ASF Strategic Plan Report, 2021

ASF adjusted to another year of pandemic operations very well. We did our work where needed through electronic means and were able to steer our way to solid progress, particularly over the spring and summer field seasons. Our Research and Environment program deployed an increased number of tags and devices in 2021 as a result of additional tag availability from those not deployed in 2020 and through involvement in partnered programs like the Environmental Studies Research Fund (ESRF). The effort to get to the cusp of eradicating smallmouth bass on the Miramichi would be impressive without the added pressures of planning and executing during Covid and although disappointing, puts us in a strong position for 2022.

ASF continues our assessment of progress against the Objectives and Activities contained in ASF's Strategic Plan. As previously described in reports, this Plan attempted to measure progress against Goals and Objectives based on ASF's own actions and not be dependent on other organizations for successful action. In the previous report ASF identified several areas where a pivot was needed after concluding limited progress was possible against the original activities. This report summarizes efforts to make progress against those new or revised actions. For example, we've become members of an international coalition to assist with efforts to contain and reduce the impacts of open net-pen aquaculture and will use that partnership to inform approaches to activating grassroots campaigns across Atlantic Canada.

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.

Goal #1 – Ensure Fisheries are Sustainable

Good Progress continues to be made for this Goal overall.

The 2021 Greenland salmon fishing season included changes from previous years put in place by the Greenland government, 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. The latest figures available indicate a harvest of 25 metric tonnes (MT). As outlined in the President's report, the Greenland agreement was paused this year due to uncertainties and delays with elections for KNAPK, the agreement's Greenland partner.

ASF continue to support the First Nations fishery for striped bass in the Miramichi and the fishery for spring 2021 employed four nets, up from two previously. An early spring resulted in the fish moving upstream very early, and only the tail end of the run was effectively fished. The autumn fishery is currently very strong, and indications are the fishery for 2021 will be the most productive yet.

For 2021 our Research team was able to travel to Greenland for capture fieldwork to deploy satellite tags and included an increased effort at communications with and involvement by Greenland fishers and residents in the program. ASF once again used local boats and captains during capture fishing, with more widespread communications in the communities before our crews arrived. Our team took precautions to minimise Covid concerns before arrival and raised awareness of the research program and its objectives. ASF ended up PSAT-tagging 70 salmon primarily using two two locally owned boats, with a third boat contributing several salmon captures on weekends.

ASF's Wild Salmon Watersheds (WSW) program includes several elements of Canada's Wild Atlantic Salmon Conservation Policy Implementation Plan (IP), and discussions continue with DFO to support the program and help DFO achieve their publicly stated progress. This is particularly timely as DFO's IP is to conclude at the end of 2021. We are aware that DFO has begun to discuss a new IP with stakeholders. The WSW program has the potential to resurrect and focus attention on new wild Atlantic salmon assessment sites. However, this will depend on the local priorities and data needs, but we expect at least some additional sites through the WSW program in the future.

Goal #2 – Understand Salmon Mortality - Tracking Programs

Good Progress has been made overall for this Goal.

As presented in the May 2021 report, ASF is a major partner in the Environmental Studies Research Fund (ESFR) program which is expanding tracking programs across eastern Canada. ESRF tags and transmitters are being deployed on rivers where ASF traditionally captures fish for tagging studies including the Restigouche, Cascapedia, and Miramichi. The following chart outlines the **numbers of tags** deployed and the target sample (in brackets):

	Restigouche	Cascapedia	Miramichi
ASF smolts	80 (80)	60 (60)	160 (160)

ESRF smolts	141 (up to 140)	70 (70)	70 (70)
ESRF kelts	51 (30)	22 (20)	31 (26)

Additional salmon were tagged on the Nepisiguit River in New Brunswick with 24 acoustic and satellite tags total. With kelt tagging, the fish are sometimes double tagged with both an acoustic and satellite tag, so that the number of tags does not always equate to number of fish. Partners involved in the tagging included Miramichi Salmon Association, Anqotum Resource Management, GMRC (Restigouche), DFO, Cascapedia River Society, and Gespe'gewaq Mi'gmaq Resource Council.

Experience with travel restrictions in 2020 guided our field planning for 2021, and our efforts have paid off with the large number of tags deployed. Additionally, after not being able to tag at Greenland in 2020 and after deploying 32 satellite tags on adult salmon in 2018 and 2019 combined, ASF's capture crew was able to deploy 70 satellite tags in 2021. This is a significant step in starting to understand Atlantic salmon migrations back to North America, with sample sizes larger than anything previously carried out. Data from the deployed tags is highly anticipated and will assist with determining subsequent deployment plans.

