Atlantic Salmon Conservation Foundation
Nova Scotia Salmon Association

Summary Outcomes

April 20, 2023 Provincial Symposium - Truro, NS

The path to a healthy and sustainable wild Atlantic Salmon population in Atlantic Canada and in Québec

Partnerships, collaborative conservation, the impacts of acid rain, and the need to leverage applied science and indigenous knowledge at the community level dominated the ASCF's fourth provincial symposium, held at Dalhousie University's agricultural campus in Truro, NS in partnership with the NS Salmon Association.

The **Atlantic Salmon Conservation Foundation (ASCF)**, in partnership with the **Nova Scotia Salmon Association (NSSA)**, welcomed a record number of 77 participants from across Nova Scotia to the fourth provincial wild Atlantic salmon symposium held in Truro, NS on April 20, 2023. The session began with a traditional indigenous smudging ceremony led by **Alanna Syliboy**, representing Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People**.** The ceremony focused on the importance of respecting and preserving Mother Nature and bringing back our wild Atlantic salmon for our collective enjoyment. The importance of leveraging traditional indigenous knowledge and shaping multi-generational salmon restoration and conservation approaches were reinforced throughout the day.

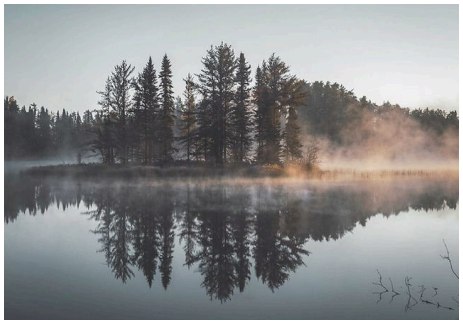
The Honourable Steven Craig provided a keynote address

Charline McCoy, Executive Director of the ASCF, and **Brent Locke**, Executive Director of the NSSA launched the symposium by acknowledging the diversity of participants and reinforcing the importance of collaboration and partnerships. The symposium was organized as a unique opportunity to break down silos by leveraging the knowledge and passion of participants, including community volunteers, members of the scientific community, participation from all three levels of government and First Nations representation. Symposium participants were encouraged to learn from each other and share ideas, knowledge, and community best practices.

The Honourable Steven Craig, Nova Scotia's Minister of Fisheries and Aquaculture, provided greetings on behalf of Premier Tim Houston and MP Mike Kelloway (Cape Breton – Canso), Parliamentary Secretary to the Federal Minister of Fisheries. He acknowledged indigenous and multi-generational participation in the room and shared an update with respect to his department's wild species conservation efforts, including the province's three hatcheries and on-going efforts to deal with the impacts of acid rain and efforts to lower pH levels in Nova Scotia's lakes.

Minister Craig acknowledged the efforts and commitment of Departmental staff and reminded participants that his Department and Government represents the interests of all Nova Scotians, including a strong commitment to species at risk.

The Sackville River watershed



The Minister reinforced the critical importance of partnerships and collaboration and the need for the provincial and federal governments to work together, as well as the opportunity to leverage indigenous learnings and Nova Scotia's post-secondary research capabilities, including Dalhousie University. He shared his passion and personal connection to the Little Sackville River and watershed, and the Sackville River Association.

Stephen Chase, VP Government Affairs with the ASCF, provided an overview of the evolution of the Foundation and its role as an agent and facilitator of watershed conservation activities on behalf of the federal Department of Fisheries and Oceans (DFO) and the Government of Canada. To date, the ASCF has supported 808 wild Atlantic salmon conservation projects across eastern Canada. While the ASCF's trust fund has grown to over $44 million and generates more than $1.5 million in annual project funding, there is an urgent need for much greater funding at the watershed and community level. Through the DFO's **Wild Atlantic Salmon Conservation Strategy** and **species-at-risk initiatives**, the ASCF is in discussions with the Government of Canada to increase the trust fund by at least $50 million, which would flow an additional $3 to $4 million each year (for perpetuity) to local recipient partners in New Brunswick, Newfoundland & Labrador, Nova Scotia, Prince Edward Island and Québec.

Dr. Eddie Halfyard, Chief Biologist with the NSSA, reflected on 25 years of freshwater science experience and provided an update with respect to the ecology of species at risk in Nova Scotia, including recreational wild Atlantic Salmon and Brook Trout fisheries. Dr. Halfyard's research includes acid rain mitigation, biotelemetry, invasive species, and predator-prey relationships.

