



The Atlantic Salmon Conservation Foundation

# ANNUAL REPORT 2016



CELEBRATING TEN YEARS OF CONSERVATION

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# MESSAGE FROM THE CHAIRMAN

Investing in a partnership of knowledge.

2016 was our tenth year of operation, and by all measures it was another exceptional year in pursuit of our mission of helping facilitate and improve the conservation status of wild Atlantic salmon in Canada. We constantly strive to improve all of our granting, information sharing and administrative processes to ensure they are open, transparent and effective. This way of doing business leads to optimum use of the precious conservation funds with which we are entrusted as a foundation.

On the verge of our tenth anniversary, The Atlantic Salmon Conservation Foundation is again pleased to have helped numerous community groups, First Nations, researchers and others to create many new gains in conservation, as well as new innovations in improving salmon conservation. Throughout this effort, we continued to forge new partnerships, while raising the bar to facilitate improved conservation action, and the sharing of information to help others learn from the experience of our recipients.

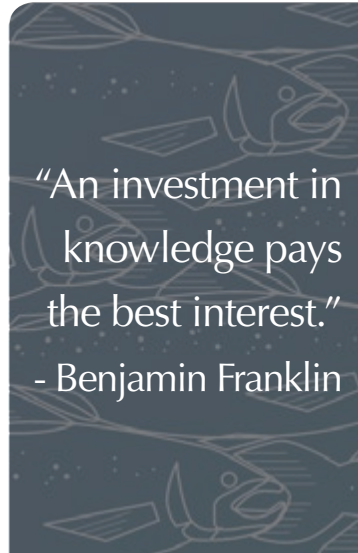
2016 was also the third year in which we were able to offer over \$1 million in grant funding. The “million dollar target” was always our goal, and it’s firmly grounded in our long-term financial plan, well into the future. The year brought with it solid growth in our trust fund achieved through wise investment management and good fiscal planning. Our long-term goal is to increase the overall grant pool based on growth in the trust fund, and any additional funding that may become available to us.

Partnership is our rule and guide. We simply could not “move the markers” toward achieving our goals without seeking and fostering collaboration and cooperation among recipient groups. Partnership is central to our business approach, whereby the contribution of individuals is brought together and focused to help achieve



photo: Valérie Maltais

Institut national de la recherche scientifique



Honourable Rémi Bujold, P.C., C.M.  
*Chairman of the Board of Directors*

greater conservation results. We are proud of our partnership with the Minister of Fisheries and Oceans, with provincial governments, with First Nations, municipalities and all of the community groups we help fund. We are especially indebted to our NB Liquor Corporation partner for significantly adding to the pool of funds available for conservation projects in New Brunswick.

Most importantly, however, our greatest pools of partners are the six expert advisory committees, and our very talented Board of Directors. The over 60 expert and dedicated volunteers serving on our Board and advisory committees are the reason why we are able to successfully pursue our mission and help the Foundation fund high quality conservation projects.

I am also deeply appreciative of the day to day work of our highly skilled staff. Our staff are there to provide the leadership and strong management that enables the Foundation to grow and innovate, based on progressive policy, plans and priorities. Staff, volunteers, our partners and our recipients, working together, are the key to helping fulfil our role of conserving and enhancing the populations of wild Atlantic salmon in Canada.

A handwritten signature in black ink that reads "Rémi Bujold".

Hon. Rémi Bujold, P.C., C.M.  
*Chairman of the Board of Directors*



# EXECUTIVE DIRECTOR'S REPORT

Moving toward our goal of making a real difference.

In 2016 we witnessed solid growth in the demand for salmon conservation project funding across each of the five provinces we serve through The Atlantic Salmon Conservation Foundation. The number of salmon conservation project funding proposals was up everywhere, and so was the quality of those submissions.

It's clear to me that both we, and our recipient groups, have come a long way in ten years. In our early years, with relatively few funding proposals and only limited funds to dispense (due to the economic downturn), it was relatively easy to meet the demand for funding. Over the intervening years, however, as the Foundation became better known for the rigour in our project approval process, it has become more challenging to respond positively to the strong demand of good project proposals. We are fortunate to receive submissions of such good quality (what we call "reasonable demand") but we also estimate that we're able to fund only approximately 50 percent of those good submissions.

Over our ten years, we have established a solid approach to business guided by a few simple principles: Partnership, Planning, Priority Setting, and Performance Measurement. These principles are the essential elements of the Foundation's business model. Working with our conservation partner recipient groups according to these principles has enabled salmon conservation gains to be realized in several critical areas.

We have also come to know that there is a limited number of committed volunteers out there ready to pursue salmon conservation at the local level. This places a crucial limit on Canada's capacity to improve salmon conservation situation, especially evident in the province of Newfoundland and Labrador, and in a few other areas, where there are only a handful of groups organized to perform stewardship work. We will, therefore, be working with conservationists and governments to help foster community-based salmon conservation, through funding and our facilitative approach to business.

The ASCF follows a fiscally prudent, long-term financial plan. 2016 saw our trust fund market value exceed \$40 million. We granted \$1.1 million in project funding with sixty-one new conservation project grants. This brought our overall eight-year contri-



Stephen Chase  
*Executive Director ASCF*

bution to \$4.7 million and funded projects totalling 337 projects. With the care we exercise in funding the best funding proposals, our leveraging (cash and in-kind) reached nearly \$24 million, providing five to one leveraging. Importantly, ASCF project funding has helped sustain well over 1000 jobs over the years, primarily seasonal and student workers. These jobs are an important and very significant contribution to rural economies, while helping young people gain valuable job experience.

Last year we launched the "Salmon Hub" as our free, web-based, one-stop shop for wild Atlantic salmon conservation information. Information sharing is our other "line of business" and we are proud to have grown a world-wide following of our salmon conservation project stories, plus technical information, manuals and scientific reports. Along with our heavily subscribed webinar series, operated in partnership with the Canadian Rivers Institute, we have become a salmon conservation information sharing leader.

As we stand on the edge of our tenth anniversary in 2017 we are excited to continue to help recipient groups respond to conservation challenges while embarking on new directions. Those rewards are what make our work so satisfying.

Stephen Chase  
*Executive Director ASCF*



Petitcodiac Watershed Alliance



# ANNUAL REPORT 2016

Facilitating Wild Atlantic Salmon Conservation!

## Introduction

Those of us at the Atlantic Salmon Conservation Foundation appreciate the opportunity to support and assist community, First Nations and other partners to facilitate improved conservation of wild Atlantic salmon. That's why we strive to facilitate conservation action. Although our processes are accompanied by rigorous accountability for performance and use of funds, we do everything we can to keep our approach to business as helpful and user friendly as possible.

The Atlantic Salmon Conservation Foundation is a non-profit, charitable organization dedicated to improving and strengthening the conservation of wild Atlantic salmon and its habitat in Atlantic Canada and Quebec. We are a volunteer-based organization that opened our doors ten years ago in February 2007. The Board of Directors of the Foundation are volunteers, along with all the volunteer experts on the six advisory committees who have come together to ensure the wise use of the trust fund for the conservation purposes for which it is intended.

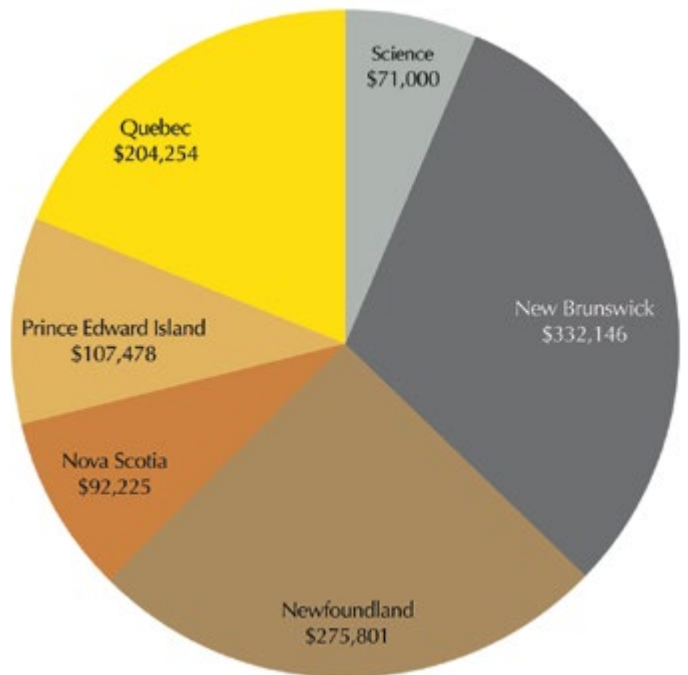
The Foundation has the dual mandate of prudently investing the trust funds to generate income while preserving capital, and ensuring that the organization is well managed so it can provide funding to eligible salmon conservation initiatives in Atlantic Canada and Quebec, in perpetuity.

A significant feature of the Foundation model is the inclusion of volunteer experts drawn from conservation groups, Aboriginal organizations and federal and provincial governments in all of its advisory processes. The Board of Directors of the Foundation actively relies on advice and recommendations forthcoming from the six technical-advisory committees to guide the work of the Foundation. It is a model of partnership and inclusiveness that is unique in the conservation world.

This annual report reflects the Foundation's tenth year of operation. In 2016 the Foundation continued to build on the successful operational structure it created over the first nine years, and launched new development activities with liquor corporation partners to augment its ability to support and extend salmon conservation initiatives. The year also witnessed completion of the Foundation's ninth round of grants in support of community salmon conservation projects as well as the 2017 call for funding proposals which closed in December.

## Background

The Atlantic Salmon Conservation Foundation (the Foundation) was formed by a group of volunteers who incorporated a non-profit organization in 2005 to prepare a proposal to the Minister of Fisheries and Oceans to accept responsibility for the Atlantic Salmon Endowment Fund (ASEF) Program. The ASEF was created by the Government of Canada as a permanent source of funding to help conserve, restore and protect wild Atlantic salmon and their habitat in Atlantic Canada and in Quebec.



## Grants Amounts Approved in 2016

The ASEF reflected, and continues to reflect, the calls of conservation organizations, Aboriginal groups and government officials for a permanent source of funding to help watershed and community organizations working on a range of wild Atlantic salmon habitat, enhancement, monitoring and conservation initiatives.

The organization that was created as a result of the federal investment was structured to meet the following objectives:

1. Be managed at arms-length from DFO by an incorporated organization;
2. Be a charitable organization;
3. Invest appropriated funds and hold them in trust;
4. Draw on contributions from other public and private sources;
5. Deliver the program from income generated on the principal amount; and
6. Facilitate partnership with the provinces, government agencies, Aboriginal groups and community volunteer organizations.

These objectives have been attained very successfully and continue to drive the organization and its way of doing business. The ASCF operates in the large and complex geographic, political and stock status environment of Atlantic Canada and Québec. To address these complexities, the Foundation relies completely on inclusive, expert advisory committees that are unique in opening all processes to broad and meaningful involvement as well as full transparency.



# ANNUAL REPORT 2016

Helping Community Groups Succeed!

In addition to the requirement to submit an annual report and an annual business plan to the Minister of Fisheries and Oceans, the Foundation is subject to periodic review of its performance by the Government of Canada. A value for money audit was carried-out in 2012 by the Department of Fisheries and Oceans based on performance measures identified in the funding agreement and several other factors associated with the Foundation's approach to business, management of its files and recipient group feedback. The audit found that the Foundation represents excellent value for money, is demonstrating measurable progress on several fronts, and is strongly supported by its broad range of recipients and others interested in salmon conservation.

## Foundation Mission Statement and Goals

The mission statement of the Foundation is "To promote enhanced community partnerships in the conservation of wild Atlantic salmon and its habitat in Atlantic Canada and Quebec".

Four goals flow from this statement, around which our strategic direction is built and from which our granting process flows:

- To be an effective source of funding for community volunteer organizations in conserving, restoring and protecting wild Atlantic salmon and its habitat.
- To enhance cooperation and partnership among governments, Aboriginal organizations, community volunteer groups and others in the interests of conserving, restoring and protecting wild Atlantic salmon and its habitat.
- To promote and improve conservation planning and management at the watershed level as the basis for ensuring effective use of and accountability for funds made available for wild Atlantic salmon conservation initiatives.
- To improve public awareness, education and research respecting the conservation of wild Atlantic salmon and salmon habitat.

## The Granting Process

The Foundation is interested in funding innovative projects that will have a high probability of success with measurable results for on-the-ground conservation of wild Atlantic salmon and its habitat. It considers eligible projects related to the following categories:

- Development of salmon and salmon habitat conservation plans for a watershed or sub-watershed (watershed planning)
- Conservation, rebuilding and restoration of wild Atlantic salmon and salmon habitat
- Restoring access of wild Atlantic salmon to salmon habitat
- Public education and awareness of the importance of conservation of wild Atlantic salmon and its habitat

Emphasis is placed on improved conservation planning and management at the watershed level, as an ecological and geographic unit,

as a way to promote most effective use of, and accountability for project funds.

The Foundation holds one call for proposals annually. Proposals may be submitted online from April to a closing date for receipt of proposals in mid-December. Proposals for funding are reviewed by staff for completeness then forwarded to the advisory committees for review and recommendation during the period February–March. Each advisory committee follows a standard proposal assessment and scoring procedures designed by the Central Advisory Committee. Recommended proposals are reviewed and approved by the Board in early spring to enable all final approvals to be given well before the opening of the conservation field season. Each project proponent that was unsuccessful in gaining approval for funding is given an explanation why it was unsuccessful both for information, and to encourage future submissions.

## Advisory Committees

The Foundation relies heavily on its volunteer advisory committee structure to make good decisions on the projects that should be funded. Our advisory committee model is unique in the world of salmon conservation. It's a strategic direction that promotes inclusiveness of the many interests in wild salmon conservation as well as partnership among them. Most importantly, our advisory committees ensure the Foundation receives excellent advice in recommending conservation projects that respond to the unique salmon conservation imperatives faced in each of the five provinces.

There are six advisory committees consisting of a Scientific Advisory Committee and five Provincial Advisory Committees. Each appointee to these committees is an expert volunteer identified in consultation with stakeholder groups and governments. Our advisory committees have proven to be a very successful way of including people in our decision-making processes and ensuring full transparency in the granting process.

The Scientific Advisory Committee (SAC) is the Foundation's newest innovation formed in 2015 as a natural evolution from the former Central Advisory Committee. Its key roles are to ensure wise investments in applied research scientific projects, as well as retaining a role in assisting the Board of Directors to develop and maintain effective policy, procedures and strategic direction. The SAC is comprised primarily of eminent scientists capable of guiding the Foundation as it moves to strategically target scientific projects that will make a difference in salmon conservation.

Each of the five provincial advisory committees is responsible for identifying the salmon conservation priorities unique to its province; reviewing proposals for conservation funding and making recommendations on which projects should be approved for funding. They also participate actively in monitoring approved projects to help ensure they are progressing as intended. These committees meet twice annually to carry-out their responsibilities.



# FOUNDATION OBJECTIVES 2016

A report on objectives met, as stated in the 2016 Business Plan.

*The following objectives were stated in the 2016 Business Plan. The following is a report on the extent to which those objectives were met:*

**Objective 1:** To strengthen our prudent investment and financial strategy to maintain the Atlantic Salmon Endowment Fund at or above Funding Agreement requirements.

**2016 Actions:** The Foundation’s investment portfolio is managed in accordance with a very prudent long-term investment and financial management plan overseen by the Investment Committee. This plan conforms to an Investment Policy and an Investment Strategy developed pursuant to the requirements of the Funding Agreement with the Government. This approach to investment and fiscal management enables the Foundation to ensure a minimum of \$1 million dollars is available for project funding on a go-forward basis.

The long-term financial plan is reviewed at least twice annually by the Board of Directors and has been designed to maintain the investment fund to projected inflation adjusted value while also making provision for maintaining a projected annual distribution of project funding over the same period, taking into account financial market performance, and Funding Agreement requirements.

