

ASF Strategic Plan Report to Boards of Directors

Robert Otto – COO

November 2022

I am pleased to provide an update on ASF's progress against our Strategic Plan (Blueprint for Saving Wild Atlantic Salmon) for the Autumn 2022 joint Board meeting. The last in-person meeting in Autumn was three years ago in 2019, and we have had to adjust to virtual meetings and presentations in the interim. I know ASF staff are looking forward to another good turnout of Directors and National Council members in New York in November, after the success of the meetings in Spring 2022.

ASF staff were the driving force on actions to treat Lake Brook and the SW Miramichi river for the smallmouth bass eradication project. It was a mammoth effort to get this treatment delivered in September 2022. Although the Lake portion of the project was not treated, the progress made on limiting impacts of smallmouth bass in the watershed is substantial. It also demonstrated the ability and capacity to deliver on an incredibly complex and involved operation across many partners, organizations, volunteers and staff. Research staff had a very busy and successful field season, tagging 288 smolts from the Cascapedia, Restigouche and Miramichi rivers, as well as deploying 114 satellite tags on salmon at Greenland. Summer and autumn are busy times for data acquisition from our telemetry receivers, with most of those data in hand currently. US Operations continues with efforts at dam removal on the Kennebec river and is preparing for a very busy summer 2023 program.

ASF continues our assessment of progress against the Objectives and Activities contained in ASF's Strategic Plan. In the previous report ASF identified several areas where a pivot was needed after concluding limited progress was possible against the original activities – and this practice continues in this report. Further, this report notes efforts to make progress against those new or revised actions. For example, ASF is in regular contact with Policy staff from the DFO Minister's office, and lead departmental staff, on the emerging Wild Atlantic Salmon Conservation Strategy, and is proposing Wild Salmon Watersheds as a delivery mechanism for the Strategy.

Below please find a short overview of progress for each of the four Goals of the "Blueprint" Strategic Plan, and a more detailed assessment of ASF's progress against planned activities. During Winter 2022-23, ASF staff will prepare an update to the 2018-2023 ASF Strategic Plan for the next implementation period of 2023-2028.

Goal #1 – Ensure Fisheries are Sustainable

Good Progress continues to be made for this Goal overall.

The 2022 Greenland salmon fishing season continued with changes from 2021, specifically staggered opening dates from south to north Greenland and a separation of the overall quota between these areas. This was intended to ensure access to salmon for more northerly communities where salmon typically arrive later in the season. As the 2021 season resulted in large overharvest, for 2022 the Greenland government agreed to close the fishery when 49% of the quota was reported. This figure was based on analysis of previous year's harvest reporting, and was chosen to allow for delays in fishers' reports being submitted as well as harvests to stop once closures are announced. To date the Greenland fishery is reported at 23.6 tonnes compared to a 2022 quota of 27.0 tonnes. Given mandatory reporting requirements in Greenland over the past several years coupled with the closures at 49% of quota, unreported harvest should be low for 2022.

ASF partnerships and relationships with indigenous groups and communities continues to grow. Our well-established partnerships in New Brunswick and Quebec on the striped bass fishery, fish capture and tagging, and cold-water refugia programs continue to build connections between our organizations. Relationships continue to develop with the Wild Salmon Watersheds program as a new focal point of discussions and partnership with Unama'ki Institute of Natural Resources in Cape Breton and Pabineau First Nation in New Brunswick. We've met with Gesgapegiag First Nation and the Mi'kmaq Malliseet Aboriginal Fisheries Management Association (works with several First Nations, including Gesgapegiag, Gaspé, and Listuguj) as part of engagement and gauging interest in the WSW program in Quebec, specifically on the Gaspé peninsula. ASF's relationship with Mi'kmaw in New Brunswick remains solid despite the situation that unfolded in September with the smallmouth bass eradication project.

DFO's pilot program on the Miramichi river for their Precautionary Approach (PA) to wild Atlantic salmon management continues. Currently ASF is not aware of any expanded plans to assess salmon populations, and angling continues to be the sole focus. We know that C&R angling impacts to salmon populations are minimal and ASF believes the overall conservation benefits of angling far outweigh minimal impacts. DFO continues to resist any reversal of a recent decision in Gulf Region to reduce the daily C&R limit from four to two bright salmon. ASF recently worked with a wide group of NB salmon conservation groups on a letter to the Minister of Fisheries and Oceans asking for the decision to be reversed.