Dr. Halfyard walked through a series of on-going projects focused on habitat restoration and preservation, including a watershed modelling initiative on the LaHave River. Key takeaways from his presentation include the increasingly important role for applied science and

predictive analytics in modelling at-risk freshwater habitats. The ability to capture primary habitat metrics such as water temperature, water chemistry and water levels were showcased as a key tool in effective watershed stewardship, planning and management. Advanced monitoring technologies such as thermal imaging and in-situ remote sampling probes are now being used the monitor the health of distressed freshwater ecosystems and associated freshwater species interrelationships.

Dr. Halfyard wrapped up his presentation with a call to action – while planning is essential, we should also act: "*while we plan, lets do*". He also referenced the term "*collabitation*", defined as collaboration + anticipation. We need to work together in proactively anticipating and planning for the impacts of acid rain, climate change and human encroachment on our watersheds and species at risk, rather than simply reacting to climate events.

Jason LeBlanc, Director, Nova Scotia Dept. of Fisheries and Aquaculture, reflected on the government of Nova Scotia's focus on maintaining a healthy sportfishing and conservation balance, including the role and function of the provincial **Sportfish Habitat Fund**. He referenced that "*where we can, we will take action*" to support healthy freshwater ecosystems, while working with DFO to implement required regulatory changes. He also discussed the importance of leveraging local knowledge in managing our freshwater fisheries and reflected on a new generation of informed, respectful, and conservation-minded anglers.

A series of watershed updates and project presentations followed, led by:

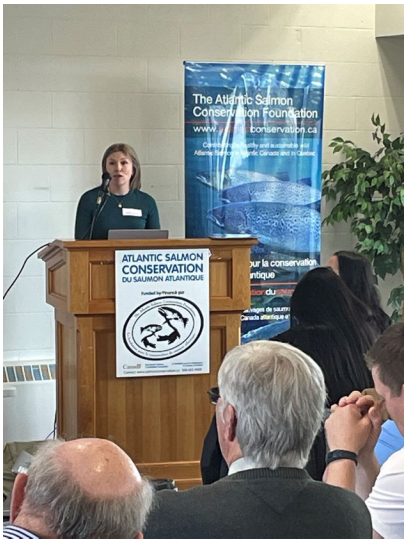
- **Amy Weston**, Program Manager, Adopt-A-Stream
- **Alyx MacDonald,** Manager of Aquatic Systems, The Confederacy of Mainland Mi'kmaq
- **Sam Reeves**, Project Coordinator, Coastal Action
- **Nick MacInnes**, Habitat Biologist, St. Mary's River Association

Amy, Alyx, Sam and Nick collectively reinforced the environmental and human impact challenges facing Nova Scotia's watersheds, including on-going efforts to restore and preserve healthy freshwater ecosystems for future generations that feed into all three coasts – the Bay of Fundy, Atlantic Ocean and Gulf of St. Lawrence.

Nick discussed the role of rock groynes in altering water courses to collect sediment and create gravel bars that support sustainable aquatic habitat. Sam reinforced the critical importance of gathering local information in building salmon knowledge, as well as the role of hands-on community learning and education in building volunteer capacity. Alyx referenced the Confederacy's on-going monitoring, habitat restoration and aquatic connectivity work. Amy showcased the

critically important and highly respected role that the Adapt-A-Stream program serves in resourcing local watershed stewardship and restoration work across Nova Scotia. The program helps build local capacity and streamline the environmental permitting processes.

Rachelle Duval shares an update from DFO's National Headquarters



Rachelle Duval, Manager, Socio-Economic Policy, National Headquarters, Department of Fisheries and Oceans Canada (DFO), travelled from Ottawa to personally participate in the Nova Scotia wild Atlantic salmon symposium. She provided an update with respect to DFO's Wild Atlantic Salmon Conservation Strategy, to be released in 2023. Next step includes the development and publication of a '*what we've heard*' report based on the recently concluded public and stakeholder engagement process. The Department was very pleased with the level and quality of feedback received and are committed to "*stop talking and get acting*". Key actionable themes referenced by Rachelle include enhanced partnerships, collaborative place-based management, addressing priority threats, and data and knowledge mobilization. She extended her appreciation for being able to join the symposium in person and listen and learn.