The Foundation was successful in increasing the market value of the trust fund to exceed the inflation adjusted book value of the fund as early as 2014. This permitted the Foundation to increase the annual grant pool to \$1 million, and to create a reserve fund to ensure the Foundation’s ability to continue to be able to provide \$1 million in grant funding each year into the future. In 2016 the financial markets demonstrated excellent growth, so much so that at year end the market value of the trust fund continued to exceed the inflation adjusted book value.



Amounts granted & amounts requested in 2016

**Objective 2:** To observe a funding allocation model that is reflective of and responsive to the various conservation needs and priorities of each province.

**2016 Actions:** As at 31 December 2016 the market value of the fund was reported as just over \$40 million. As noted above, this placed the market value of the trust fund above the projected 2016 year-end amount as presented in the long-term financial strategy.

The Foundation continues to follow a funding allocation model, based on the early advice of the Scientific Advisory Committee, which is designed to optimize response to the respective conservation needs of each province. The funding formula provides for a base allocation to each province that can be supplemented in accordance with a funding distribution formula that reflects individual provincial conservation variables. Each year, provincial conservation priorities are reviewed by each advisory committee to help ensure funding is directed where desired results may be obtained. The formula also provides \$100,000 as a fixed annual amount to fund applied research and other scientific projects recommended by the Scientific Advisory Committee.

**Objective 3:** To strategically allocate funding to key, priority applied research scientific projects.

**2016 Actions:** The Scientific Advisory Committee reviewed a wide range of conservation issues affecting the survival and strengthening of wild Atlantic salmon populations in Canada, and elsewhere, to identify key applied research topics that could be funded by the Foundation.

This new and proactive approach to awarding ASCF funding directs funds to specific applied research topics that could have the greatest on-the-ground impact for salmon conservation through a Request for Proposal process. The RFP is sent to potential respondents with responses evaluated by the SAC and final approval by the Board.

In 2016 the SAC placed priority on launching a salmon modelling project intended identify conservation issues and causal factors affecting the survival of wild Atlantic salmon. This is intended to be a pivotal project to help lay the basis for wise and cost-effective investment in wild Atlantic salmon conservation initiatives into the future. In May 2016 DFO officials concurred and agreed to a 50/50 cost matched joint project with DFO totaling \$150,000 over 2 years. A joint ASCF -DFO committee was agreed to provide oversight and support to Dr. Jeff Hutchings, who was selected to carry-out the project. The project has a spring 2017 startup date.

In December, the SAC also advised the Board that it would issue two new RFPs on priority applied research topics.



# FOUNDATION OBJECTIVES 2016

The following objectives were stated in the 2016 Business Plan

**Objective 4:** To maintain and strengthen a results-based management approach to funding Foundation projects.

**2016 Actions:** The Foundation conducts its business in accordance with its comprehensive *Audit and Evaluation Strategy*. All projects report their performance in a uniform manner designed to populate a database developed by the Scientific Advisory Committee.

The standard project report for each grant is designed to reflect the performance of each project and to enable cumulative reporting against the Foundation's performance measures as outlined in the Funding Agreement. The performance measures contribute to a database which has enabled the Foundation to report clearly on its attainment of objectives and other performance criteria. Thus, the Foundation is a results-based management organization. During 2016 additional refinements were made to project report forms through feedback from grant recipients and advisory committees to ensure that necessary data was reported but also to simplify required reporting.

Up to and including 2016, 337 salmon conservation projects had been funded by the Foundation through a total investment of \$4.7 million in grant funding. Overall, from inception, 570 funding proposals have been received by the Foundation, including those received in 2016 for the 2017 round of grants. The total value of the projects approved up to and including 2016, in both cash and in-kind contributions, was over \$23.9 million. This resulted in an overall leveraging benefit of nearly five to one.

**Objective 5:** To broadly share information through innovative methods such as the web-based "Salmon Hub" utility.

**2016 Actions:** The "Salmon Hub" was launched in late 2015 as a "one stop" web based source to facilitate access to salmon conservation information, including ASCF funded project reports, government and NGO created technical and scientific reports and other sources of material related to salmon conservation. Information sharing is major line of business for the Foundation and the Salmon Hub builds on the already significant Foundation website sharing of project reports, monthly newsletters and social media.

Throughout the year staff added new material to the Salmon Hub. Considerable effort was placed in active recruiting of additional sources of information and links to build content including: best-practice guides, instruction manuals, videos, scientific research and more. The Salmon Hub has experienced significant access and has been widely acclaimed, nationally and internationally.

**Objective 6:** To strengthen the Foundation's relationships and communications with current and potential stakeholders/ beneficiaries, the public, and potential supporters.

**2016 Actions:** Throughout 2016 the Foundation carefully followed the direction identified in the communications plan, which is designed to facilitate the Foundation in establishing a distinct profile; building public understanding of wild Atlantic salmon conservation needs, and building public support for salmon conservation.

Periodically, throughout the year, the Foundation periodic press releases and posted items on its website, as well as sending monthly email messages to its constituents and interested stakeholders. The Annual Report and the Business Plan are both designed to promote understanding of and support for the Foundation, and are frequently shared with external groups. Throughout 2016 the Foundation provided regular updates to Facebook and Twitter to keep followers informed of developments. The number of followers on both social media increased significantly during the year.

Throughout 2016 the Foundation issued its monthly newsletter featuring announcements and updates on the Foundation, as well as profiles on several advisory committee and Board of Director volunteers. Growth in the number of recipients continued to increase significantly throughout the year with over 500 individuals and organizations receiving the newsletter by year-end.

During 2016 the Foundation partnership with the Canadian Rivers Institute also jointly hosted the monthly webinar series on fish and freshwater issues. Several expert individuals from Canada and abroad were invited to present the topics and lead discussion on-line with regular attendance by representatives of First Nations, NGOs, governments, academic institutions and businesses. The series has provided major new opportunities for information sharing and partnership building. In 2016, 14 webinars were hosted with a total of 842 participants.

Several supportive communications were also made jointly with our primary corporate partner organization, Alcool New Brunswick Liquor, which sponsors the "Protect Our Rivers" sales event. This long-term partnership has been extremely important in helping advance to wild Atlantic salmon conservation in New Brunswick, through which 100 percent of funds are committed directly to river conservation projects in the province.

In 2016 ANBL held its fifth "Protect Our Rivers" sales event which raised \$54,000, contributing to a five-year combined total of over \$425,000 for river conservation in New Brunswick. ANBL will continue this very successful partnership program to 2018.





# 2016 PROJECT PROFILES • NL

What technology is the most useful when it comes to restocking efforts?

Research underway at Memorial University is hoping to gain some insight with a project designed to look at the offspring quality of virgin/repeat spawning grilse salmon and the success of Jordan-Scotty incubators in conjunction with salmon reintroduction to Rennie's River.

The ASCF has provided the university with \$15,000 in funding; the research is being supervised by Dr. Craig Purchase, an Associate Professor of Biology & Ocean Sciences.

"Salmon conservation regularly requires restocking," says Purchase. "Research has shown the method used to produce juveniles influences long term outcomes. Instream incubation provides natural conditions for fry and exposes embryos to ambient environmental conditions. Scotty-Jordan incubators provide one option for instream incubation, but are difficult to install in areas that lack gravel substrate. This project addresses how installation methods affect silt accumulation, and therefore hatch success in these incubators."

He says this project builds on top of a restoration program in a St. John's watershed and uses eggs from the Exploits River. Egg quality from two spawner types is also being compared through this effort.

"We broke the incubator installation comparison into 2 phases. Phase 1 was completed in November (2015), and Phase 2 began in December, but it will be late spring before they are removed from the river."

"Starting in 2014, we have been comparing offspring quality of virgin versus repeat spawning salmon. We get 10-15% repeat spawning females each year in our samples (five fish in 2014, six fish in 2015) so this research needs to be repeated in multiple years to get a clear conclusion."

Purchase said the grant for this research helped pay for the work on the 2015 spawners.

"We already know virgin/repeat status of females, we know egg sizes of each female and will shortly have information on egg colour. It will be a few months before we know egg chemistry and hatching/fry performance."

This project has already achieved a number of goals – 100 sites were set up in Rennie's River for restocking efforts; experimental incubation sites were set up as well for incubator installation comparisons.

Twenty-five volunteers helped stock the Rennie's River watershed with 86,000 eggs at 86 sites.

The hatch success of the incubator sites will be determined in the summer of 2016.



Twenty-five volunteers helped stock the Rennie's River watershed with 86,000 eggs at 86 sites.

Memorial University



# 2016 PROJECT PROFILES • QC

There's a saying that if you don't ask the question, you'll never know the answer.

Well, FaunENord decided to ask some questions to learn more about the Atlantic salmon in the Ungava Bay area of Nunavik in Quebec's far north.

The project is in its second year, and is being funded by a grant totaling \$50,000 awarded by the Atlantic Salmon Conservation Foundation. It is a collaborative effort with contributions from Quebec's Ministry of Forests, Wildlife and Parks, and the Makivik Corporation.

Alexandre Anctil, project manager, said in the beginning the project was launched for one simple reason.

"We know very little about the Atlantic salmon in the Ungava area which makes its management and conservation complicated," he said. "Actually, the Atlantic salmon population of Nunavik is the only one that was evaluated as data deficient by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). On top of its ecological and economical importance, the Atlantic salmon of the Ungava area also has a very important traditional value for the Inuit."

"In order to adequately manage and protect this important resource, we felt that it was necessary to increase our knowledge on this population. We believed that one of the first steps to achieve that was to know which rivers are being used by the salmon. This can sound strange as salmon rivers are quite well known in southern Québec, or in the Maritime provinces, but in Nunavik the regulatory delineation of the legally recognized 'salmon rivers' was defined many years ago using the available knowledge and tools and therefore, many limits have been set arbitrarily."

"Furthermore, it seems as if only the main rivers were considered to obtain the legal salmon river status and very few tributaries where the salmon could actually spawn have received a status. This is mostly because we don't really know if the salmon use these small tributaries to spawn and if so, which ones."

Anctil said based on this, they wanted to determine if other rivers or tributaries should be considered to receive the salmon river legal status and benefit from the protection associated with the status.

"In order to do so, the project was divided into two phases. First, we used theoretical data - like satellite imagery analysis provided by a team from the INRS - and data from interviews with outfitters, old scientific reports and sport fishing to target rivers and tributaries that have a good theoretical potential for the Atlantic salmon. As the Ungava region is very vast, our work was restricted to the Koksoak River watershed."

"We selected the Koksoak system because it has a high potential for salmon habitat and the Koksoak salmon population is the most prized by local communities and sport fishers. Conservation in this sector is therefore a priority for the province's Wildlife Management Branch."

The rivers and tributaries with potential for the Atlantic salmon were identified in phase one. That meant phase two would involve going to Nunavik and actually going into the field to confirm the theoretical data.

"Again, the Koksoak system covers an area that is extremely vast so the Delay River area, a part of the Koksoak system, was selected for the field inventory. This area was selected for various reasons, but most importantly because it allowed us to cover many different tributaries with potential for the Atlantic salmon. So, in late August/early September 2016, we went in the Delay River area and sampled nine rivers or tributaries to detect the presence of salmon."

Anctil said they have found young salmon in seven of the nine sampled sectors. They are now waiting for a specialized lab to conduct analysis on the specimens to determine if the young fish they caught are anadromous salmon or if they are landlocked salmon. He notes these results will be important since landlocked salmon do not benefit from the same protection as anadromous salmon.

"In the short term, we wanted to identify priority areas where efforts should be made to learn more about the Atlantic salmon within the Koksoak system, verify - if we can - salmon rivers based on theoretical data and once the results from the lab will be in, we want the tributaries in which we have found young salmon be recognized legally as salmon rivers."

"In the long term, we hope that the data we have gathered, including the habitat characterization, will help validate and refine the theoretical models used to target rivers and tributaries with high potential for the Atlantic salmon in the Ungava region and thus provide an important new tool for Atlantic salmon management in the region. Obviously, the ultimate goal of the project is to actively contribute to the Atlantic salmon conservation in the region where our organizations operate."



"...the Atlantic salmon of the Ungava area also has a very important traditional value for the Inuit."

FaunENord



# 2016 PROJECT PROFILES • NB

Understanding more about the life cycle of Atlantic salmon in the Kouchibouguacis River watershed

In an effort to understand more about the life cycle of Atlantic salmon in the Kouchibouguacis River watershed, the Friends of the Kouchibouguacis have embarked on an ambitious project.

In 2016 the group received a \$25,000 grant from the Atlantic Salmon Conservation Foundation. The project covers a number of components that will benefit the Atlantic salmon population and its habitat in the Kouchibouguacis River watershed. Different monitoring methods will be used to collect data on salmon (and other fish species) population, available habitat, migration, and age, along with water quality and environmental parameters. Salmon eggs/milt will be collected for incubation purposes. An environmental consultant will provide the land owners with further guidance for future restoration work. Public education will be part of this effort as well.

Anita Doucet, coordinator of The Friends of the Kouchibouguacis, says the Kouchibouguacis River is one of the many treasures Kent County residents hold dear.

“The river is used for swimming, boating, canoeing, and fishing. A big part of the regional economy rely on commercial fishing; lobster, mackerel, herring, cod, American eel, smelt, and gaspereau fishing are the targeted species. Recreational fishermen have known to target trout, eel, smelt, whitefish, yellow perch, and just recently, the striped bass. Salmon fishing has been closed on the Kouchibouguacis River since 1998; this represents a great disappointment to many local fishermen.”

Doucet notes there are several stress factors at play, but there is hope fish populations can be improved.

The group has also had great success in the past using Jordan-Scotty incubators which are designed to protect eggs from environmental pressures, sedimentation, and predators. Doucet says incubators that were set out in the brook last fall have been retrieved. Results from the 2015 incubation have been calculated and show good egg survival ranging from 76.3% to 90.3%, with an overall average of 89.5% survival.

An incubation workshop was held in June of 2015 and Doucet said the event was exciting for everyone involved.

“The participants got the opportunity to prepare the equipment and load up Jordan-Scotty incubators with green eggs! OK, not real eggs - we used green peas as eggs and it worked like a charm.

White peas were used to simulate dead eggs that one may encounter during the process. We wanted the participants to be able to leave us with enough knowledge and some practice to comfortably set up their own incubation exercises.”

“Our experience with the Jordan Scotty incubators and the methods we use for the preparation and installation of the incubators will be compiled in a document that will be posted on the ASCF Hub page; a French and English version of this document will be made available soon.”

Doucet also notes students from different schools in the area have been participating in the Fish Friend Program for a number of years, and it's having an impact on the students and the fish population.

“We provided the different schools with salmon eggs and the students took care of the eggs until they hatched. The students made their way to the Kouchibouguacis River to release their small friends in June. The students were then brought to another site where they were introduced to a sampling method we use to determine the health of our estuary. The activities we offer to the school are always popular with the students, and we look forward to them every year!”

Doucet says the overall project will eventually lead to the return of the salmon population in the watershed, the reopening of its sport fishing, and contribute to a better quality of life for people in the area.

“We have received \$5000 from the NB Wildlife Trust Fund as matching funds for this project. We also have wonderful partners who offer plenty of in-kind support towards this project.”



The Kouchibouguacis River is one of the many treasures Kent County residents hold dear.

Friends of the Kouchibouguacis



# 2016 PROJECT PROFILES • NS

Working hard on developing a salmon habitat conservation watershed management plan.

The Pictou County Rivers Association (PCRA) takes fish habitat protection very seriously, and the group is working hard on developing a salmon habitat conservation watershed management plan.

With the help of an \$8500 grant from the Atlantic Salmon Conservation Foundation, the PCRA is concentrating on the East River Watershed in Pictou County.

The project will see the PCRA survey at least half a dozen of the major tributaries of the river to identify fish habitat restoration needs, impediments to fish passage and water quality. This information will be used to prioritize fish habitat issues and to develop a multi-year strategy to address them.

While Pictou County rivers still support reasonably healthy stocks of Atlantic salmon, the fish are under constant threats from habitat loss and destruction, damage to streams through severe storms, threats to water quality, and illegal fishing activities.

Roy Parker, PCRA director, said the group felt it needed to take a more organized and long term approach to their fish habitat protection and restoration work.