Goal #2 – Understand Salmon Mortality - Tracking Programs

Good Progress has been made overall for this Goal.

ASF's Research team assisted with kelt capture work in early spring 2022 with some rivers experiencing very early kelt migrations. Smolt wheels were installed on the NW and SW Miramichi rivers and the Cascapedia river as part of ASF's long-term monitoring program, to capture and tag smolts. In 2022 ASF and partners tagged 288 smolts including 100 from the NW Miramichi, 80 from the SW Miramichi, 63 from the Cascapedia, and 45 from the Restigouche.

Following from our success in deploying satellite tags on salmon at West Greenland in 2021 ASF was planning for the same number of deployments in 2022, however through partners and the ESRF program we were able to increase the number of satellite tags available for deployment. Experience garnered from our field efforts in 2021, coupled with what appears to be a high concentration of salmon in the Qaqortoq area meant a smooth field operation for 2022. ASF deployed 114 satellite tags and 95 acoustic tags on salmon at west Greenland in September and October 2022. Some of these salmon were fitted with both tag types. Sample sizes are subject to revision after consolidation of capture records. Please see the Research and Environment department report for full details.

ASF tagged 2 adult striped bass in the lower reaches of the SW Miramichi river in October 2022. This project was launched in response to large abundances of striped bass being observed in these areas in autumn 2021. Striped bass return to the river to overwinter after spending the summer months in the marine waters of the southern Gulf of St. Lawrence. The project is intended to explore movements and behaviour of adult striped bass in freshwater and infer possible impacts on Atlantic salmon. Deployed tags will also increase our sample size for analysis of striped bass movements and impacts on smolts in spring. ASF is seeking clarification on our tagging permit for 2022 and it is possible additional striped bass could be tagged before winter.

Goal #3 – Contain and Reduce Impacts of Open Net-Pen Aquaculture

Good progress has been made for this Goal.

ASF continues with our Aquaculture Campaign and using a distributed leadership model of delivery. The key message of the campaign is that Open net pen salmon aquaculture is having significant negative impacts on Canada's wild Atlantic salmon and their marine habitat and that Canada must take responsibility for these impacts and develop timely and effective solutions. The campaign will ensure decision-makers accept the science surrounding ONP aquaculture and build a broad base of support across the conservation community to demand change.

John Burrows and Steve Sutton lead ASF's response to the American Aquafarms massive salmon farm proposal for Frenchman Bay, Maine. ASF worked to support local groups fighting

the American Aquafarms semi-closed containment salmon farms proposed for Frenchman Bay in Maine when the Maine Department of Marine Resources (DMR) terminated their site lease permitting process for the farms in the mid-April 2022. Maine DMR's decision was based on the inability of American Aquafarms to provide the genetic and pathogen information for the strain of salmon eggs they wanted to use for the project, which were going to come from AquaBounty. At the end of May the proponent filed suit against the State over the decision, but in July withdrew the suit stating they wanted to pursue a cooperative approach and would file a new application in the future.

Goal #4 – Improve Freshwater Connectivity and Productivity

Good progress has been made for this Goal.

ASF is improving fish passage, particularly in Maine under our US Programs. In July 2022, the Walton's Mill dam in Farmington, ME was removed opening up 54 miles of important cold-water spawning and rearing habitat in this Sandy River tributary of the Kennebec river watershed. This is the largest dam removal project that ASF has undertaken under the Maine Headwaters Project to date. ASF staff continue to work to secure funding from various federal grant programs for 2023. The draft 2022-23 ASF budget includes large, restricted funding in support of a large roster of projects slated for activity in summer 2023.

Jon Carr is serving as one of our three expert witnesses in the Kennebec River ESA lawsuit against Brookfield. John Burrows continues to coordinate with our partners in Maine and Jon and Heather Perry from ASF's Research and Environment department are supporting the lawsuit in federal court. In addition to Jon's affidavit, we expect depositions will be scheduled in the coming weeks.

Wild Salmon Watersheds (WSW) conceptual development has continued and we have launched pilot programs in three watersheds – the Terra Nova river in Newfoundland and Labrador, the sister rivers of Cheticamp and Margaree in Nova Scotia, and the Nepisiguit river in New Brunswick. ASF WSW and Regional staff visited prospective locations for a fourth pilot on the Gaspé peninsula in Quebec and spoke with numerous prospective local leadership groups. ASF continues to work with FQSA as a program partner in Quebec. ASF expects to accept expressions of interest / applications from interested partners in the coming weeks and add a location(s) to the WSW pilot program. An expert facilitation process has been developed and each of the three existing pilot locations has completed a first facilitated session with all watershed leaders. We are scheduling subsequent facilitated sessions and technical supports (GIS and database management).