The symposium wrapped up with an interactive panel discussion moderated by **Jim Jones**, representing the Atlantic Salmon Conservation Foundation, with participation from **Rene Aucoin**, representing the Cheticamp River Salmon Association and Atlantic Salmon Conservation Foundation, **Jason LeBlanc**, Director, Nova Scotia Department of Fisheries and Aquaculture, **Dr. Shelley Denny**, Director of Aquatic Research and Stewardship with the Unama'ki Institute of Natural Resources, **Mark McLean** from DFO, and **Amy Weston**, representing the NS Adopt-A-Stream program.

The session focused on three key discussion themes:

1. **Top wild Atlantic salmon conservation priorities requiring action.**

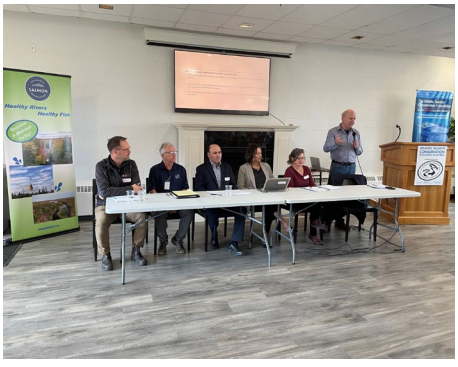
    a) ***Acid Rain****: Acid rain is on on-going challenge for Nova Scotia and a focus of liming efforts.*
    b) ***Climate Change****: Increasing challenges associated with high temperatures, low water levels, winter thaws and catastrophic storm events.*
    c) ***Habitat Restoration****: On-going efforts to restore and preserve critical aquatic ecosystems in NS.*

d) ***Protection of Watersheds on Private Lands****: Human encroachment and pollution is a significant threat to Nova Scotia's watersheds. Urbanization is changing the face of Nova Scotia.*
e) ***Human Capacity****: Building volunteer skills, capacity and capabilities at the community level.*
f) ***Culverts****: A proactive provincial plan is required to address the legacy and future watercourse challenges presented by culverts (an estimated 100,000 stream crossings in Nova Scotia).*

2. Actions required to encourage collaboration and create cooperative partnerships.

a) ***Clarity****: Alignment of DFO, provincial and municipal policies and regulations focused on aquatic species at risk. Timely release of DFO's Wild Atlantic Salmon Conservation Strategy. Alignment of efforts and resources between different federal and provincial government departments.*
b) ***Communications****: Regular forums or gatherings like the Truro symposium.*
c) ***Ability To Share Best Practices****: Leverage proven organizations such as the ASCF and the Adopt-A-Stream program to facilitate the sharing of information, best practices, and applied science. Communities require significantly increased resources to address growing environmental threats.*
d) ***Leverage Both Applied Science and Traditional Indigenous Learnings****: Build community capacity and partnerships with respect to both applied science and traditional indigenous learnings, including a focus on conservation approaches that reflect seven generations of continuity.*
e) ***Build Local Capacity:*** *Focus on local education and awareness building efforts to build local volunteer numbers and capabilities. Look to the resident recreational angler community as conservation advocates and create localized networks of guides, leveraging community-based expertise and skills.*

3. How should funding and expertise be allocated to address conservation priorities.



a) ***Address Knowledge Gaps****: The ability to share and interpret open-source data through applied science, traditional indigenous learnings, and best practices.*
b) ***Local Conservation Resources****: Incremental and permanent (sustainable) funding is required to address escalating local restoration and conservation needs.*
c) ***Communications – Tell Our Stories****: There is a critical need to share and communicate wild Atlantic salmon conservation stories. Can we find a common voice?*
d) ***Education:*** *Education, awareness, and community outreach efforts are required to develop the next generation of community volunteers and conservation advocates.*
e) ***Enabling Technology****: We need to invest in science and advanced watershed monitoring and rehabilitation technologies. We need to shape a provincial plan to proactively incorporate watershed conservation objectives within provincial and municipal culvert design and engineering best practices.*