“In the past, the projects had followed a more ad hoc approach where we responded to local concerns raised by PCRA members or from members of the public,” he said. “With the direction and encouragement of the NSLC Adopt-A-Stream program staff, we decided that we should develop a long term watershed management plan based on fish habitat issues. This year is the first year of that project.”

“We selected the East River Pictou County as our target watershed. The East River is our largest river and supports important stocks of

speckled trout, brown trout, and Atlantic salmon. PCRA members visited several of the important tributaries of the East River accompanied by staff from NSLC Adopt-A-Stream and we selected a couple of streams to begin our project. We also identified eight other tributaries that we would look at over the next few years.”

Parker said in 2016 their river restoration crew constructed in-stream structures in two of the streams.

“In Archibald Brook, the crew constructed 12 structures over a 560 metre stretch of the brook resulting in 4500 m<sup>2</sup> of fish habitat being restored. On Glencoe Brook, seven structures were installed over a 300 metre stretch of the stream resulting in 2100 m<sup>2</sup> of restored habitat.”

Parker said fish habitat surveys were completed on each of these brooks to identify any obstructions to fish passage, substrate types, water quality, stream flow, riparian zone characteristics, and any sources of inflow to the streams.

“Similar surveys will be conducted on four other tributaries of the East River this fall. Any culverts, bridges and other road crossings are being identified on each of these six streams and they will be assessed for fish passage. The survey results will be collated and fish habitat issues will be identified and prioritized. This information will form the basis for the development of a fish habitat based watershed management plan for the East River. The watershed plan will then be used to plan our annual fish habitat restoration projects over the next few years.”

The stream surveys are being completed this fall and the watershed management plan will be developed over the next couple of months.



...in 2016 their river restoration crew constructed in-stream structures in two of the streams.

Pictou County Rivers Association



# 2016 PROJECT PROFILES • PEI

Discovery of unique Atlantic salmon population may contain ancestral genetics of original PEI Atlantic salmon

For the Abegweit Conservation Society the discovery of a unique Atlantic salmon population that may contain ancestral genetics of the original PEI Atlantic salmon is very exciting, especially given the cultural and ceremonial significance of Atlantic salmon to the Mi'kmaq people.

An arm of the Abegweit First Nation, the Abegweit Conservation Society is working on a project called “Foundation Knowledge Building for Future PEI Salmon”, and has been granted \$15,000 in funding from the Atlantic Salmon Conservation Foundation.

The project is a product of an Atlantic salmon DNA study carried out by Laval University that analyzed 9,142 tissue samples from Atlantic salmon collected in 149 sampling locations of the eastern United States and Canada. In 2012, the provincial fish and wildlife office coordinated the collection of DNA samples from 5 PEI Rivers for the study. The preliminary results of the analysis were published in 2014 and it was revealed that while Atlantic salmon populations in the eastern Atlantic region are closely related and could be grouped into 29 regional strains there are however Atlantic salmon from two eastern PEI Rivers, North Lake Creek and Cross Creek, that stood out as a separate cluster and could be considered “unique”.

“The overarching goal of this project is to monitor and collect essential information on the genetically distinct Atlantic salmon population with the intent of applying the information towards appropriate management, protection and conservation plans, guidelines, and recommendations,” said Rebecca Hersom-Petersen, a project manager with Abegweit.

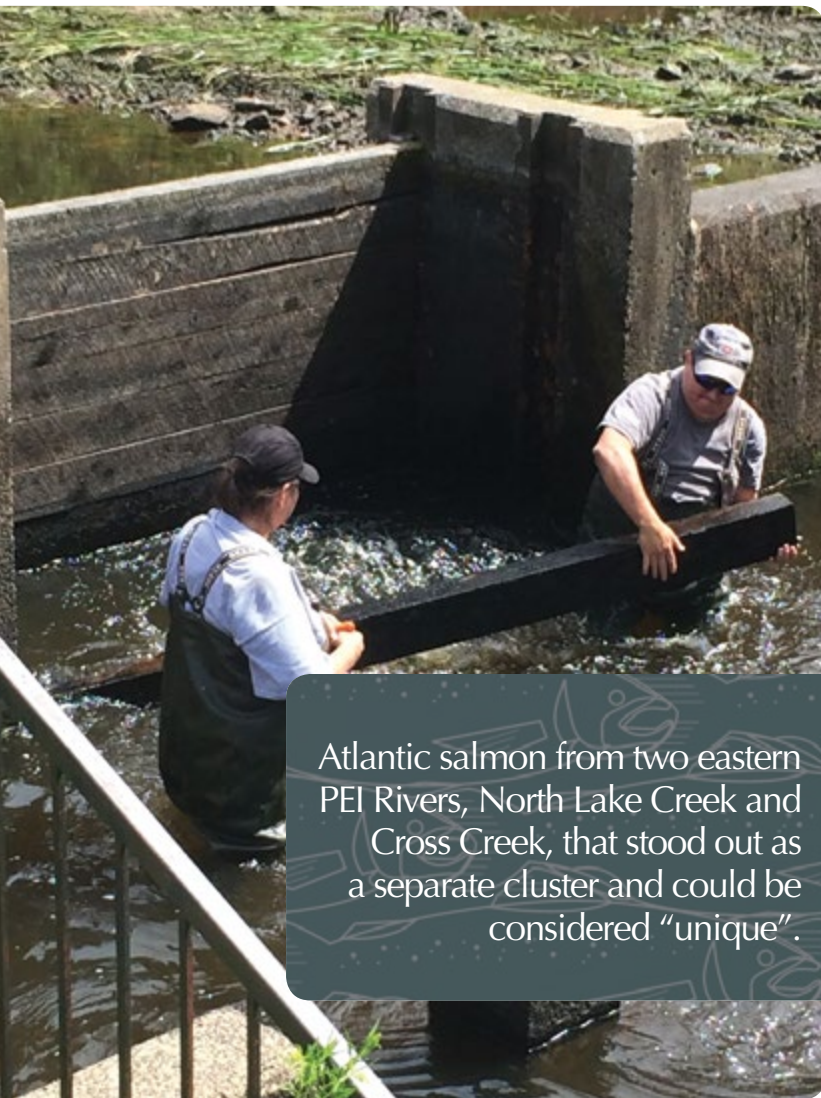
“It is also hoped that further explorations will be done into how this population could provide insight into the future survival of all Atlantic salmon on PEI. The project also has broad implications for other Atlantic salmon populations in the Maritimes as it will provide insight into Atlantic salmon life history.”

One goal of particular importance to the Abegweit Conservation Society is the building of capacity within the aboriginal community in managing watersheds for Atlantic salmon conservation.

Hersom-Petersen said they are very encouraged by the progress made so far on this project.

“During the summer, the Abegweit field crew worked alongside the Souris and Area Branch of the PEI Wildlife Federation on stream rehabilitation activities in North Lake and Cross Creek. During the fall months, the crew worked together with other watershed groups and the provincial government carrying out electrofishing surveys to collect the tissue samples. These activities provided mentorship and training to Abegweit members while helping to foster relationships that will aid in future Atlantic salmon conservation projects.”

“Perhaps, one of the greatest things gained during this project is the importance of partnerships and working together. This is a grass-roots project initiated by a First Nation group in conjunction with community watershed groups, by reaching out and working together we are completing a project with value and implications for the future of Atlantic salmon on PEI.”



Atlantic salmon from two eastern PEI Rivers, North Lake Creek and Cross Creek, that stood out as a separate cluster and could be considered “unique”.

Abegweit Conservation Society



# 2016 PROJECT PROFILES • SCIENCE

Studying how Atlantic Salmon navigate hydroelectric infrastructure in efforts to improve migratory passage.

Navigating a waterway can be tough on a good day for an Atlantic salmon, but when that waterway is hydropower regulated like the St. John River the challenges are even greater.

The Canadian Rivers Institute (CRI) at UNB is studying the migration and survival of smolt, post-spawning (kelt), and adult Atlantic salmon through the 96-kilometre long Mactaquac reservoir upstream of the Mactaquac Generating Station.

The CRI received a three-year grant from the Atlantic Salmon Conservation Foundation totaling \$118,500. The project is a part of larger research (Mactaquac Aquatic Ecosystem Study consortium) evaluating the options for the future of the generating station which is nearing the end of its service life.

The CRI's Dr. Tommi Linnansaari notes it is widely recognized that when a river is regulated for hydropower by building a dam spanning across a river, the migratory routes of diadromous fishes, like Atlantic salmon, will be affected.

"Multiple means to mitigate these effects exist, and often fish passage solutions are required and built at dams," he said. "However, the location of the dam may not be the only location the focus should be on. Dams create reservoirs behind them, and depending on the size of the dam and the geography of the impounded area, a sizeable reservoir may be created that may act as a movement barrier in itself. Relatively little is understood about the role of a reservoir as a movement barrier as opposed to the dams in itself."

"Our Tries to understand how do different migratory life stages of Atlantic salmon cope with a large reservoir; are they able to find a migratory path through it, or do they "get lost"? Does the passage through the reservoir cause a delay in their migration? If yes, is this delay ecologically significant? Are there certain areas where the fish get confused along the way?"

Linnansaari said they are also interested in a secondary problem, related to how do Atlantic salmon behave as they approach the dam in close range.

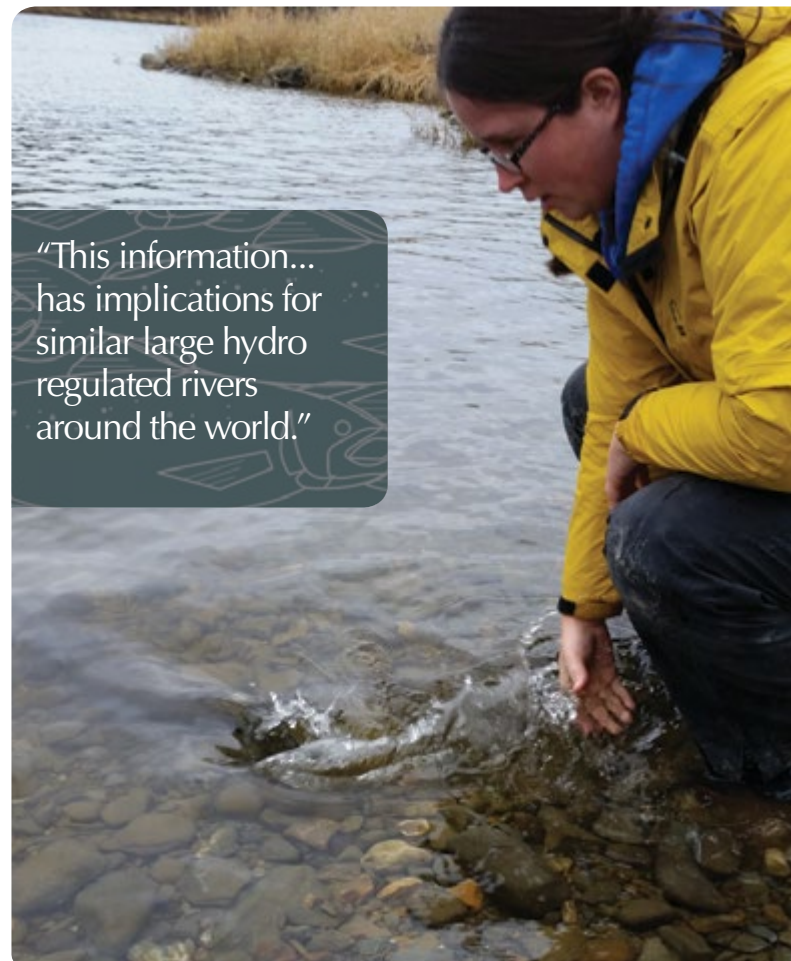
"This is important to understand so that such behavioural data can inform what engineered solutions would be helpful when trying to arrange successful downstream passage for migrating salmon at a potential new hydropower facility."

"In short, we are trying to assess how big of a problem the mere existence of a relatively large reservoir is for Atlantic salmon migration in the St. John River. In other words, if one found a silver bullet to build an engineered passage structure that was 100% efficient at a potential future dam at Mactaquac, do we still have a problem with salmon migration due to the reservoir? This information will not only inform us, but has implications for similar large hydro regulated rivers around the world."

Linnansaari said one challenge researchers are facing is with low numbers of salmon it has been difficult to get enough fish for their tagging program.

"We have been successful for the most part, although we may have had to tag fish with some delays. Also, we have realized we have had to tag more fish than we first anticipated due to some technical challenges. However, the data has been very informative, and we are progressing as planned."

Some of the things being considered as part of this project include: does the reservoir create a movement barrier to different life stages of Atlantic salmon; does it cause migratory delays, and what are the ecological implications of such delays; what is the survival of different life stages through the reservoir; are there certain locations along the reservoir that are more problematic than others; can we link the movement rates and success to hydropower operations at the dam; and how do Atlantic salmon smolts and kelts (post-spawned, over-wintered salmon) approach the dam?



"This information... has implications for similar large hydro regulated rivers around the world."

University of New Brunswick



# GRANTS & STATUS

## 2016 Project Grants

### Science

**Project Number:** IN-2014-03

**Recipient:** Institut national de la recherche scientifique (INRS)

**Title:** Building a water temperature monitoring network in Canadian Atlantic salmon rivers.

**Approved grant:** \$25,000 for 2016 (3 of 3 years, total: \$75,000)

**Funding provided to date:** \$75,000

**Summary:** Atlantic salmon tolerates a relatively narrow range of temperatures. Although temperature is monitored in some rivers, Eastern Canada does not have a structured river water temperature network. This project established a network of water temperature monitoring stations with centralized data management relevant for fishery management.

**Project Number:** IN-2015-04

**Recipient:** University of New Brunswick (Linnansaari)

**Title:** Migration and survival of smolt, post-spawning (kelt) and adult Atlantic salmon in hydropower regulated Saint John River, New Brunswick.

**Approved grant:** \$46,000 for 2016 (2 of 3 years, total: \$118,500)

**Funding provided to date:** \$92,000

**Summary:** The project is examining the survival and success of migration of Atlantic salmon through 96 km long Mactaquac reservoir, situated upstream of the Mactaquac Generating Station in the Saint John River. The project is a part of larger research Mactaquac Aquatic Ecosystem Study consortium evaluating the options for the future of MGS that is nearing the end of its service life.

### New Brunswick

**Project Number:** NB-2014-01

**Recipient:** Association des Bassins Versants de la Grande et Petite Rivière Tracadie Inc.

**Title:** Evaluation and strategic planning in Petite rivière Tracadie watershed

**Approved Grant Amount:** \$11,300 for 2016 (3 of 3 years, total: \$33,900)

**Funding provided to date:** \$33,900

**Summary:** In 2016, this multiyear project continued implementation of the management plan developed in the first year of the project. Restoration activities were undertaken in Trout and Seal Brooks including installation of structures to control sedimentation and removal of stream blockages such as inactive beaver dams. Education and outreach activities were also undertaken.

**Project Number:** NB-2014-16

**Recipient:** Petitcodiac Watershed Alliance

**Title:** Broken Brooks: Monitoring and Restoration activities in the Petitcodiac River

**Approved Grant Amount:** \$20,000 for 2016 (3 of 3 years, total: \$60,000)

**Funding provided to date:** \$55,000

**Summary:** PWA monitored, restored and enhanced salmon habitat and numbers. An assessment of potential fish passage barriers in the watershed was completed and rehabilitation activities were undertaken. Over the course of this 3-year project, access was restored to more than 105 km of stream habitat.

**Project Number:** NB-2015-03

**Recipient:** Restigouche River Watershed Management Council

**Title:** Fall count of brood salmon – Restigouche River

**Approved Grant Amount:** \$10,400 for 2016 (2 of 3 years, total: \$31,200)

**Funding provided to date:** \$18,917.46

**Summary:** This multi-year project is using a fall count method in spawning areas of rivers and brooks within the watersheds of Upsalquitch, Kegwick, Little Main Restigouche and Restigouche. This project is also aiming to improve evaluation techniques of conservation by comparing with modern stock evaluation methods.