ASF continues to engage with the Province of New Brunswick on the expansion of provincial protected areas from 4% to 10%. As we've highlighted previously, ASF's proposals to government included additional known cold-water sources across the province as part of the expanded protected areas. You can find the maps of currently identified areas within New

Brunswick, updated as new areas are identified, on the following site:

https://www2.gnb.ca/content/gnb/en/departments/erd/promo/nature_legacy/involved.html

Scroll down the screen and click on the “View Map” button.

ASF and partners were able to deliver smallmouth bass eradication action on Lake Brook and the SW Miramichi in September 2022. Circumstances including lawsuits, injunctions and illegal occupations of crown lands delayed our plans from August, and ultimately resulted in the project proponent not pursuing the full treatment of Miramichi Lake, the brook, and river. We continue to work with project partners to share in the significant project expenses, and ASF is seeking legal advice on any actions toward recovery of costs to the project. The complex delivery was executed extremely well, the treatment was delivered as scheduled in one day, all crews carried out their assignments fully, and there were no safety or health issues. It is an open question as to what happens in the future with smallmouth bass in the Miramichi. Although the full treatment of the lake, brook and river was not completed, the treatment of the brook and river in September was a major achievement for ASF and partners. A presentation is schedule for the Board meeting on 10 November 2022.

The cold-water refugia project partnership between ASF, indigenous, academic and eNGO organizations continues. The program began in 2019 and progresses through to 2023 with the goal of enhancing 10 sites throughout the watershed. To date, four sites have been successfully constructed. The six sites remaining are on track for construction in 2023. Four of the six sites have been surveyed and designs completed and are in the permitting phase. The final two remaining sites have been chosen and will be surveyed and designed this fall/winter. All six sites will be ready for construction in the summer and fall of 2023.

Appendix 1 – Assessment of 2018-19 Strategic Mileposts in Support of ASF Blueprint

A “stoplight” approach is being used to monitor and report on progress of the Blueprint:

- **Green** – On track; good progress being made consistent with plan
- **Yellow** – Some progress being made; needs attention to avoid falling behind planned targets
- **Red** – Little progress; requires focused effort to get back on planned track

The reporting structure below within each of the four goals in the Blueprint follows this example:

Blueprint Activity

Blueprint Outcome/Output

Milepost

Each Activity of the Strategic Plan (SP) is included in the assessment below. We gauged progress against each of the Outcomes / Outputs associated with the various Activities from the Strategic Plan (multi-year) by determining Mileposts for the 2020-21 ASF fiscal year (annual) that move us substantially toward our targets. Each Milepost was included in at least one of the Operations Departments (Regional Programs, Research and Environment, Communications, and Outreach and Engagement) workplans for 2020-21 and will be for 2021-22, unless otherwise indicated.

Goal #1 – Ensure Fisheries are Sustainable

- **Pursue and maintain conservation agreements for Greenland and Faroes commercial WAS fishery.**

Signed agreement to suspend commercial fisheries.

COMPLETED

- **Advocate to Canada, USA, and Greenland to set a low annual subsistence quota for Greenland through NASCO that is consistent with scientific advice (ICES), including reliable monitoring and reporting systems.**

Greenland implements an annual limit on their subsistence fishery and introduces effective monitoring/reporting of catch for the Greenland subsistence harvest.

Good Progress

- **ASF actively engages communities and fishers in Greenland in salmon research.**

Build sense of cooperation with other WAS conservation partners.

Good Progress

- **Establish and develop strong and productive working relationships with leading First Nations (FN) as partners in conservation.**

A well-established network of contacts in select FN communities and aboriginal groups throughout the regions through which ASF can regularly connect and share information;

Good Progress

FNs have the opportunity to showcase how they value the resource.

Some Progress

Invitations to attend meetings on WAS conservation as a trusted partner, including First Nations, DFO, and the Province of Quebec.

Good Progress

- **Increased engagement and direct involvement of FN in salmon research, including joint research projects that bring real benefits to FN communities.**

Develop a sense of partnership in defining and understanding salmon conservation issues of mutual interest through the application of both traditional knowledge and scientific methods of understanding.

Good Progress

Direct and meaningful inclusion of Indigenous people (e.g., placements, cooperative work and training opportunities) in ASF research and conservation activities.