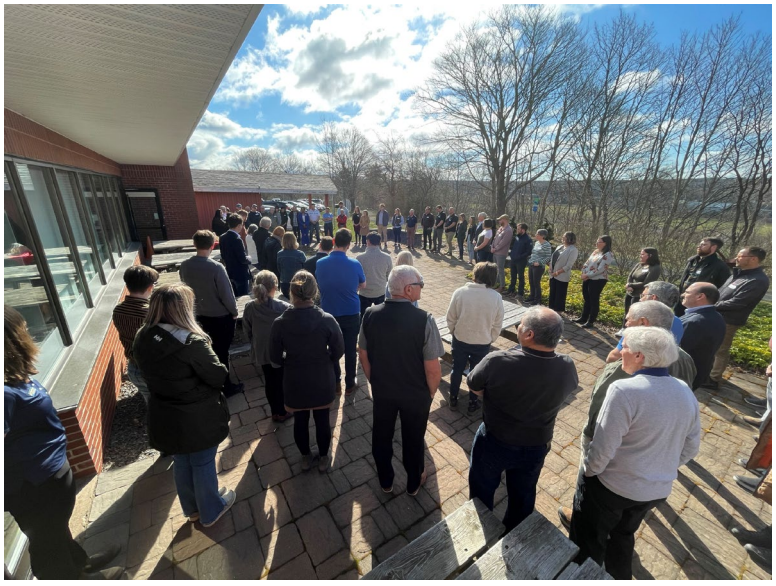
Charline McCoy and **Brent Locke** closed off the symposium by acknowledging the challenges facing wild Atlantic salmon and aquatic species-at-risk in Nova Scotia, but also reflected on the passion and commitment of the symposium participants and the quality of the presentations and discussions.

They acknowledged the active participation of a wide cross-section of local watershed conservation groups and both the provincial and federal government in the symposium, as well as First Nations representation and the personal participation of the Honourable Steven Craig, Nova Scotia's Minister of Fisheries and Aquaculture.

Charline committed to the ASCF producing a summary of the symposium, including key themes and potential action items.

Finally, the pending 2023 release of DFO's **Wild Atlantic Conservation Strategy** was identified as a key milestone in resourcing and actioning community-based wild Atlantic salmon conservation activities.

Our future lies in working together and respecting Mother Nature.



Attachment A: ASCF Background

The ASCF, founded in 2007, was established as an endowment fund by the Government of Canada to create lasting financial support for Atlantic salmon conservation projects. Since its inception, it has granted more than $14 million to 808 projects, including applied scientific research grants and Indigenous-led projects. The outcomes of this work speak for themselves with more than 100 km^2 of Atlantic salmon habitat opened or improved.

The ASCF Board of Directors also approved a renewed strategic plan in the spring of 2022 focused on transformational growth. The plan will guide the Foundation's direction and priorities for the five-year period extending from mid-2022 to 2027, including the goal to double the size of the ASCF's trust fund and the funds it distributes on an annual basis in support of Atlantic salmon conservation efforts in New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island and Québec.

Sixty volunteers representing government, research, academic and several non-governmental organizations from five provinces support the work of the Foundation and are contributing their time and efforts in organizing the five provincial symposiums. The next symposium will be held on April 25th in Québec City.

The ASCF's Vision, Values and Mission are well positioned for transformational growth:

Vision:

To contribute to the attainment of healthy and sustainable wild Atlantic Salmon in Atlantic Canada and in Québec

Values:

Inclusiveness and Partnerships, Volunteerism, Balance and Integrity

Mission:

To promote enhanced community partnerships in the conservation of wild Atlantic salmon and its habitat in Atlantic Canada and Québec

Attachment B: ASCF Outcomes

The ASCF has delivered over $14 Million in funds to 808 Projects since 2008. Through effective governance, the original $30 million trust fund has also grown to over $44 million.

- 113 million square meters of habitat access opened and 2.2 million square meters of improved habitat.
- 8,989 volunteers contributed 211,822 hours of effort.
- 155,241 individuals involved in education & awareness.
- $1.5 million contributed to 80 Indigenous organization projects.
- $2.5 million contributed to 75 applied scientific research grants, aimed at improving the effectiveness of Atlantic salmon conservation efforts.
- 2,958 jobs sustained, mostly in rural areas - ASCF funded projects help sustain an eco-tourism industry worth several hundred million dollars annually in 5 provinces.
- ASCF funds have leveraged more than $62.3 million in overall project valuation from other sources for an impressive leveraging ratio of 5:1.

Geographic distribution of ASCF funds since 2008:

- New Brunswick: $3.37 million
- Newfoundland & Labrador: $3.52 million
- Nova Scotia: $1.49 million
- Prince Edward Island: $1.39 million
- Quebec: $2.60 million
- Scientific Advisory Committee: $1.77 million