**Project Number:** NB-2015-15

**Recipient:** University of New Brunswick (Gray)

**Title:** Thermal infrared remote sensing to identify critical thermal refuges in southern NB rivers.

**Approved Grant Amount:** \$7,000 (2 of 2 years, total: \$27,000)

**Funding provided to date:** \$25,250

**Summary:** Using remote sensing, this project mapped the frequency and distribution of thermal refuges in Hammond, Kennebecasis, and Pollet Rivers. Airborne optical and thermal infrared imaging techniques were employed to identify thermal refuges and link to landscape-level GIS variables for the development of a long-term aquatic monitoring plan.



Petitcodiac Watershed Alliance



# GRANTS & STATUS

## 2016 Project Grants

**Project Number:** NB-2015-16

**Recipient:** University of New Brunswick (Samways)

**Title:** Restoring ecosystem health and increasing progeny fitness through marine reared native adult Atlantic salmon introductions.

**Approved Grant Amount:** \$28,000 (2 of 3 years, total: \$84,000)

**Funding provided to date:** \$56,000

**Summary:** This multiyear project is working to determine the effects of native adult salmon releases in Fundy National Park on ecosystem integrity and population fitness. This project will assess efficacy of introduced adult Atlantic salmon, quantifying increases in freshwater productivity and food resources, and determine young-of-the-year (YOY) recruitment and distribution.

**Project Number:** NB-2016-01

**Recipient:** Bassins versants de la baie des Chaleurs:

**Title:** Restoration of Atlantic salmon habitat in Jacquet river and sub-watersheds (Phase 2)

**Approved grant:** \$20,000

**Funding provided to date:** \$18,583.93 (*unspent grants funds were returned to provincial pool for future grants*)

**Summary:** The goal of this project is to improve Atlantic salmon habitat in the Jacquet River watershed. A management plan was developed in 2014. This project continued the implementation of priority activities from that plan including restoration of access to habitat, habitat restoration, debris removal, data collection, education and outreach.

**Project Number:** NB-2016-02

**Recipient:** Conseil de gestion du bassin versant de la rivière Restigouche

**Title:** Restoration of Upsalquitch River Forks

**Approved grant:** \$17,223

**Funding provided to date:** \$17,223

**Summary:** Deterioration of a fortification built at this site in 1981 had resulted in changes to run-off and creation of a new channel which severely eroded the banks and reduced habitat quality through siltation. This results of this project will reduce bank erosion, direct run-off waters to recreate a channel, and redirect the current in order to decrease the erosive forces on the banks.

**Project Number:** NB-2016-03

**Recipient:** Conseil de gestion du bassin versant de la rivière Restigouche

**Title:** Kedgwick River Watershed Management Plan

**Approved grant:** \$9,000

**Funding provided to date:** \$6,750

**Summary:** This project developed a management plan of Kedgwick River with concrete actions and priorities. The plan will characterize present condition by analyzing reports, data and existing studies, complete inventories of habitat and salmon populations and characterize fishing effort. It is also intended to develop a dialogue with governments and local First Nations about the fishing licenses.

**Project Number:** NB-2016-04

**Recipient:** Eastern Charlotte Waterways

**Title:** Atlantic salmon population and habitat assessments for the Magaguadavic and Digdeguash Rivers

**Approved grant:** \$15,000

**Funding provided to date:** \$15,000

**Summary:** This project assessed conditions in the Magaguadavic and Digdeguash river systems for stocking cage reared Atlantic salmon. Habitat quality was assessed and the abundance of Atlantic salmon and their predators was determined. Data is being shared with stakeholders working to bring Atlantic salmon back to the Magaguadavic, informing their efforts.



Eastern Charlotte Waterways Inc.

**Project Number:** NB-2016-05

**Recipient:** Fort Folly First Nation

**Title:** Restoring endangered inner Bay of Fundy Atlantic salmon to the Petitcodiac River 2016

**Approved grant:** \$30,000

**Funding provided to date:** \$22,500

**Summary:** Monitoring the various life stages of salmon currently residing in the Petitcodiac contributed to the assessment of the effectiveness of the various restocking approaches. Public outreach targeted the Greater Moncton population. As a partner in the Conservation Sea Cage project, juvenile salmon smolt were collected and adults were returned to the Petitcodiac.

**Project Number:** NB-2016-06

**Recipient:** Friends of the Kouchibouguacis

**Title:** Atlantic Salmon-Kouchibouguacis watershed (*education, egg incubation, restoration and monitoring*) 2016

**Approved grant:** \$25,000

**Funding provided to date:** \$25,000

**Summary:** This project focused on restoring the Atlantic salmon population and its habitat in the Kouchibouguacis River watershed. Activities included monitoring, collection of salmon eggs and milt for





# GRANTS & STATUS

## 2016 Project Grants

incubation purposes, education and outreach with local residents and schools. An environmental consultant provided the land owners with further guidance for future restoration work.

**Project Number:** NB-2016-07

**Recipient:** Hammond River Angling Association

**Title:** Hammond River Smolt Assessment

**Approved grant:** \$6,000

**Funding provided to date:** \$6,000

**Summary:** A rotary screw trap was deployed in the spring of 2016 in an attempt to assess the smolt population. To promote education and outreach, approximately 250 children from 10 classes visited the smolt wheel and participated in the fish friends program.

**Project Number:** NB-2016-08

**Recipient:** Kennebecasis Watershed Restoration Committee:

**Title:** Improving Cold Water Refuge Habitat in Smith's Creek Headwaters

**Approved grant:** \$20,000

**Funding provided to date:** \$20,000

**Summary:** This project addressed recommendations made in a 2015 Smith's Creek Headwaters Habitat Assessment regarding refuge habitat for salmon parr and brook trout species. The project was comprised of three main components: riparian habitat improvement, instream boulder placement, and culvert and ford enhancement which allowed the removal of barriers to fish passage.

**Project Number:** NB-2016-09

**Recipient:** Miramichi River Environmental Assessment Committee

**Title:** Implementing the Bartibogue River Recreational Fishing Management Plan

**Approved grant:** \$15,000

**Funding provided to date:** \$15,000

**Summary:** This project worked to implement the recommendations of the "Bartibogue River Watershed Recreational Fishing Management Plan" (2015) in partnership with BF&GA. Activities included promotion of best management practices, electrofishing surveys, breaching inactive beaver dams, conducting a late season redd count, and monitoring water temperatures at two major pools.

**Project Number:** NB-2016-10

**Recipient:** Nashwaak Watershed Association

**Title:** Geomorphic assessment and action planning in the upper Nashwaak River

**Approved grant:** \$15,000

**Funding provided to date:** \$15,000

**Summary:** A salmon habitat conservation plan for the Nashwaak River was developed. A geomorphic assessment of the river was conducted with different geomorphic sections of the river identified and river conditions assessed in the field. Results informed an action plan to improve salmon habitat in the upper Nashwaak.

**Project Number:** NB-2016-11

**Recipient:** Nepisiquit Salmon Association

**Title:** Nepisiquit Salmon Assessment & Enhancement 2016

**Approved grant:** \$10,000

**Funding provided to date:** \$10,000

**Summary:** Approximately 100,000 eyed salmon eggs were reared in streamside incubation boxes at Nepisiquit Falls and released as fry. Electrofishing surveys were completed as were water quality surveys, mainly temperature and pH, predator and environmental surveys. Minor obstructions to fish passage were removed as encountered.

**Project Number:** NB-2016-12

**Recipient:** Northumberland Salmon Protection Association

**Title:** Release and track reconditioned Atlantic Salmon kelts in the Northwest Miramichi River

**Approved grant:** \$10,000

**Funding provided to date:** \$0

**Summary:** This project was cancelled and approved funding returned to provincial pool for future New Brunswick projects.

**Project Number:** NB-2016-13

**Recipient:** Shediac Bay Watershed Association

**Title:** Habitat Evaluation and Restoration for Salmonids in the Shediac Bay Watershed

**Approved grant:** \$5,000

**Funding provided to date:** \$5,000

**Summary:** This project undertook habitat restoration in several watershed streams. Blockages were cleared, debris was removed, tree deflectors and digger logs were installed and trees were planted. Another component of the project was evaluation of habitat conditions, and possible areas that need restoration in the watershed. Evaluations included habitat assessments and electrofishing.

**Project Number:** NB-2016-14

**Recipient:** University of New Brunswick (Cunjak)

**Title:** Patterns in the abundance and distribution of Atlantic salmon in Maritime Rivers

**Approved grant:** \$25,000 for 2016 (1 of 2 year, total: \$50,000)

**Funding provided to date:** \$25,000

**Summary:** This project is working to develop statistical analyses and hierarchical (Bayesian) models to determine whether spawner estimates correlate with indices of juvenile salmon abundance. These juvenile estimates will help develop accurate stock-recruitment models, evaluate representivity of electrofishing sites and determine how river warming affects observed juvenile population trends.

**Project Number:** NB-2016-15

**Recipient:** University of New Brunswick (Duffy)

**Title:** Identification of Ectoparasites infecting Outer Bay of Fundy Atlantic salmon

**Approved grant:** \$17,500 for 2016 (1 of 2 years, total: \$35,000)



# GRANTS & STATUS

## 2016 Project Grants

**Funding provided to date:** \$13,125

**Summary:** This project is addressing our knowledge gaps by identifying specifically the diversity of ectoparasitic lice found on migrating Outer Bay of Fundy salmon. Accurate identification of parasites and understanding their survival and transmission is essential to develop rational control measures, and to avoid inadvertent parasite introduction to pristine rivers by fish translocations.

**Project Number:** NB-2016-16

**Recipient:** University of New Brunswick (Linnansaari)

**Title:** Quantifying Striped Bass and Muskellunge Predation on Atlantic Salmon Smolts at the Base of the Mactaquac Dam, Saint John River, New Brunswick.

**Approved grant:** \$14,723

**Funding provided to date:** \$11,110 (*unspent grants funds were returned to provincial pool for future grants*)

**Summary:** Striped bass and muskellunge have long been suspected as potential predators of Atlantic salmon smolts, but direct stomach content analyses within the Saint John River have never been conducted. This project conducted a stomach content analysis of both predators as they become captured in the vicinity of Mactaquac Dam to assess the effect of these species on salmon smolt mortality.

## Newfoundland & Labrador

**Project Number:** NL-2015-04

**Recipient:** Memorial University (Dr. Craig Purchase)

**Title:** Incubation sensitivity to winter temperatures in four DU's of Atlantic salmon in Canada

**Approved grant:** \$42,000 for 2016 (2 of 3 years, total: \$95,000)

**Funding provided to date:** \$24,750

**Summary:** Official start time of this project was delayed until Spring 2016. This project aims to monitor the response of salmon to changes in temperature on their development. The differences from Exploits River salmon will be compared among 8 rivers from 4 DUs (Labrador, Northeast Newfoundland, South NL, Northwest NL).

**Project Number:** NL-2015-05

**Recipient:** Memorial University (Dr. Van zyll de Jong)

**Title:** Development of river restoration planning and analysis tool

**Approved grant:** \$20,000 for 2016 (2 of 2 years, total: \$46,500)

**Funding provided to date:** \$41,500

**Summary:** This project aims to develop a river restoration planning and analysis tool for consistent and thorough planning of, and evaluation of the potential effects of proposed projects on river habitat and function, particularly for Atlantic salmon.

**Project Number:** NL-2016-01

**Recipient:** Freshwater Alexander-Bays Ecosystem Corporation

**Title:** Evaluation of habitat expansion outcomes on Upper Terra Nova River, Phase 2

**Approved grant:** \$23,000

**Funding provided to date:** \$17,250

**Summary:** This project aims to monitor water flow and salmon migration through the Mollyguajeck Falls fishway on the Upper Terra Nova River.

**Project Number:** NL-2016-02

**Recipient:** Indian Bay Ecosystem Corporation

**Title:** Adurt Brook Restoration Project

**Approved grant:** \$17,987

**Funding provided to date:** \$17,987

**Summary:** The Adurt Brook Restoration Project will re-establish access to and restore habitat for Atlantic salmon in the Indian Bay Watershed. Issues include: woody debris accumulations, old logging dams and at least nine beaver dams.

**Project Number:** NL-2016-03

**Recipient:** Indian Bay Ecosystem Corporation

**Title:** Spurrell's Brook Restoration Project

**Approved grant:** \$16,861

**Funding provided to date:** \$16,861

**Summary:** This project will provide Atlantic salmon access to Spurrells Pond through the removal of a significant migration barrier along Spurrells brook. IBEC will implement stream bank stabilization and erosion control measures to mitigate the issue.

**Project Number:** NL-2016-04

**Recipient:** Memorial University (Clément)

**Title:** Salmon in a changing environment: Developing a water temperature monitoring program in the Northern range of Atlantic salmon

**Approved grant:** \$20,000 for 2016 (1 of 3 years, total: \$50,000)

**Funding provided to date:** \$15,000

**Summary:** This project will develop a community-driven water temperature monitoring network as well as an observatory salmon network while building capacities in aboriginal and non-aboriginal communities. The data will be used to create simple water temperature models to provide thermal scenarios associated with predicted climate change.



Town of Holyrood



# GRANTS & STATUS

## 2016 Project Grants

**Project Number:** NL-2016-05

**Recipient:** Memorial University (Purchase)

**Title:** Salmon gametes as a source for research, restocking and public engagement

**Approved grant:** \$60,000 for 2016 (1 of 3 year project, total: \$110,000)

**Funding provided to date:** \$45,000

**Summary:** This project will research egg and sperm quality from repeat vs virgin spawning salmon from the Exploits River while restocking the Rennies River and providing fertilized eggs to the Fish Friends Program in eastern Newfoundland.

**Project Number:** NL-2016-06

**Recipient:** Miawpukek First Nation

**Title:** Miawpukek Aquaculture Escapee Monitoring (MAEM) 2016

**Approved grant:** \$34,873

**Funding provided to date:** \$26,154.75

**Summary:** A counting fence on the Little River will be used to sample all salmon that enter to determine if they are of aquaculture origin or are carrying any disease. Salmon will be scale sampled and fin clipped. All farm fish species will be recorded, sampled and removed from the system.

**Project Number:** NL-2016-07

**Recipient:** Salmonid Association of Eastern Newfoundland

**Title:** Smolt fence to gauge success of ongoing egg planting project in Rennies River

**Approved grant:** \$14,780

**Funding provided to date:** \$11,085

**Summary:** With this project, SAEN will commission a smolt fence, including a camera system to enumerate out-migrating smolts.

**Project Number:** NL-2016-08

**Recipient:** Salmonid Preservation Association for the Waters of Newfoundland

**Title:** Removal of obstructions to spawning salmonids throughout the river system

**Approved grant:** \$17,240

**Funding provided to date:** \$17,221

**Summary:** This project involved the removal of dams and other natural blockages by manual labour throughout Hughes Brook. Overhanging alders cause debris to build up – these were cleared as well.

**Project Number:** NL-2016-09

**Recipient:** Town of Holyrood

**Title:** Adaptations in Atlantic salmon juvenile behaviour and health related to long-term habitat alterations

**Approved grant:** \$9,060 for 2016 (1 of 2 years, total: \$19,220)

**Funding provided to date:** \$6,795

**Summary:** The reaction of juvenile salmon to large fluctuations in habitat type will be researched through stable isotopes, passive integrated transponder (PIT) tags and radio telemetry in Holy Cross Park (Mahers River).

## Nova Scotia

**Project Number:** NS-2015-02

**Recipient:** Dalhousie University (Sterling)

**Title:** Acid rain mitigation plans for the 13 priority watershed for Southern Upland Salmon in Nova Scotia: development of a sub-plan to address the aluminium problem

**Approved grant:** \$15,000 for 2016 (2 of 3 years, total: \$45,000)

**Funding provided to date:** \$22,500

**Summary:** This project proposes to create a sub-plan for the Southern Upland Watershed Acid Rain Mitigation Plan that will address the aluminium problem. A student in Dr. Sterling's research group, Marley Geddes began this Southern Upland Watershed Acid Rain Mitigation plan in 2014, and it is planned to continue in 2015.