Some Progress

- **Actively advocate for, where abundance permits and is agreeable by FN communities, alternative species (e.g., striped bass, snow crab, lobster) substitution for salmon in FN fisheries.**

Increasing FN harvest of alternate fish species with a corresponding decrease in salmon harvest.

Little Progress

Adjustment / Pivot: Continue to support FN harvests in other fisheries, but ASF cannot effectively advocate for corresponding decreases in FSC salmon fisheries.

- **Actively participate in DFO’s Working Group to develop implementation plans for the recently (2017) revised WAS Conservation Policy. These plans must respect new inputs available since the WASCP was first drafted in 2009 (MAC recommendations, DFO Forward Plan, Standing Committee recommendations and Minister’s response).**

A clearly defined policy and regionally based and focused implementation plans for conservation and restoration of WAS based on the Precautionary Approach.

COMPLETED

A single policy document with detailed implementation plans that will be presented to ASAC in spring 2019 and reviewed every two years going forward; number of ideas and suggestions adopted by Working Group

Little Progress

- **Advocate to and work with the appropriate management agencies to institute river-specific recreational angling through the Precautionary Approach (PA) framework in all WAS recreational fishery regions.**

Sustainable, abundance-based harvest levels and fishery management plans based on the Precautionary Approach;

Some Progress

Increased sustainability in other fisheries (i.e., First Nations, Greenland, SP+M).

Some Progress

Additional rivers and regions selected for use of Precautionary Approach in Gulf Region, as well as Maritimes and Newfoundland and Labrador.

Little Progress

Adjustment / Pivot: DFO has selected the Miramichi as a pilot site for establishing the PA. Until that project is completed and implemented (ASF is part of that working group with DFO) this outcome, and work in support of it, is paused.

- **Advocate for and participate as appropriate with management agencies to expand river-specific monitoring, stock assessment, in-season review(s) and fishery/harvest management.**

Abundance-based harvest levels (Precautionary Approach); Expand existing index river monitoring;

Little Progress

Increased accuracy and precision of assessments through new approaches, partnerships, and technologies;

Little Progress

New index rivers established in key/under-represented areas;

Little Progress

Improved catch reporting and statistics in all Provinces, including expansion of electronic systems

Little Progress

Adjustment / Pivot: DFO is limited at least by budget and will not on their own expand the number of index rivers or monitoring sites. The forthcoming Wild Atlantic Salmon Conservation Strategy has the potential to address the DFO's budget issues. ASF will work through our partners and also the Wild Salmon Watersheds program to help achieve these outcomes.

Goal #2 – Understand Salmon Mortality - Tracking Programs

- **Expand tracking within GoSL, Newfoundland and Labrador, and Greenland, both in types and numbers of tags and receiver arrays / positions through ASF and partnered programs.**

Determine specific spatial distributions in the marine environment throughout their residency (i.e. from the time they leave freshwater to their return from Labrador Sea and Greenland); Determine migration success through defined stages of the marine migration.

Good Progress

- **Preparation and publication of peer-reviewed manuscripts and technical reports through in-house research staff and other partnerships; ensure circulation to Councils, affiliates, partners and other interested groups and availability of all materials on the ASF website.**

Peer-reviewed publications; presentations at conferences and symposia; internal / field report series established.

Some Progress

- **Analyze results from tracking programs with known patterns of oceanographic and environmental conditions.**

Determine why fish are detected where they are and when they are there. We do this by comparing/contrasting biotic and abiotic variables from locations where fish are and where fish aren't to infer what type of factors determine their marine distribution; Determine how annual variation in identified biotic and abiotic predictors of the marine distribution of Atlantic salmon covary with migration success through different migration stages.

Engage with various institutions to scope out next steps for linking ASF tracking data with physical and biological oceanographic features.

Good Progress

- **Advocate to the relevant management agencies in Canada and the USA, as well as NASCO to implement effective mitigation measures to protect and conserve WAS in coastal and marine ecosystems.**

Minimize unintended population-level impacts on WAS.

Seek out partnerships and R&D opportunities for novel technologies that will advance our understanding of spatial and temporal distribution of salmon in the marine environment.

Good Progress

Advising on policy development to conserve and protect wild Atlantic salmon.

Some Progress

Respond to ASF science needs. Conduct reviews and assessments, work with councils and affiliates, speaking engagements.

