Aerial View 1948

Hogansburg Dam Sediment Investigation

All dam removals must deal with the accumulation of sediment. Areas within and above the dam were monitored, with an overall volume estimated at 17,000 cubic yards. Any movement of this relatively small volume of sediment is expected to behave similarly to the annual load of sediment during spring ice jam. The dam does not allow vast quantities of sediment to accumulate in the reservoir. The few areas where sediment does accumulate are exposed to currents and flushed out by the river's natural flow.

Comparison of Fort Covington Dam Removal

It is important to understand the differences between the Hogansburg Dam and the one previously located in Fort Covington. The St. Regis River has higher-sustained flow throughout the year to disperse sediments faster, while the Fort Covington dam had acted like a sediment trap. The Hogansburg impoundment is also much smaller in length, with less opportunity to accumulate sediments.

	FORT COVINGTON	HOGANSBURG
Watershed	Salmon River, 280 sq miles	St. Regis River, 848 sq miles
Average August/April Flow	Aug. 311 cfs / April 1,162 cfs*	Aug. 688 cfs / April 3,765 cfs**
Mean Annual Flow*	493*	1,455 cfs**
Distance to St. Lawrence	5 miles	2.5 miles
River Width	150' to 250'	400' to 1,100'
Spillway	90 feet long/ 9 feet high	250 feet long/ 11.5 feet high
Total Length	240 feet long	330 feet
Impoundment Length/Area	1.15 miles; 12 foot-acres	0.5 miles; 19 foot-acres
Impoundment Sediments	60,000-80,000 cubic yards	17,000 cubic yards

**Estimated by watershed size and data from Chasm Falls USGS station (Milone and MacBroome 2004)*

***USGS station (04269000) at Brasher Center, NY.*

Milone and MacBroome. 2004. Report of Findings: Fort Covington Dam Mitigation. March 11, 2004. Prepared for Town of Fort Covington, NY.

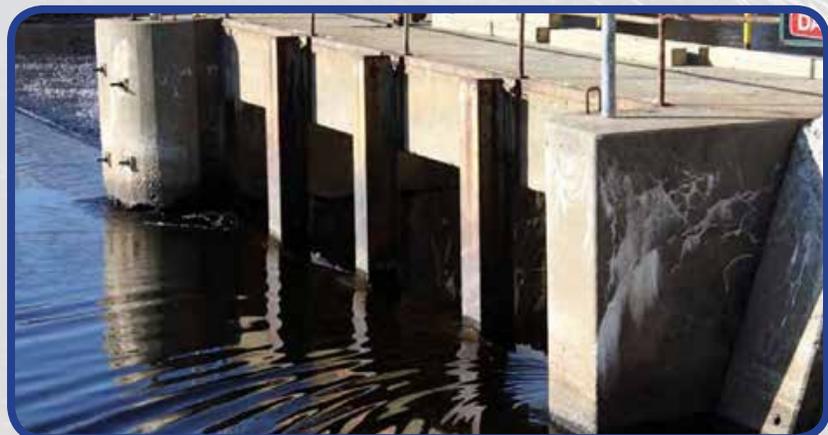
Comprehensive Review and Consultation

In addition to the standard dam removal concerns such as engineering feasibility, sediment and water quality - the Tribe also reviewed potential impacts to fish, cultural resources, recreation, ice jams, aquatic insects and archaeological concerns. The Hogansburg Dam removal project represents more than five years of study and consultation with experts across the country.

Temporary Reservoir Drawdown

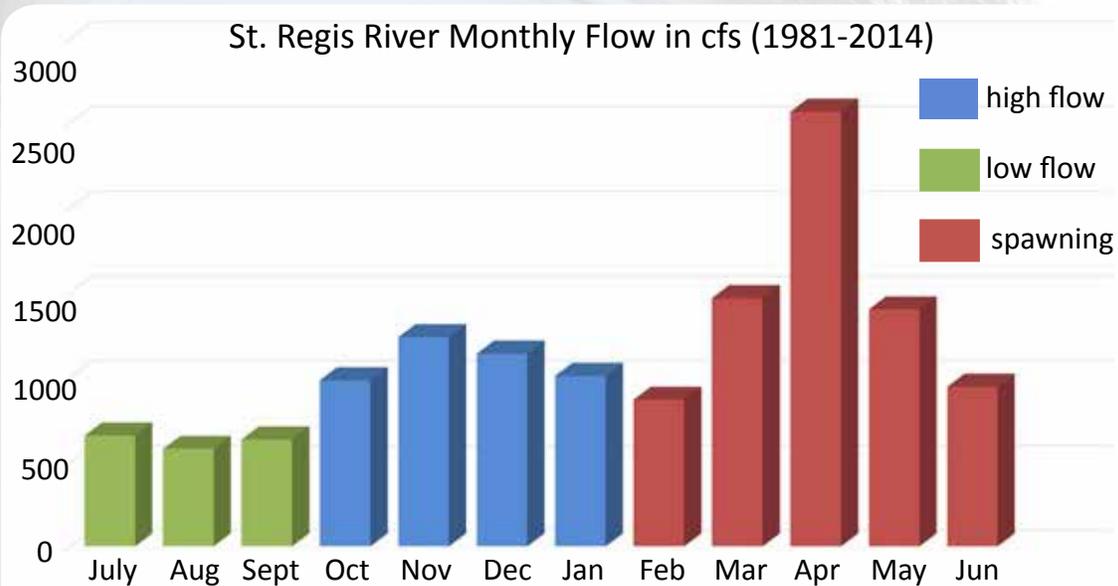
In the fall of 2015, the Hogansburg Dam will have a temporary drawdown to conduct additional environmental surveys. The timing of the drawdown reduces the potential impact to fish. The lowered reservoir will reveal a natural pool upstream of the Route 37 bridge and allow the Tribe to verify conditions and water levels post-removal.

The stoplog gate will be opened to lower the water level in the reservoir.



Dam Removal Process

Dam removal is planned for July through September of 2016 (shown in green). These months are ideal for their low flows and reduced impact to fish. The removal will occur in two phases, first on the west side opposite the powerhouse and then on the east side. A coffer dam will be used to isolate the work area. Removal of the dam will be performed in an environmentally responsible manner with excavators and other equipment. During the first removal phase, about 210 feet of the dam from the west bank will be removed. Phase two will remove the remaining 35 feet of the dam, as well as the stoplog gate structure and the concrete walkway. All that will remain is the powerhouse.



Improved Fish Habitat

Removal of the Hogansburg Dam will open up 274 miles (442 km) of stream habitat within the St. Regis River watershed. Fish will be able to reach a variety of previously inaccessible spawning habitat. Additionally, remnant populations above the dam will have the benefit of increased genetic pool diversity. Over time, increased habitat could mean more fish with more nursery habitat for juveniles. The greatest potential impacts are expected for Atlantic salmon, American eel, walleye, lake sturgeon and muskellunge.

Our Future River

The greatest change in water elevation will occur from the Hogansburg Dam up to the State Route 37 bridge. From the bridge, a natural pool will be revealed that extends upstream. The impact of dam removal diminishes with distance upstream.

Below the Hogansburg Dam, there will be very little change, as water levels are controlled by St. Lawrence River.

Contact

Please call the Water Resources Program, SRMT Environment Division, at (518) 358-5937 if you have any questions or concerns.