Cheticamp River Association

**Project Number:** NS-2016-01

**Recipient:** Bluenose Coastal Action Foundation

**Title:** LaHave River Watershed Project 2016 – Main Sub-watershed Aquatic Connectivity Assessment and Restoration

**Approved grant:** \$10,000

**Funding provided to date:** \$7,500

**Summary:** The proposed project will expand on the existing North Branch Sub-watershed Fish Habitat Restoration Plan (drafted in 2012) to include an assessment of aquatic connectivity. Two high priority crossings, determined to be barriers to fish passage, will be identified and restored during the 2016 field season. This project also involves a fish habitat restoration project on Juniper Brook.

**Project Number:** NS-2016-02

**Recipient:** Cheticamp River Salmon Association

**Title:** Improving fish passage on the lower Cheticamp River (Phase III)

**Approved grant:** \$7,500



# GRANTS & STATUS

## 2016 Project Grants

**Funding provided to date:** \$7,500

**Summary:** This is the third phase of a collaborative effort between the CRSA and Parks Canada to improve fish passage, increase access to important upstream habitat, and restore impacted habitat on the lower Cheticamp River. It involves installing instream structures at two new work sites and carrying out necessary work to maintain and improve previous restoration structures.

**Project Number:** NS-2016-03

**Recipient:** Nova Scotia Salmon Association

**Title:** West River Sheet Harbour Acid Mitigation, Counting Fence & Science

**Approved grant:** \$20,000

**Funding provided to date:** \$10,000

**Summary:** The project proposed herein (ASCF portion) is for the upgrade, operation and maintenance of a seasonal Atlantic salmon counting fence and trap as part of the West River-Sheet Harbour Acid Mitigation Project.

**Project Number:** NS-2016-04

**Recipient:** Pictou County Rivers Association

**Title:** Restoration of Atlantic Salmon Habitat in the East River Watershed, Pictou County

**Approved grant:** \$8,500

**Funding provided to date:** \$8,500

**Summary:** Major tributaries in the Pictou County River watershed will be surveyed to develop a multi-year strategy to address habitat issues. Structures will also be installed in Glencoe and Archibald brooks to restore habitat.

**Project Number:** NS-2016-05

**Recipient:** Sackville Rivers Association

**Title:** River Restoration 2016

**Approved grant:** \$6,000

**Funding provided to date:** \$6,000

**Summary:** This project will provide fish habitat restoration on three watercourses in the Sackville River Watershed – Beaver Pond Brook, Sandy Lake Brook, and Lewis Lake Brook.

**Project Number:** NS-2016-06

**Recipient:** St. Mary's River Association

**Title:** Salmon Habitat Enhancement (West River St. Mary's)

**Approved grant:** \$25,225

**Funding provided to date:** \$25,225

**Summary:** SMRA removed logs and other debris from the Sutherlands Brook and using a "sand wand" to remove silt from the stream bed. This project also involved habitat restoration in the West River.

## Prince Edward Island

**Project Number:** PEI-2015-01

**Recipient:** Central Queens Branch of the PEI Wildlife Federation

**Title:** Restoration of Cold, Freshwater Habitat for Atlantic Salmon on the West and Clyde Rivers, PEI

**Approved grant:** \$55,000

**Funding provided to date:** \$36,130.42 (*Project underspent, remaining funds returned to PEI pool*)

**Summary:** This project aims to continue efforts to improve habitat in the West River, particularly CQWF will reduce the amount of sediment in the river with the construction of three more sediment traps or bypass ponds.

**Project Number:** PEI-2015-04

**Recipient:** Souris & Area Branch of the PEI Wildlife Federation

**Title:** Perpetuation of Atlantic Salmon in Northeastern PEI

**Approved grant:** 26,500 for 2016 (*2 of 3 years, total: \$79,500*)

**Funding provided to date:** \$46,375

**Summary:** The majority of this project aims to restore and further enhance existing Atlantic salmon habitat in North Lake, Priest Pond, Cross, Hay, Naufrage and Cow Rivers by installing brush mattresses and ensuring fish passage by trimming alders and removing "blow-downs", natural blockages and any non-active beaver dams.

**Project Number:** PEI-2016-01

**Recipient:** Abegweit Conservation Society

**Title:** Foundation Knowledge Building for Future PEI Salmon

**Approved grant:** \$15,000

**Funding provided to date:** \$11,250

**Summary:** This project will investigate life history values for the North Lake Creek Atlantic salmon population with the implication that this unique genetic cluster could have differing life history values with regards to spawning schedules and migration patterns.



Bedeque Bay Environmental Management Association



# GRANTS & STATUS

## 2016 Project Grants

**Project Number:** PEI-2016-02

**Recipient:** Abegweit Conservation Society

**Title:** Midgell Salmon Habitat Reclamation

**Approved grant:** \$9,858

**Funding provided to date:** \$7,393.50

**Summary:** This project will apply consistent and continuous restoration methods to address habitat degradation from impoundments, natural and manmade, on the entire Midgell Watershed.

**Project Number:** PEI-2016-03

**Recipient:** Bedeque Bay Environmental Management Association

**Title:** Atlantic Salmon Habitat Conservation in the Bedeque Bay Watershed

**Approved grant:** \$13,000

**Funding provided to date:** \$13,000

**Summary:** This project will focus on restoring and improving critical Atlantic salmon habitat in the Lower Dunk River, Lower McCardle's, Bell's Hole and the Wilmot River.

**Project Number:** PEI-2016-04

**Recipient:** Prince Edward Island Trappers' Association

**Title:** Atlantic Salmon Habitat Restoration and Enhancement in Two PEI Watersheds

**Approved grant:** \$8,100

**Funding provided to date:** \$6,075

**Summary:** PEITA will conduct aquatic connectivity assessments as well as restore fish habitat in the Pisquid and Vernon Rivers. Population surveys and water quality monitoring will also take place.

**Project Number:** PEI-2016-05

**Recipient:** Richmond Bay Watershed Association

**Title:** Healthy Watersheds, A Sustainable Balance

**Approved grant:** \$7,520

**Funding provided to date:** \$7,520

**Summary:** This project will improve salmon habitat through restoration of riparian buffers, beaver management, and through the installation of various in-stream structures.

## Québec

**Project Number:** QC-2014-06

**Recipient:** Corporation du bassin de la Jacques-Cartier

**Title:** Tracking migrating smolt of the Atlantic salmon population (*Salmo salar*) of Jacques-Cartier River.

**Approved Grant:** \$10,000 for 2016 (3 of 3 years, total: \$35,000)

**Funding provided to date:** \$35,000

**Summary:** This project estimated smolt population outmigrating in the river every year and estimated the survival rate of introduced smolts in the river. In 2016, collected data suggested that 25,456 smolt outmigrated. In addition, comparing morphological parameters between smolt from seeding and those from natural reproduction show cultured smolt adapt well to the river conditions.

**Project Number:** QC-2015-07

**Recipient:** Corporation du bassin de la Jacques-Cartier

**Title:** Validation of the use of a new spawning habitat by Atlantic salmon on Jacques-Cartier River after the failure of Donnacona dam

**Approved Grant:** \$5,000 (2 of 2 years, total: \$10,000)

**Funding provided to date:** \$7,437.25 (unspent grants funds were returned to provincial pool for future grants)

**Summary:** After the failure of the Donnacona dam in 2014, salmon were able to reach spawning areas in the downstream section of the river, the access of which had been limited for 100 years. This project worked to determine if natural reproduction of Atlantic salmon occurred in this stretch of the river and to identify the presence of potential competitive species.

**Project Number:** QC-2015-03

**Recipient:** Restigouche River Watershed Management Council

**Title:** Characterization of Matapedia River smolt outmigration within the integrated management structure of salmon resource in the Restigouche

**Approved Grant:** \$27,836 for 2016 (2 of 3 years, total: \$59,658)

**Funding provided to date:** \$47,822

**Summary:** By installing a rotary trap for three consecutive spring seasons, RRWMC is working to estimate smolt productivity in the Matapedia. With this standardized approach, RRWMC will be able to compare the outmigration on Matapedia River with Kedgwick River. Time variability of smolt outmigration, density and physical condition and survival rate are being investigated.

**Project Number:** QC-2015-08

**Recipient:** FaunENord

**Title:** Presence of Atlantic salmon (*Salmo salar*) of Ungava Bay, Nunavik, in Koksoak system

**Approved Grant:** \$25,000 for 2016 (2 of 2 years, total: \$50,000)

**Funding provided to date:** \$41,499.20

**Summary:** In the second phase of this project, priority sites were visited in order to validate their use by Atlantic salmon. Inventory results will serve to develop a series of recommendations which can be used to provide a better protection of the species and its habitat. The project will also provide field characterization of sampling stations data.

**Project Number:** QC-2015-09

**Recipient:** Institut national de la recherche scientifique (Bergeron)

**Title:** Fragmentation of juvenile salmon habitat caused by road and forest culverts.

**Approved Grant:** \$25,000 (2 of 3 years, total: \$75,000)

**Funding provided to date:** \$50,000

**Summary:** Passive transponder technology is being used to complete a marking-recapture study for many culverts of variable features, allowing to determine variables and thresholds which limit juvenile migration. This filter can be applied to all culverts on salmon rivers and a GIS analysis will allow calculation of habitat losses related to each insurmountable culvert.



# GRANTS & STATUS

## 2016 Project Grants

**Project Number:** QC-2016-01

**Recipient:** Association des pêcheurs sportifs de la Bonaventure

**Title:** Operating a youth summer camp (12 - 15 years old) on Bonaventure River.

**Approved grant:** \$4,000 for 2016 (1 of 2 years; total: \$8,000)

**Funding provided to date:** \$4,000

**Summary:** L'Association des pêcheurs sportifs de la Bonaventure will continue to operate a youth summer camp. The Association will recruit participants from all regions of Quebec. Social media will be used to reach future participants. During the same period, the association will hold information sessions on the Youth Camp for high school students of the region (Matapédia, Carleton, Bonaventure and Paspébiac).

**Project Number:** QC-2016-02

**Recipient:** Fédération québécoise pour le saumon atlantique

**Title:** Developing tools to protect critical habitats for Atlantic salmon.

**Approved grant:** \$10,000

**Funding provided to date:** \$7,500

**Summary:** In hot weather, salmon is often concentrated in pools receiving fresher water from small streams or resurgent streams. From one control river (Ouelle), the project consists in developing tools for salmon river managers to identify and provide better protection of these watercourses of three types of tenure: 1-forest (public and private), 2-agriculture, 3- municipal.

**Project Number:** QC-2016-03

**Recipient:** Institut national de la recherche scientifique (Bergeron): Modelling potential production of Quebec salmon rivers with high resolution imaging.

**Approved grant:** \$30,000 for 2016 (1 of 2 years; total: \$60,000)

**Funding provided to date:** \$22,500

**Summary:** This project is designed to develop a salmon habitat quality index (IQH). The approach is based on 1) modelling and large scale mapping of the bathymetry and run-off velocity on rivers and 2) transfer of preference curves of micro-habitat scale to hydromorphological facies scale. Also, the calculation method of production area will be reviewed to consider the connectivity between habitats.

**Project Number:** QC-2016-04

**Recipient:** Institut national de la recherche scientifique (Bergeron)

**Title:** Use of thermal refuges by salmon spawners

**Approved grant:** \$15,000

**Funding provided to date:** \$11,250

**Summary:** The objective of this project is to document the use of thermal refuges in the river by Atlantic salmon spawners. With acoustic emitters, the frequency and the length during which refuges are used as well as the river water temperature where salmon go in and go out of the refuges were determined. This assessment of the use of cold refuges will help prioritize important refuges preservation action.

**Project Number:** QC-2016-05

**Recipient:** Institut national de la recherche scientifique (St-Hilaire)

**Title:** Integrating water temperature in a general model of salmon habitat

**Approved grant:** \$10,000 for 2016 (1 of 3 years; total: \$30,000)

**Funding provided to date:** \$10,000

**Summary:** This project contributes to the improvement of an Atlantic salmon habitat modelling method, in particular in relation to parr nurseries. This project develops a set of thermal preferences for parr. To achieve this goal, salmon experts opinions is coded using fuzzy logic. Thermal preferences and the resulting model will be validated in part on two Québec rivers.

**Project Number:** QC-2016-06

**Recipient:** Organisme de bassins versants de Kamouraska, L'Islet et Rivière-du-Loup (OBAKIR)

**Title:** Characterizing spawning areas on Ouelle River

**Approved grant:** \$10,000

**Funding provided to date:** \$7,500

**Summary:** This project characterized spawning sites habitat in the area of Grande rivière, which is the main tributary with spawning sites for Atlantic salmon, in order to protect or restore them adequately. Data was digitally mapped (SIG) and transferred on Google Earth. This tool will be useful for users awareness and actions planning with partners.

**Project Number:** QC-2016-07

**Recipient:** Organisme de bassin versant Matapédia Restigouche

**Title:** Development of an urban drainage area model by riparian municipality along a salmon river: Residential and municipal actions

**Approved grant:** \$25,000

**Funding provided to date:** \$22,809.05 (unspent grants funds were returned to provincial pool for future grants)

**Summary:** This project will alleviate peak flows from urban drainage areas having a visible impact on Matapédia River. Preliminary plans and specifications were developed for municipal developments and for residential developments. Awareness, commitment and training of citizens, municipal employees and elected officials were completed. A sedimentation and flow monitoring plan was developed.

**Project Number:** QC-2016-08

**Recipient:** Organisme de bassins versants Manicouagan: Fishway Refurbishing and improvement on Godbout River Project

**Approved grant:** \$7,418

**Funding provided to date:** \$0

**Summary:** Molson fall is classified as « surmountable with qualifications. » Thus, the MFFP erected a fishway in 1985. A capture cage serves to count, measure and identify fish passing through the fishway. This project will fix the fishway. This project has been delayed until 2017.



# GRANTS & STATUS

## 2012–2015 Project Grants

### ASCF Grants 2012 – 2015

**Note:** This statement reflects only those projects that were completed in 2016 or are ongoing. All other projects from previous years have been finalized.

#### Science

**Project Number:** IN-2014-04

**Recipient:** Restigouche River Watershed Management Council

**Title:** Characterization of piscivorous birds predation in Restigouche River estuary using bioenergy analysis approach.

**Approved Grant:** \$44,000 (2 of 2 year project)

**Funding provided to date:** \$39,576 (unspent grants funds were returned to interprovincial science pool for future grants)

**Summary:** This project characterized smolt mortality rates in the Restigouche River estuary by piscivorous bird predation during spring migration, particularly the cormorants of Rock Bonamy colony, using a bioenergy model approach to determine the proportion of Atlantic salmon in the cormorants' diet during the smolt's downstream migration.

**Project Number:** IN-2015-01

**Recipient:** Atlantic Salmon Federation

**Title:** Estimation of post-smolt survival through the Gulf of St. Lawrence

**Approved Grant:** \$10,000

**Funding provided to date:** \$10,000

**Summary:** The overall objective of this study was to gather more accurate probability of detection estimates that would enable more precise estimations of survival to be made. With the installation of the second line, survival estimates can now be made more accurately while taking into account yearly variation in detection probabilities. This will allow for population fluctuations to be detected more accurately and will enable managers to make more educated decisions, thus improving restoration and conservation initiatives.

**Project Number:** IN-2015-02

**Recipient:** University of New Brunswick (Cunjak)

**Title:** Patterns in the abundance and distribution of Atlantic salmon in Maritime rivers

**Approved Grant:** \$40,000

**Funding provided to date:** \$30,000

**Summary:** This project is analyzing DFO's electrofishing data and returning adult salmon numbers in the Miramichi and Restigouche Rivers to determine whether spawner estimates correlate with indices of juvenile (parr) abundance and freshwater production (smolts). River warming on juvenile population trends and representivity of DFO electrofishing sites were also investigated.

#### New Brunswick

**Project Number:** NB-2014-05

**Recipient:** Restigouche River Watershed Management Council

**Title:** Salmon stocks restoration and education on Little Main Restigouche

**Approved Grant:** \$25,000 (2 of 2 years)

**Funding provided to date:** \$14,847 (unspent grants funds were returned to provincial pool for future grants)

**Summary:** This project focused on management activities for the Little Main Restigouche watershed including dismantling of targeted beaver dams, assessment of forest road crossings, development of an interpretation trail of Atlantic salmon along Hailes Brook, installation of in-stream structures and monitoring by electrofishing surveys.

