## Bringing the Eel River Back to Life

For the past nine years Ugpi'ganjig, a Mi'gmaq First Nation, has been working to improve habitat for Atlantic salmon in the Eel River on Chaleur Bay in northern New Brunswick. The community is located near the mouth of the Eel River and was formerly known as Eel River Bar First Nation.

"We've been recognized for our contributions to salmon restoration. We're not just taking fish, we're giving back and ensuring the next seven generations have access to this resource," says Chief Sacha LaBillois. Identifying someone in the community to champion the project, to get the funding and to manage it, was the single most important thing in the success of this multi-faceted, long-term project she added.

Ugpi'ganjig's Atlantic Salmon Habitat Recovery Project is part of a larger salmon and river drainage conservation and restoration plan following the removal of the Eel River dam in 2011. Built in 1963, the dam had a big impact on the health of the river and blocked passage for Atlantic salmon. Ugpi'ganjig's recovery efforts include rebuilding and restoring wild Atlantic salmon habitat and salmon stocks, and public education and awareness of the importance of conservation to wild Atlantic salmon and its habitat.

The first few years involved removing blockages and obstructions in the river so the salmon could get upstream. Then, to re-build their numbers, the community installed in-stream fish egg incubators called scotty boxes. According to Chief LaBillois, these increase survival rates of salmon eggs to 90 per cent compared to the 5 or 10 per cent survival rate of the eggs in a natural setting.

"We're among the first in Atlantic Canada to use the scotty boxes and they've worked very well. We're seeing a big boost in the salmon population," she says.

Other actives include erosion site surveying, clam surveying and monitoring the salmon population using electrofishing. Special training and certification are required for personnel to do electrofishing since it uses direct-current electricity in water to catch fish so they can be measured and examined. Once this is completed, the fish are returned to the river unharmed.

Carole-Anne Gillis, Chief LaBillois and the Atlantic Salmon Habitat Recovery Project team. Photo Credit: Ugpi'ganjig First Nation



## Compendium of Indigenous Socio-economic Best Practises in Fisheries and Oceans Sectors

Working with other partners on the project was challenging, particularly when they have different priorities, continued Chief LaBillois. Electrofishing was often delayed because the community didn't have the equipment or the training, for instance. Working with outside consultants then became problematic since their values we're out of step with the community as they were not interested in capacity building. "We wanted to participate and learn to how to do the activities ourselves."

Fortunately, the Gespe'gewaq Mi'gmaq Resource Council (GMRC), a non-profit organization focused on aquatic research that is supported in part through Fisheries and Oceans Canada's Aboriginal Aquatic Resource and Oceans Management Program, was "very helpful" said Chief LaBillois. GMRC provided the electrofishing training, and Ugpi'ganjig was able to purchase the equipment. Carole-Anne Gillis, a biologist at GMRC, also provided training on all aspects of the project. "We've been able to develop capacity from within; our staff are very knowledgeable and certified, and can participate freely in activities as opposed to observing."

In addition to the Atlantic salmon habitat restoration, monitoring and re-population activities, the community has been doing clam surveys to assess the health of the Eel River. When the dam was removed, the few clams that could be found were extremely small. Now there are a lot of large adult clams in the river, which indicate that the restoration efforts are working.

Ugpi'ganjig has also been involved in public education efforts including a salmon awareness program at local elementary schools, community information sessions on salmon conservation, and a project booth set up at their community Pow Wow. In addition, the topic of salmon and salmon restoration has been woven into Ugpi'ganjig's ongoing comprehensive community planning efforts.

Community support, and willingness to help out when help is needed, has been important to the success of the project says Chief LaBillois. "We'd love to help other communities now, to form partnerships and brainstorm restoration ideas and help train others." Ugpi'ganjig's Atlantic Salmon Habitat Recovery Project was a 10-year effort that concludes next year. The community is now looking for additional resources to continue their work to bring the Eel River back to full health and perhaps be able to continue to use their skills and knowledge in the restoration of other damaged river systems.

## **Best Practise:**Capacity Building through Training



Technical training. Photo Credit: Ugpi'ganjig First Nation





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