Some Progress

Goal #3 – Contain and Reduce Impacts of Open Net-Pen Salmon Aquaculture

- **Engage with appropriate partners to ensure ASF contributes to the potential development of a federal Aquaculture Act, and to the strengthening of the Fisheries Act and associated regulations and policies resulting in an appropriate legislative framework to better protect WAS from impacts of the salmon aquaculture industry.**

Any development of an Aquaculture Act contains provisions to protect WAS populations and focuses on industry best practices and strong regulation and enforcement.

Some Progress

Inclusion of protections from aquaculture industry in Fisheries Act legislation and associated regulations, policies and codes of practice.

Good Progress

- **Advocate for the creation of ONP salmon aquaculture-free zones based on current distribution of aquaculture sites, areas suitable for industry expansion, and WAS rivers; integrate with efforts to establish protected WAS watersheds.**

Agreement and support from appropriate management authorities on concept of aquaculture free zones.

Little Progress

Adjustment / Pivot: ASF will continue to work to eliminate impacts of ONP aquaculture through our advocacy and legal options as necessary, but we should not continue expending any money and time to establish aquaculture-free zones in direct collaboration with provincial governments in Atlantic Canada. Involvement with the GSFR alliance will be valuable to ASF's open net pen salmon farming campaign, the development of which is well underway.

Good Progress

Goal #4 – Improve Freshwater Connectivity and Productivity

- **Advocate for and support establishment of wild WAS watersheds where WAS populations can flourish.**

Identify candidate watersheds; Identify stakeholders and prepare communication plan.

Good Progress

Introduce concept to stakeholders; Determine levels of support and main challenges; Collaborate with stakeholders to achieve as many common targets as possible.

Good Progress

- **Work in coalitions to address the impacts of hydropower and non-hydropower dams through removals, better upstream and downstream fish passes, and improved policy, regulations and license requirements that improve flows for fish.**

Further progress to eliminate barriers to fish passage, particularly in N.E. USA;

Good Progress

Update inventory of barriers to fish passage in Atlantic Canada and Quebec, coordinated with Councils and local affiliates.

Little Progress

Adjustment / Pivot: This is a huge effort to complete and is currently not a high priority. ASF and partners will work to remove any barriers, as necessary.

Improved access to river and lake habitats;

Good Progress

Increased knowledge of barriers limiting freshwater production of WAS;

Good Progress

Increased production potential of WAS in high quality habitat where fish passage is improved;

Good Progress

Increased resilience of watersheds to climate change;

Good Progress

Increased populations of other species salmon depend on such as river herring and shad.

Good Progress

- **Advocate to the appropriate agencies for stricter licensing processes and consultations during planning and design phases of new hydro dams.**

Intervention in license, legal, and regulatory procedures.

Good Progress

ASF, Councils, and affiliates play key collaborative role in all discussions regarding new licensing for proposed and existing hydro dams, ensuring that the needs of functional fish passage facilities for WAS are a top priority to be addressed by proponents and regulators.

Good Progress

- **Further develop and promote the content in ASF's WAS Freshwater Recovery Strategy to make it more consumable by affiliates, watershed and FN groups conducting habitat restoration programs.**

Materials and documentation readily available and updated as needed on ASF's website to assist and guide groups that are planning WAS restoration work in their watershed(s); Meetings with, presentations to Councils, Affiliates and other conservation groups to highlight value of the Strategy; Expert advice given to groups and collaborative efforts to restore and improve freshwater productivity based on the tenets of the Strategy.

Some Progress

WAS freshwater conservation and restoration activities follow guidance provided by the Strategy.

Good Progress

- **Encourage and actively support identifying land-use issues in all regions that impact WAS and use results to guide focused, collaborative regional advocacy and restoration efforts.**

Regional advocacy plans to address prioritized land-use impacts on WAS.

Little Progress

Adjustment / Pivot: Developing these plans is currently not a high priority to complete. ASF and partners will continue to work and solve land use impacts on WAS as they become known to us. Wild Salmon Watersheds will include land use issues in those watersheds that become part of the network.

- **Support and undertake baseline requirements, help to secure funding sources, and ensure all permitting is completed for smallmouth bass (SMB) eradication from Miramichi Lake by 2019, and similarly for any other invasive species threats that arise.**

Proponent is identified for eradication program;

COMPLETED

Permits obtained, consultations undertaken, funding secured;

Good Progress

Physical infrastructure for eradication activities in place.

COMPLETED

SMB eradication completed by September 2020.

NOT POSSIBLE