**Project Number:** NB-2014-11

**Recipient:** Meduxnekeag River Association Inc.

**Title:** Meduxnekeag Watershed Salmon Habitat Restoration Plan

**Approved Grant:** \$15,000 (2 of 2 years)

**Funding provided to date:** \$13,750

**Summary:** MRA is participating in the development of a trans-border salmon habitat restoration plan for the Meduxnekeag watershed, a process being facilitated through a partnership between the US Army Corps of Engineers and the Houlton Band of Maliseet Indians. MRA's involvement and support is integral to the long-term potential completing this planning process in other portions of the St. John River Watershed.

**Project Number:** NB-2015-01

**Recipient:** The Chaleur Bay Watersheds Group

**Title:** Atlantic salmon habitat restoration in the Jacquet River

**Approved Grant:** \$24,000

**Funding provided to date:** \$24,000

**Summary:** This project improved Atlantic salmon habitat in Jacquet River watershed. Restoration techniques were based on the DFO manual "Ecological Restoration of Degraded Aquatic Habitats: A Watershed Approach" and included removal of debris, alder thinning, stabilizing the banks, and adding retaining structures or deflectors on damaged waterstream banks.

**Project Number:** NB-2015-04

**Recipient:** Eel River Bar First Nation

**Title:** Eel River Recovery Project

**Approved Grant:** \$20,000

**Funding provided to date:** \$20,000

**Summary:** This project implemented activities within the Recovery Plan for the Eel River including electrofishing surveys, habitat inventories, potential stocking sites recommendations, restoration of access of wild Atlantic salmon, Fish Friends Program, public information sessions and tree planting.

**Project Number:** NB-2015-05

**Recipient:** Fort Folly First Nation

**Title:** Restoring Atlantic Salmon to the Petiscodioc River: An Inner Bay of Fundy Wild Salmon Recovery Project

**Approved Grant:** \$30,000



# GRANTS & STATUS

## 2012–2015 Project Grants

**Funding provided to date:** \$30,000

**Summary:** This project worked to improve salmon populations in the Petitcodiac River by capturing smolt from Petitcodiac tributaries, rearing them to maturity at sea along with live gene bank smolt, and returning mature adults to their spawning grounds to spawn. Electrofishing surveys, smolt run monitoring, fyke net captures, snorkel surveys and redd counts were used to monitor the population.

**Project Number:** NB-2015-07

**Recipient:** Hammond River Angling Association

**Title:** Hammond River Smolt Assessment

**Approved Grant:** \$5,000

**Funding provided to date:** \$5,000

**Summary:** A smolt wheel was installed on the Hammond River to allow for a mark-recapture survey. The ongoing smolt assessment, in conjunction with long-term data on juvenile and adult salmon life stages, helped to increase the understanding of documented population declines and will contribute to future management decisions to better protect this species.

**Project Number:** NB-2015-08

**Recipient:** Kennebecasis Watershed Restoration Committee

**Title:** Assessing and improving stream bank health in the Kennebecasis watershed

**Approved Grant:** \$20,000

**Funding provided to date:** \$20,000

**Summary:** More than 12 km of stream habitat were assessed and landowners were provided with prescriptions to stabilize eroding stream banks and improve riparian and flood plain conditions. KWRC completed restoration and enhancement work over 390 m of severely eroding stream banks and planted more than 8000 trees.

**Project Number:** NB-2015-09

**Recipient:** Maliseet Nation Conservation Council

**Title:** Maliseet Nation McIntosh Brook Fish Habitat Enhancement Program.

Approved amount: \$15,000

**Funding provided to date:** \$0

**Summary:** This project was cancelled and approved funding returned to provincial pool for future New Brunswick projects.

**Project Number:** NB-2015-10

**Recipient:** Miramichi River Environmental Assessment Committee

**Title:** Barnaby River Atlantic Salmon Habitat Assessment

**Approved Grant:** \$14,000

**Funding provided to date:** \$14,000

**Summary:** MREAC undertook an Atlantic salmon habitat assessment on the Barnaby River in 2015 along with environmental assessment and monitoring. Existing knowledge was used along with field assessments to determine the habitat and salmon stock potential for this river system.

**Project Number:** NB-2015-11

**Recipient:** Miramichi Salmon Association Inc.

**Title:** Enhancing critically important Atlantic salmon thermal refuge habitat throughout the Miramichi watershed

**Approved Grant:** \$20,000

**Funding provided to date:** \$20,000

**Summary:** This initiative used heavy equipment and rock structures to physical restore and enhance three important cold-water refuges: confluence of Otter Brook and the Little SW Miramichi River, confluence of Indiantown Brook and the SW Miramichi River, and at the confluence with Doak Brook and SW Miramichi.

**Project Number:** NB-2015-14

**Recipient:** Shediac Bay Watershed Association Inc.

**Title:** Salmonid Habitat Restoration and Public Education Program

**Approved Grant:** \$7,500

**Funding provided to date:** \$7,500

**Summary:** SBWA conducted electrofishing surveys to identify spawning habitat. Two eroding bank areas were planted with native trees and shrubs as well and erosion control measures were installed. Access was restored at an elevated culvert by the installation of a fish ladder. This project expanded the engagement and education of river stakeholders.

## Newfoundland & Labrador

**Project Number:** NL-2014-05

**Recipient:** Norris Arm & Area Economic Development Committee

**Title:** Rattling Brook Salmon Restoration Project

**Approved Grant:** \$65,000 (2 of 2 years)

**Funding provided to date:** \$64,538.57 (Project underspent, funds returned to NL pool)

**Summary:** This project involves building a fish passage and restoring adult salmon to the Rattling Brook watershed. A total of 800 fish are being transferred in 2014 and 2015. Construction is completed on a downstream fish pass and the upstream fish pass is expected to be completed in time for the upstream migration of grilse and adult salmon in 2014.

**Project Number:** NL-2014-07

**Recipient:** Salmonid Association of Eastern Newfoundland

**Title:** Rennie's River Watershed management Survey & salmon spawning bed enhancement

**Approved Grant:** \$13,250

**Funding provided to date:** \$10,496.83 (Project underspent, funds returned to NL pool)

**Summary:** This project is focusing on the restoration of a section of the Rennie's River, St. John's adjacent to the Avalon Mall by installing 5 lowhead barriers. Each chamber will be filled with coarse spawning stone. Topsoil is being added and natural grasses and shrubs are being planted to stabilize the banks and stop sediment influx.





# GRANTS & STATUS

## 2012–2015 Project Grants

**Project Number:** NL-2015-01

**Recipient:** Environment Resources Management Association

**Title:** Exploits River Tributaries Restoration - 2015

**Approved Grant:** \$20,000

**Funding provided to date:** \$20,000

**Summary:** This project is a continuation of efforts from past years to address sites that are considered to be on the priority list for restoration on the tributaries of the Exploits River. The remains of old wooden structures and drowned pulpwood will be removed from the streams and placed above the high water mark to prevent re-entry into the streams.

**Project Number:** NL-2015-02

**Recipient:** Freshwater-Alexander Bays Ecosystem Corporation

**Title:** Evaluation of Habitat Expansion Outcomes on Upper Terra Nova River.

**Approved Grant:** \$26,270

**Funding provided to date:** \$26,270

**Summary:** This project aims to monitor water flow and salmon migration through the Mollyguajeck Falls fishway on the Upper Terra Nova River.

**Project Number:** NL-2015-06

**Recipient:** Miawpukek First Nation

**Title:** Miawpukek Aquaculture Escapee Monitoring

**Approved Grant:** \$50,000

**Funding provided to date:** \$37,500 (Project scope reduced, funds returned to NL pool)

**Summary:** Miawpukek First Nation will aim to sample a portion of the Atlantic salmon population in the Conne River watershed at pre-determined sites using electroseining methods to determine if they are of aquaculture origin or are carrying any diseases. All salmon will be scale sampled and fin clipped. Any salmon of aquaculture origin will be sent away for genetic analysis.

**Project Number:** NL-2015-07

**Recipient:** Salmonid Association of Eastern Newfoundland

**Title:** Salmon Tracking and Falls Remediation Plan

**Approved Grant:** \$17,552

**Funding provided to date:** \$8,776

**Summary:** With this project, SAEN will commission a smolt fence, including a camera system to enumerate out-migrating smolts. They will also transfer and tag 20 adult salmon from the Exploits River to the Rennie's River.

**Project Number:** NL-2015-09

**Recipient:** Indian Bay Ecosystem Corporation

**Title:** Bonavista North Stewardship & Enhancement Project

**Approved Grant:** \$5,000

**Funding provided to date:** \$5,000

**Summary:** This project aims to restore habitat in Indian Bay Big Pond and Number Two River. This project will remove the remnants

of a dam at the mouth of Indian Bay Big Pond to increase salmon access to the rest of the watershed.

**Project Number:** NL-2015-10

**Recipient:** Memorial University (Purchase)

**Title:** Research on offspring quality of virgin/repeat spawning grilse salmon and the success of Jordan/Scotty incubators undertaken in conjunction with salmon reintroduction to Rennie's River

**Approved Grant:** \$15,000

**Funding provided to date:** \$15,000

**Summary:** A technician will setup incubation sites in the Rennie's River to determine how placement effects siltation of Jordan/Scotty incubators in streambeds lacking gravel. This will inform on how useful this technology will be for other Newfoundland stocking efforts.

## Nova Scotia

**Project Number:** NS-2012-05

**Recipient:** Nova Scotia Salmon Association (NSSA)

**Title:** West River (Sheet Harbour) acid mitigation project – end of project monitoring and report

**Approved Grant:** \$5,000

**Funding provided to date:** \$5,000

**Summary:** Equipment for monitoring river pH and the effects of lime dosing has been purchased, tested and installed in the West River. NSSA is currently negotiating sorting and analysis of previously collected invertebrate samples. In general, the project is on track, and NSSA anticipates progress report will be completed as scheduled.

**Project Number:** NS-2015-01

**Recipient:** Bluenose Coastal Action Foundation

**Title:** LaHave River watershed project 2015 – development of Main River sub-watershed fish habitat restoration plan and West Branch sub-watershed fish habitat restoration project

**Approved Grant:** \$14,000

**Funding provided to date:** \$14,000

**Summary:** This project will simultaneously be an in-stream restoration project in the West Branch sub-watershed and will also involve the development of a Main river Sub-watershed Fish Habitat Restoration Plan.

**Project Number:** NS-2015-03

**Recipient:** Habitat Unlimited

**Title:** Initial South River watershed planning and restoration including the installation of a novel temperature reduction device

**Approved Grant:** \$10,000

**Funding provided to date:** \$5,000

**Summary:** The project seeks to begin substantive restoration in the South River in Antigonish County by development a watershed strategy outlining potential restorative measures, conducting traditional restoration actions on existing salmon bearing streams, development novel restoration actions to mitigate temperature issues and continuing education initiatives.



# GRANTS & STATUS

## 2012–2015 Project Grants

**Project Number:** NS-2015-05

**Recipient:** Nova Scotia Salmon Association

**Title:** River Restoration 2015

**Approved Grant:** \$13,000

**Funding provided to date:** \$13,000

**Summary:** This project aims to install and operate a seasonal adult salmon counting fence and trap in the West River-Sheet harbour to further document the results of measures taken to mitigate the impacts of acidification upon returning adult Atlantic salmon.

**Project Number:** NS-2015-07

**Recipient:** St. Mary's River Association

**Title:** Salmon Habitat Enhancement (West River, St. Mary's)

**Approved Grant:** \$31,314

**Funding provided to date:** \$31,314

**Summary:** This project aims to continue the study of selecting the appropriate sites to be addressed, the type and design of structure to be used and their implementation on one or two short sections of the river. Habitat enhancement work will also be done on the middle section of the river as set out in the 2014 Restoration of the West Branch of the St. Mary's River report.

**Project Number:** NS-2015-08

**Recipient:** Cheticamp River Salmon Association

**Title:** Improving fish passage on lower Cheticamp River (Phase II)

**Approved Grant:** \$10,000

**Funding provided to date:** \$10,000

**Summary:** This project is phase two of a collaborative effort between the CRSA and Parks Canada to improve fish passage increase access to important upstream habitat, and restore impacted habitat on the lower Cheticamp River. Phase II involves installing instream structures in three over-widened sites upstream of the sites addressed in Phase I.

### Prince Edward Island

**Project Number:** PEI-2014-01

**Recipient:** Morell River Management Co-operative

**Title:** Morell River Habitat Rehabilitation Project

**Approved Grant:** \$25,000 (2 year project)

**Funding provided to date:** \$25,000

**Summary:** The main focus of this project is to reclaim and repair spawning habitat that has been lost due to habitat degradation from human and beaver activity. Habitat degradation has caused both physical and thermal barriers to migrating fish. Work is focusing on improving habitat to regain the spawning gravel and increasing the quantity of cold-water input.

**Project Number:** PEI-2015-02

**Recipient:** Morell River Management Coop

**Title:** Midgell River Habitat Rehabilitation Project

**Approved Grant:** \$17,000

**Funding provided to date:** \$17,000

**Summary:** MRMC aims to restore habitat in Midgell watershed by addressing habitat degradation from impoundments natural & manmade.

**Project Number:** PEI-2015-03

**Recipient:** Richmond Bay Watershed Association

**Title:** On the Road to Recovery

**Approved Grant:** \$9,020

**Funding provided to date:** \$9,020

**Summary:** This project focuses on restoring Atlantic salmon habitat on the Trout River and Little Trout Rivers in West Prince, PEI. This will be done by the selective removal of in-stream debris and placement of brush mats to consolidate in-stream sediment. A significant portion of headwater stream on the Trout River will be restored through the removal of a beaver colony and a beaver dam that restricts fish passage.

**Project Number:** PEI-2015-05

**Recipient:** Trout Unlimited Prince County Chapter

**Title:** North Branch of Caruther's Brook Restoration

**Approved Grant:** \$17,000

**Funding provided to date:** \$12,750

**Summary:** This project aims to improve habitat on the North Branch of Caruther's Brook in the Mill River watershed. This will be done by removing debris and obstructions, installation of in-stream structures, removal of dams and by conducting redd surveys.

### Québec

**Project Number:** QC-2014-05

**Recipient:** Conseil des Innus de Pessamit

**Title:** Salmon conservation plan in Betsiamites River

**Approved Grant:** \$5,000

**Funding provided to date:** \$5,000

**Summary:** The goal of this project is to develop an Atlantic salmon conservation plan for the Betsiamites River. Resource users and managers are represented on the plan working group. The plan addresses the values of all stakeholders, identifies important habitats, assesses the population durability based on demographic, ecological and genetic factors.

**Project Number:** QC-2015-01

**Recipient:** Agence Mamu Innu Kaikusseht

**Title:** Regional Round Table on participatory management of Atlantic salmon by the Innu communities of the North Shore.

**Approved Grant:** \$10,000

**Funding provided to date:** \$8,319.58 (unspent grants funds were returned to provincial pool for future grants)

**Summary:** The objective of this project is to facilitate the implementation of stewardship actions to reduce threats to Atlantic salmon recovery. Seven Innu communities on the North Shore participated through the establishment of a consultative structure, monitoring measures, management symposium, public meetings, integration of ATK and scientific knowledge, and the development of a method of participatory management.



# GRANTS & STATUS

## 2012–2015 Project Grants

**Project Number:** QC-2015-02

**Recipient:** Association de chasse et pêche de Forestville

**Title:** Improving habitat quality on the Laval River

**Approved Grant:** \$6,400

**Funding provided to date:** \$5,744.13 (*unspent grants funds were returned to provincial pool for future grants*)

**Summary:** This project improved the habitat of the Laval River by stabilizing the bank with rock and planting vegetation on the talus slope. The river was surveyed to identify areas of erosion and sedimentation. All information gathered through the project was used to develop a prioritized list of action items.

**Project Number:** QC-2015-04

**Recipient:** Conseil de l'Eau Gaspésie Sud

**Title:** For Bonaventure River's sustainable future: Development of an adapted management method - phase II

**Approved Grant:** \$10,000

**Funding provided to date:** \$10,000

**Summary:** This project worked to mobilize and engage stakeholders; identify creative and relevant tools for use by municipalities, tourism operators and others; enable joint actions; promote awareness and long term protection of Atlantic salmon population and habitat; help limit negative impacts; and facilitate knowledge and expertise transfer to other communities.

**Project Number:** QC-2015-05

**Recipient:** Conseil des Innus de Pessamit

**Title:** Hydraulic features assessment of a spawning area on Betsiamites River and Boucher River

**Approved Grant:** \$6,900

**Funding provided to date:** \$3,450

**Summary:** This project is collecting reference data on 2 spawning sites in order to document the impact of Bersimis Dam-2 flow management on spawning site hydrodynamics. One spawning site is located above the dam, and thus strongly influenced by dam management, while the other is located at the mouth of Boucher River and serves as a control point.

**Project Number:** QC-2015-06

**Recipient:** Conseil Innu Takuaikan Uashat Mak Mani-Utenam (ITUM)

**Title:** Fish way reconstruction and improvement at McDonald Falls on Nipissis River

**Approved Grant:** \$35,000

**Funding provided to date:** \$5,000 (*unspent grants funds were returned to provincial pool for future grants*)

**Summary:** After the development of plans and specifications, it was determined that the project would not be carried out because of administrative orientations related to available budgets. A contribution of \$5,000 for development of a plan by engineering consultants was accepted as the plan could be used to improve the fishway in the future.

**Project Number:** QC-2015-10

**Recipient:** Institut national de la recherche scientifique (INRS)

**Title:** New calculation of the productivity potential of Québec salmon rivers

**Approved Grant:** \$29,451

**Funding provided to date:** \$29,451

**Summary:** The project is based on recent geomatics developments (remote sensing and GIS) and habitat model to recalculate the production potential of salmon rivers established by Picard and Caron (1999). Semi-automated habitat mapping was developed based on aerial photos recently obtained by the Department of Natural Resources for the southern part of Quebec.

**Project Number:** QC-2015-11

**Recipient:** Saumon de la Rivière Malbaie

**Title:** Inventory of salmon spawning sites of Malbaie River, upstream portion

**Approved Grant:** \$11,900

**Funding provided to date:** \$11,900

**Summary:** Potential salmon spawning were identified, characterized and entered in a geographic information system (GIS) for the upstream portion of the Malbaie River. This work will allow for the production of thematic maps, information consultation, resource management and will guide conservation actions or interventions to improve salmon productivity of the river.

**Project Number:** QC-2015-12

**Recipient:** Société de gestion de la rivière Ouelle

**Title:** Preparation of Wild Atlantic salmon conservation plan of Ouelle River

**Approved Grant:** \$8,200

**Funding provided to date:** \$8,200

**Summary:** A conservation plan for the Ouelle River is being developed in cooperation with local and regional partners and stakeholders to help achieve healthy and sustainable Atlantic salmon stocks. Developing and managing fishing opportunities, protecting and improving spawning sites, thermal refuges, and action leads will be included in the plan.



FaunENord



# SUMMARY OF PROJECT AUDITS

## Summary of Project Audits and Evaluations

In 2016 random audits of 26 Foundation funded projects were conducted. The audit process follows a structured method of assessing whether the project is being carried-out in accordance with the funding agreement entered into between the Foundation and the recipient, including site visits and an examination of minutes of meetings and accounting records. This supplements the assessment of perfor-

mance completed by staff through review of the draft funding agreement, interim and final reports received from recipients.

Note: Project audits are not conducted on every project each year. This is due to limited staff resources being available, or that the same recipient group had recently undergone a project audit.

In 2016 the following recipient groups were audited for performance:

### New Brunswick Projects

NB-2014-01c	Association des bassins versants de la Grande et Petite Rivière Tracadie
NB-2015-15b	UNB-Gray
NB-2016-01	Bassins versants de la Baie des Chaleurs
NB-2016-10	Nashwaak Watershed Association
NB-2016-11	Nepisiquit Salmon Association

### Nova Scotia Projects

NS-2015-02	Dalhousie University - Sterling
NS-2016-03	Nova Scotia Salmon Association
NS-2016-04	Pictou County Rivers Association
NS-2016-06	St. Mary's River Association

### Prince Edward Island Projects

PEI-2016-01	Abegweit Conservation Society
PEI-2016-02	Abegweit Conservation Society
PEI-2016-03	Bedeque Bay Environmental Management Association
PEI-2016-04	PEI Trappers' Association
PEI-2016-05	Richmond Bay Watershed Association

### Newfoundland & Labrador Projects

NL-2015-04	Memorial University - Purchase
NL-2015-05	Memorial University - van Zyll de Jong
NL-2015-10	Memorial University - Purchase
NL-2016-05	Memorial University - Purchase
NL-2016-08	SPAWN
NL-2016-09	Town of Holyrood

### Quebec Projects

QC-2015-09b	INRS – Bergeron
QC-2016-02	Fédération québécoise pour le saumon atlantique
QC-2016-03	INRS - Bergeron
QC-2016-04	INRS – Bergeron
QC-2015-06	Organisme de bassins versants de Kamouraska, L'Islet et Rivière-du-Loup (OBAKIR)
QC-2016-07	Organisme de Bassin Versant Matapedia-Restigouche



# REPORTS & STATEMENTS

Auditors' Report

## MacMillan Lawrence & Lawrence *Chartered Accountants*

Report of the Independent Auditor on the Summary Financial Statements

### **To the Directors of The Atlantic Salmon Conservation Foundation**

The accompanying summary financial statements, which comprise the summary statement of financial position as at December 31, 2016, the summary statements of operations and changes in net assets for the year then ended, are derived from the audited financial statements of The Atlantic Salmon Conservation Foundation for the year ended December 31, 2016. We expressed an unmodified audit opinion on those financial statements in our report dated March 20, 2017.

The summary financial statements do not contain all the disclosures required by the Canadian accounting standards for not-for-profit organizations. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of The Atlantic Salmon Conservation Foundation.

#### *Management's Responsibility for the Summary Financial Statements*

Management is responsible for the preparation of a summary of the audited financial statements in accordance with Canadian accounting standards for not-for-profit organizations.

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on the summary financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, "Engagements to Report on Summary Financial Statements".

#### *Opinion*

In our opinion, the summary financial statements derived from the audited financial statements of The Atlantic Salmon Conservation Foundation for the year ended December 31, 2016 are a fair summary of those financial statements, in accordance with Canadian accounting standards for not-for-profit organizations.

Fredericton, NB  
March 20, 2017

*MacMillan Lawrence & Lawrence*  
Chartered Accountants




# REPORTS & STATEMENTS

## Statement of Financial Position

		December 31, 2016	December 31, 2015
<b>Assets</b>			
<b>Current</b>			
Cash and cash equivalents		\$ 68,780	\$ 158,421
Receivables		74,427	37,713
Prepays		<u>3,252</u>	<u>93</u>
		146,459	196,227
Investments		<u>40,682,962</u>	<u>37,696,662</u>
		<u>\$ 40,829,421</u>	<u>\$ 37,892,889</u>
<b>Liabilities</b>			
<b>Current</b>			
Payables and accruals		\$ 305,625	\$ 320,499
<b>Net Assets</b>			
General Fund – Unrestricted		-	-
Reserve Fund – Internally Restricted		207,068	192,414
Endowment Fund – Externally Restricted		40,262,382	37,294,908
ANBL – Externally Restricted		54,346	65,338
PEILCC – Externally Restricted		<u>-</u>	<u>19,730</u>
		<u>40,523,796</u>	<u>37,572,390</u>
		<u>\$ 40,829,421</u>	<u>\$ 37,892,889</u>

Approved on behalf of the Board:

 Director

 Director



# REPORTS & STATEMENTS

## Statement of Operations and Change in Net Assets

Year ended December 31,	2016	2015
Revenue	\$ 4,667,923	\$ 1,608,584
Expenses		
Administration	436,975	412,089
Grants	1,078,904	1,162,113
Investment management fees	200,638	179,561
	1,716,517	1,753,763
Excess of revenue over expenses (expenses over revenue)	\$ 2,951,406	\$ (145,179)
Net assets, beginning of year	\$ 37,572,390	\$ 37,717,569
Excess of revenue over expenses (expenses over revenue)	2,951,406	(145,179)
Net assets, end of year	\$ 40,523,796	\$ 37,572,390

### Statement of Remuneration:

Statement of Remuneration: For the 2016 Fiscal Year total remuneration paid to one Foundation employee whose remuneration exceeds \$100,000 per year was \$153,858 consisting of the following: Salary = \$120,693; fees = \$0; travel expenses = \$17,666; CPP = \$2,544; EI = \$955, allowances \$0; and, benefits = \$12,000.00



# ASCF VOLUNTEERS & PERSONNEL

## Officers, Directors & Board Committees

### Officers

Honourable Rémi Bujold, P.C., C.M. · *Chairman & President* · Québec, QC  
 Robert Bishop, C.A. · *Vice-Chairman & Vice-President* · St. John's, NL  
 Paul D. Michael, Q.C. · *Secretary* · Stratford, PEI  
 Joan Marie Aylward · *Treasurer* · St. John's, NL

### Directors

James Lawley · Halifax, NS  
 Jim Jones · Moncton, NB  
 John LeBoutillier · Montréal, QC  
 Denis Losier · Moncton, NB  
 Evelyne Meltzer · Halifax, NS  
 Chief David Peter Paul · Pabineau First Nation, NB



L-R: John LeBoutillier, Jim Lawley, Jim Jones, Katharine Mott, Hon. Remi Bujold (Chair), Joan Marie Aylward, Robert Bishop, Paul Michael. *Missing: Chief David Peter-Paul, Denis Losier, Evelyne Meltzer.*

### Board Committees

#### Investment:

J. LeBoutillier  
 D. Losier  
 S. Graham  
 R. Bishop (Chair)

#### Audit & Finance:

J.M. Aylward (Chair)  
 R. Bishop  
 R. Bujold

#### Policy & Program:

J. Jones  
 P. Michael (Chair)  
 D. Losier  
 E. Meltzer

#### Development Committee

D. Losier  
 R. Bujold  
 J. Lawley  
 D. Peter-Paul

### Staff

Stephen Chase, Executive Director  
 Darla Saunders, Conservation Program Manager  
 Krystal Binns, Conservation Program Coordinator



L-R: Darla Saunders, Stephen Chase, Krystal Binns





# ASCF VOLUNTEERS

## Advisory Committees



### Scientific Advisory Committee

L-R: Yvon Coté, Brian Dempson, Peter Cronin, Stephen Chase (Executive Director), David Reddin (Chair), John Bagnall, Marsha Vicaire, Francois Caron. *Missing: Dr. Rick Cunjak*



### Newfoundland & Labrador Advisory Committee

L-R: Gregory Jeddore, Calvin Francis, Dr. Martha Robertson, Brian Dempson, Rick Maddigan (Chair). *Missing: Jim McCarthy.*



### New Brunswick Advisory Committee

L-R: Patricia Saulis, Dr. Michelle Gray, Kathryn Collet (Chair), Fernand Savoie, Tom Callaghan, Jim Marriner. *Missing: Denis Guitard, John Pugh.*



### Prince Edward Island Advisory Committee

L-R: Mike Durant, Allan Ledgerwood (Chair), Joshua Lindsay, Rob Burnett, Randy Angus, Mary Finch. *Missing: Ottis McInnis.*



### Nova Scotia Advisory Committee

L-R: Shane O'Neil (Chair), Sana Kavanagh, Michael Pollard, Kris Hunter, Al McNeill, Larry Shortt, Jim Gourlay. *Missing: Darryl Murrant, Alex Ley.*



### Comité consultatif provincial du Québec

L-R: Sébastien Ross, Jean Boudreault, René Lafond (Chair), Ronald Cormier, Patrick Plante. *Missing: Sylvie Tremblay, Jean Malec, André St-Hilaire.*



# 2016 VOLUNTEER PROFILES

Meet a few of ASCF's stellar volunteers, who are crucial to realizing ASCF's work for Atlantic Salmon conservation.



Jean Boudreault

Meet Jean Boudreault, a member of the Québec Advisory Committee.

After a 30-year career working in the environmental field for a large engineering firm in Quebec, Boudreault decided to move on and use his knowledge of the environment in another way. He is currently the president of the Quebec Federation for Atlantic Salmon; he became involved with the ASCF two years ago noting it felt quite natural to do so.

Boudreault said he is involved because of his love for the Atlantic salmon.

"I am committed to be the voice of the salmon," he said. "There are so many threats to their habitat and survival at sea, that is why I am committed."

"For me the job is not yet done, in Quebec and Canada. I trust the next generation will be there to continue."

Boudreault said the ASCF, and all environmental foundations, play an important role in protection and conservation.

"I encourage all men and women with an environmental conscience to be actively involved. It is through volunteering that we will protect our environment!"

Meet Mike Durant, member of the PEI Advisory Committee.

A native Islander, Durant grew up in Summerside, but now lives in Charlottetown. He is married with two children ages 18 and 21. Durant works for the Federal Government as an Information Technology Project Manager.

"My father was an avid trout fisherman and from a young age in the early 1970s I accompanied him on many fishing trips all over PEI," said Durant. "In those days you could catch brook trout in every stream on the Island and there were several rivers where healthy populations of Atlantic salmon were present."

"Since the mid to late 1970s changes in land use caused major damage to our rivers - fish kills from pesticide laden fields, sediment and nitrate contamination following intense rainfall events, deforestation and removal of hedgerows, and extraction of groundwater

from high capacity wells all contributed to a gradual decline in the health of our watersheds."

"When my dad passed away a few years ago I decided to honor his memory by volunteering with a watershed group. One of my Dad's favorite rivers was the West (Eliot) River, so I joined the Central Queens Branch of the PEI Wildlife Federation as they were actively engaged in restoration work in the West River and Clyde River watersheds."

Durant is currently the President of the Central Queens Branch of the PEI Wildlife Federation and he also serves on the executive of the PEI Watershed Alliance, an umbrella group that represents all Island watershed groups. He first became involved in the PEI advisory sub-committee for ASCF in 2013.

"I had noticed posters recognizing ASCF's contributions to various projects throughout PEI and I was intrigued by the diversity and scope of the projects that were supported. As I started my volunteer efforts with our watershed group ASCF was a major funder of the work that was underway; ASCF continues to this day to be a strong supporter of CQWF."

Durant said he stays involved with the ASCF as it is a crucially important partner in restoring salmon habitat throughout the Maritimes.

"ASCF's information sharing programs such as the Salmon Hub, its training and networking opportunities, and its project funding all provide direct and measurable benefits to watershed groups."

He encourages others to get involved noting watershed restoration requires a long term investment in time and resources, adding ASCF's project funding model allows watershed groups to pursue small and medium size projects that support an incremental year-over-year approach to habitat restoration.

"Provincial sub-committee members provide valuable input to the advisory committee on projects that are considered innovative and effective within that province or region. This is very important as each province has specific priorities as well as differing habitats that need to be accommodated. Successful watershed restoration activities can certainly be adopted but they must also be adapted; ASCF supports both of these best practices."



Mike Durant



# 2016 VOLUNTEER PROFILES

Meet a few of ASCF's stellar volunteers, who are crucial to realizing ASCF's work for Atlantic Salmon conservation.

Meet Dr. Jeff Hutchings, a member of the Scientific Advisory Committee (formerly called the Central Advisory Committee).



Jeff Hutchings

Hutchings, a professor at Dalhousie University and former Chair of the Committee on the Status of Endangered Wildlife in Canada (2006-2010), first became involved with the Atlantic Salmon Conservation Foundation in 2009.

"I became involved following an invitation to serve on the ASCF's Central Advisory Committee," he said. "I was a member of the Central Advisory Committee for 6 years, and I now serve on the ASCF's new Scientific Advisory Committee. My interest in Atlantic salmon began in 1982 during my MSc research on two salmon populations in Newfoundland's Terra Nova National Park. Since 1985, I have authored 51 peer-reviewed scientific papers on the ecology, behaviour, reproduction, conservation, and evolution of Atlantic salmon. I have also supervised 10 PhD and MSc students whose thesis research focussed on Atlantic salmon."

"I remain involved because of the opportunity it provides me to contribute what I can to the conservation and continued viability of wild salmon populations."

Hutchings said the ASCF plays a unique and increasingly pivotal role in a wide range of initiatives that directly or indirectly contribute to the restoration and persistence of Atlantic salmon.

"It serves as a nexus of financial and logistical support for interested individuals and parties, including aboriginal groups, community organizations, academic scientists, and government researchers."

Meet Rick Maddigan, Chair of our Newfoundland and Labrador Advisory Committee.

A retiring professor at Memorial University of Newfoundland (for 45 years), Maddigan is a husband, father of four, and grandfather of eight. While he may be new to our organization – Maddigan first became involved with the ASCF in 2015 – he is a lifelong angler.



Rick Madigan

"I began salmon fishing with my father when I was five-years-old," he said. "This will be my 60th year. Salmon fishing has given me so much enjoyment over the years that I can no longer measure it. It is a part of me. I became involved and stay involved to simply give something back. I hope others in the future can enjoy it as I have."

Maddigan said he stays involved because he thinks it makes a difference.

"The ASCF puts the salmon first. That's why I would encourage others to get involved. And so far I have quite enjoyed the meetings."

Meet Shane O'Neil, Chair of the Nova Scotia Advisory Committee.

O'Neil is an avid angler who joined DFO as a biologist in the early 1980s to work on diadromous species, with a focus on salmon. His recreational interest in salmon fishing evolved as population levels changed and his work became more focused on salmon.

"At home, my wife June and I were busy with three children, now grown, through school and extracurricular activities including soccer, music, and hockey," said O'Neil.

"I worked with others from the community to start the Sackville Rivers Association in 1988 and volunteered with them as they worked to protect and restore fish habitat and to contribute to the restoration of salmon to the watershed. Work at Fisheries and Oceans over a period of 34 years included data capture on recreational salmon angling, salmon assessments, and managing a team conducting assessments and salmon recovery activities."

O'Neil has been involved with the Atlantic Salmon Conservation Foundation since its inception, and said he joined to help where he could.

"As a member of the Nova Scotia committee, we developed priorities with a mind to protecting existing salmon populations consistent with the foundation's mandate."

O'Neil said he stays involved because public engagement in conserving salmon populations will be necessary in order for salmon to remain healthy, adding the ASCF is one way to promote local stewardship and restoration activities.



Shane O'Neil



# 2016 VOLUNTEER PROFILES

Meet a few of ASCF's stellar volunteers, who are crucial to realizing ASCF's work for Atlantic Salmon conservation.

"The Atlantic Salmon Conservation Foundation is a prime example of a multi-faceted partnership in the wise use and conservation of our most valuable natural resources, the wild Atlantic salmon."

And why should others get involved?

"Because the foundation's work is substantive for salmon conservation and supported via the 'principle funds' provided by the federal government and through partnership with stakeholders including community groups, First Nations, and conservation organizations, who bring in-kind and partner funds to the table to complete river and population support activities."



Fernand Savoie

Meet Fernand Savoie, a member of our New Brunswick Advisory Committee.

Savoie has lived in the Moncton area all of his life; he graduating from the Université de Moncton in 1987 with a Bachelor degree in biology. For the past 28 years Savoie has been working for DFO.

"I originally started my career in a lobster research group and now work as a biologist in the Fisheries Protection Program," he said. "The goal of the program is to provide for the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries. My primary responsibility within the program is working in guideline development and partnerships. This means working with provincial governments, industry, and NGOs in applying the fisheries protection provisions of the Fisheries Act."

Savoie first became involved with the ASCF in 2011. He said he initially became involved as it was part of his job and was asked by the ASCF to review projects submitted for funding.

"But once I got involved I realized that my role as a fisheries protection biologist for DFO was a good match with the mission of the foundation that is to promote enhanced community partnerships in the conservation of wild Atlantic salmon and its habitat. The committee reviews project proposals. By participating in the review of projects in New Brunswick I have been able to integrate my work objectives and goals as they are complimentary to those of the foundation."

As a biologist with DFO, Savoie reviews and evaluates a large number of habitat restoration projects. He said he stays involved with ASCF because he believes the organization is doing a good job in funding good projects that improve the state of the environment and aquatic habitat.

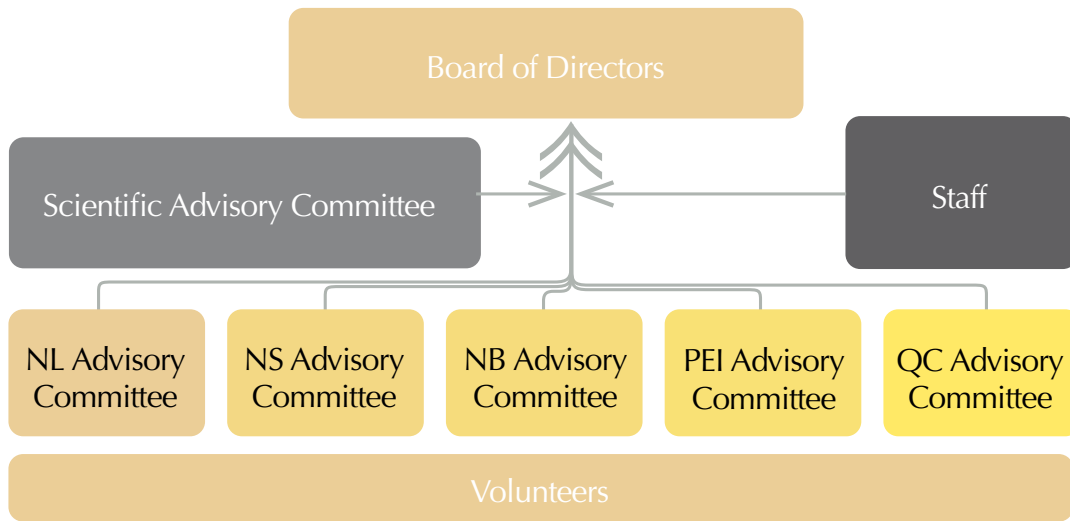
"I also like the process that is used to prioritize the projects that are submitted for funding. The NB team is comprised of individuals from different backgrounds and experiences in the field of conservation. We then have the opportunity to share these experience to fund the best projects possible. These round tables are my favorite part. Opinions and views are shared respectfully among the team and the proof is in the quality of work that is being done by the different groups in New Brunswick."

Savoie encourages others to get involved.

"The ASCF does good work in supporting salmon habitat restoration projects in New Brunswick and across Atlantic Canada. There are many groups across the province that are working hard and always need extra hands, so there are opportunities out there to help if only for a few hours or a day."



# ASCF STRUCTURAL MODEL



## CONSERVATION PARTNERS

The 2016 List of Our Conservation Partners

Abegweit Aboriginal Youth  
Environmental Services  
Abegweit Conservation Society  
Abegweit First Nation  
Abegweit Fisheries  
Aboriginal Fund for Species at Risk  
Agriculture Alliance of NB  
Alcool NB Liquor  
ALUS Canada  
Amec Foster Wheeler  
Arpin Canot Restigouche  
Association de la rivière Sainte-Marguerite  
Association des bassins versants de la Grande et Petite Rivière Tracadie  
Association des pêcheurs sportifs de la Bonaventure  
Atlantic Canada Fish Farmers Association  
Atlantic Salmon Federation  
Atlantic Salmon Research Joint Venture plan conjoint de recherche sur le saumon de l'Atlantique  
AVIVA Community Fund  
Bartibogue Fish and Game Association  
Bassins versants de la Baie des Chaleurs  
Bedeque Bay Environmental Management Association  
Belledune Regional Environmental Association  
Bluenose Coastal Action Foundation  
Caisse Desjardins  
Canadian Forest Service  
Canadian Rivers Institute

Central Prince Grasslands Associates  
Central Queens Branch of the PEI Wildlife Federation  
Centre d'Expertise Hydrique de Québec  
Centre interuniversitaire de recherche sur le saumon atlantique  
Cheticamp River Salmon Association  
Clean Annapolis River Project  
Clean Foundation  
Coasters Association  
Commission environnement Tracadie-Sheila  
Conseil de Gestion du Bassin Versant de la rivière Restigouche  
Conseil des Innus de Pessamit  
Cooke Aquaculture  
Corporation du bassin de la Jacques-Cartier  
Corporation de gestion des rivières Matapédia-Patapédia  
Craig Construction & Cabinet Making  
Community Based Environmental Monitoring Network  
Dalhousie University  
Ducks Unlimited PEI  
Eastern Charlotte Waterways  
École Marée Montante  
École W. F. Boisvert  
Eel River Bar First Nation  
Elsipogtog First Nation  
Employment and Social Development Canada  
Emploi et développement social Canada  
Énergie NB Power

Environment and Climate Change Canada  
Environnement et Changement Climatique Canada  
Environment Canada  
Environment Resources Management Association  
FaunENord  
Fédération des véhicules tout-terrain de Nouveau-Brunswick  
Fédération québécoise du saumon atlantique  
Fisheries and Oceans Canada - Pêches et Océans Canada  
Fondation Héritage Faune  
Fonds de recherche du Québec – Nature et technologies  
Fort Folly First Nation  
Freshwater-Alexander Bays Ecosystem Corporation  
Friends of the Kouchibouguacis  
Gespe'gawaq Mi'gmaq Resource Council Glencore  
Hammond River Angling Association  
Highland Ford  
Hillsborough River Association  
Hydro-Québec  
Indian Bay Ecosystem Corporation  
Institut national de recherche en sciences et technologies pour l'environnement et l'agriculture (France)  
Institut national de recherche scientifique  
J Frank Gaudet Tree Nursery Services



# CONSERVATION PARTNERS

## The 2016 List of Our Conservation Partners

Jardins Vertes l'Avenir  
JD Irving Ltd.  
Kativik Regional Government  
Kedgwick Salmon Club  
Kennebecasis Watershed  
Restoration Committee  
Kingsclear First Nation  
Labrador Hunting and Fishing Association  
Listuguj Fisheries – Listuguj  
Mi'gmaq Government  
Magaguadavic River Salmon Recovery Group  
McLean Foundation  
Mecatina Outfitters  
Memorial University  
Mi'kmaq Confederacy of PEI  
Mi'kmaw Alsumk Mowimsikik  
Koqoey Association  
Miawpukek First Nation  
Ministre du Développement durable, de  
l'Environnement et de la Lutte contre les  
changements climatiques du Québec  
Ministère des forêts, de la faune et des parcs  
du Québec  
Ministre de l'Énergie et des Ressources naturelles  
du Québec  
Ministère des Transports, de la Mobilité durable  
et de l'Électrification des transports du Québec  
Miramichi River Environmental  
Assessment Committee  
Miramichi Salmon Association  
Mitacs  
MRC de la Matapédia  
Municipalité de Causapscal  
Municipalité de Matapédia  
Municipalité de Sainte-Florence  
Municipalité de Tracadie-Sheila  
Municipality of St-Louis-de-Kent  
Municipality of the District of Lunenburg  
Napetipi River Outfitters  
Nashwaak Watershed Association  
National Defence - Défense nationale  
Natural Sciences and Engineering Research  
Council - Conseil de recherches en sciences  
naturelles et en génie  
Nepisiguit Salmon Association  
New Brunswick Community College - Collège  
communautaire du Nouveau-Brunswick  
New Brunswick Department of Agriculture,  
Aquaculture and Fisheries – Ministère  
d'Agriculture, aquaculture et pêches  
New Brunswick Department of Transportation  
and Infrastructure – Ministère de transport  
et infrastructure  
New Brunswick Department of Environment  
and Local Government - Ministère de  
l'environnement et des gouvernements locaux  
du Nouveau-Brunswick  
New Brunswick Department of Energy and  
Resource Development - Ministère des  
Développement de l'énergie et des ressources  
du Nouveau-Brunswick  
New Brunswick Department of Post-Secondary  
Education, Training and Labour - Ministère de  
l'éducation postsecondaire, de la formation et  
du travail de Nouveau-Brunswick  
New Brunswick Energy Institute - Institut de  
l'énergie du Nouveau-Brunswick  
New Brunswick Wildlife Trust Fund - Fonds de  
fiducie de la faune du Nouveau-Brunswick  
Newfoundland Department of  
Natural Resources  
Newfoundland Department of  
Transportation Works  
Newfoundland Department of Advanced  
Education and Skills  
Newfoundland Department of Environment  
and Conservation  
North American Commission for  
Environmental Cooperation  
Nova Scotia Department of Agriculture  
Nova Scotia Salmon Association  
Nova Scotia Student Summer Skills  
Incentive (SKILL)  
NSLC Adopt A Stream  
Nunatsiavut Government  
Nunatakavut Community Council  
Nunavut Wildlife Management Board  
Ocean Tracking Network  
Organisme de bassin versant  
Matapédia-Restigouche  
Organisme de bassins versants de Kamouraska,  
L'Islet et Rivière-du-Loup  
Organisme de bassins versants Manicouagan  
Pabineau First Nation  
Parish Geomorphic (Matrix Solutions)  
Parks Canada - Parcs Canada  
PEI Liquor Control Commission  
Petitcodiac Watershed Alliance  
Pictou County Rivers Association  
Prince Edward Island Department of  
Communities, Land & Environment  
Prince Edward Island Employment  
Development Agency  
Prince Edward Island Department of  
Transportation, Infrastructure & Energy  
Prince Edward Island Department of Workforce  
and Advanced Learning  
Prince Edward Island Forest, Fish and  
Wildlife Division  
Prince Edward Island Watershed Alliance  
Prince Edward Island Wildlife  
Conservation Fund  
Quidi Vidi Rennie's River  
Development Foundation  
R. A. Currie Biological Consultant  
Red Pine Sanitary Landfill  
Regroupements des organismes de bassin  
versant du Québec  
Restigouche River Camp Owner's Association  
Richmond Bay Watershed Association  
Ristigouche Salmon Club  
Royal Bank of Canada Blue Water Fund  
RSP Énergie Inc.  
Sackville Rivers Association  
Sage Environmental Fund  
Salmon Preservation Association for the Waters  
of Newfoundland  
Salmonid Association of Eastern Newfoundland  
Service Canada  
Shediac Bay Watershed Association  
SkillsPEI – Graduate Mentorship Program  
Small Change Fund  
Société Cascapédia  
Société de gestion de la rivière Ouelle  
Société Makivik  
Souris and Area Branch of the PEI  
Wildlife Federation  
South Shore Watershed Association (SWAA)  
St. Mary's River Association  
St. Paul's Salmon Fishing Club  
St-Ignace Golf Club  
Suncor Energy Fluvarium  
Sussex Fish and Game Association  
Syngenta Corporation  
Tobique First Nation  
Tobique Salmon Club  
Town of Lunenburg  
Tri Province Enterprises  
Université Laval  
University of Hull  
University of New Brunswick  
University of Prince Edward Island  
Village de Nigadoo  
Winter River Watershed Association  
Woodlands Nursery Ltd  
WWF Canada Loblaw Water Funds



# CONSERVATION PARTNERS

Our 2016 Conservation Partners

Alcool NB Liquor

Products with this symbol support

Les produits avec ce symbole appuient

PROTECT  
OUR RIVERS



PROTÉGEONS  
NOS RIVIÈRES

A portion of proceeds will be donated to support river conservation projects in New Brunswick.

In partnership with



En collaboration avec

Une partie des bénéfices sera utilisée pour appuyer les projets de conservation des rivières au Nouveau-Brunswick.

PEI Liquor Control Commission

**ISLAND RIVERS - WORTH PROTECTING**

Prince Edward Island  
CANADA  
Liquor Control Commission

**\$0.25, \$0.50, or \$1.00 from every purchase of participating products will be donated to *Island Rivers - Worth Protecting* - a joint project of the Atlantic Salmon Conservation Foundation and the PEI Liquor Control Commission. See shelf for details.**