ASF R&E staff provided an increased level of support to US Programs in 2021 particularly on issues associated with the Kennebec River. The support helped with required reviews of FERC's relicensing of the Shawmut Dam and Brookfield's latest Species Protection Plan. Upcoming legal action and anticipated depositions will further require the expertise and support of ASF R&E Department to US Programs staff.

A significant portion of ASF's field season is spent preparing, deploying, retrieving, and downloading data from a huge array of sonic receivers used within rivers in Atlantic Canada, to our estuaries and bays, and extending to the Strait of Belle Isle and the Labrador Sea. Graham Chafe, ASF Senior Biologist, recently gave a presentation on this aspect of tracking program logistics at a virtual Research and Environment committee meeting.

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

Some progress has been made for this Goal.

Based on the pivot outlined in May 2021 Strat Plan report, ASF has made progress on two new fronts supporting this strategic Goal. First, ASF has joined the Global Salmon Farming Resistance (GSFR) alliance, coordinated by the NGO *Re-Wildling Argentina*. Argentina recently became the first nation to ban open net salmon farming due to the environmental impacts of the industry. GSFR is a global coalition of organizations, civil groups, and

activists around the world united with one vision: oceans free from open net salmon farms and depleted marine ecosystems thriving once again. Steve Sutton is a member of the working group that shares information and actions that can bring a halt to the expansion and remove open net salmon farms from the ocean globally. The group is now seeking funding to directly support local campaigns against ONP salmon farming around the globe.

And secondly, to reduce the negative effects of open net pen salmon aquaculture on wild fish and the environment, and block industry expansion into new areas, ASF has designed a campaign to launch in Q1 2022 focused on the federal government and its commitments made to the North Atlantic Salmon Conservation Organization to eliminate escapes and reduce the effects of aquaculture parasites on wild fish to minimal levels. The campaign is based on the principles of engagement organizing, where local partners and individuals are empowered and encouraged to act, make statements, and react to developments. ASF will provide strategic guidance and help directly with high level advocacy to officials and elected representatives. The timeframe for the campaign is a single federal election cycle in Canada. Given a minority Liberal government was re-elected in September 2021, this cycle will likely last for 2-3 years. Over the next two months, ASF will cultivate local partners and develop specific materials and plans for the campaign.

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. This summer we completed construction of a new road-stream crossing on Cummings Brook, a tributary of Temple Stream in the Town of Farmington. Next year, we are slated to begin construction of the Walton's Mill Dam Removal and Park Project that will restore access to more than 50 miles of high-quality salmon habitat in Temple Stream. ASF plans to construct fishways at two dam sites in 2022: Branch Pond (Sheepscot River) and Baskahegan Dam on the Mattawamkeag River (Penobscot River). ASF will soon hire an engineer to do final fishway engineering and design plans at two small dams on Eskutassis Stream, a tributary to the Passadumkeag River for construction for the summer of 2023.

The Kennebec River has been a priority for ASF dating back to the mid-1990s. ASF and several partners filed a lawsuit in U.S. federal court against Brookfield Renewable Power for violations of the Endangered Species Act (ESA) at four of their dams on the Kennebec River. Subsequently, ASF and the other groups asked the federal court to issue a preliminary injunction to stop or curtail operations at the four dams during autumn and spring downstream migration periods. ASF has committed significant time preparing several regulatory filings over the summer, including comments on the Federal Energy Regulatory Commission's (FERC) Draft Environmental Assessment for the relicensing of the Shawmut Dam as well as commenting on Brookfield's latest proposed Species

Protection Plans (SPPs) for the dams. The International and Government Affairs report contains an extended overview of ASF activities on the Kennebec.

Wild Salmon Watersheds (WSW) conceptual development has continued since Geoff Giffin completed his work with ASF in spring of this year and presented his progress at the Board meeting of 6 May 2021. Feedback received on his presentation and the program concept and design was uniformly positive and excited. An in-depth presentation is planned for the Board meeting on 11 November 2021 focussing on progress since May 2021 including preparations to launch a pilot program in autumn 2021.

ASF continues to engage with the Province of New Brunswick on the expansion of provincial protected areas from 4% to 10%. ASF's proposal to government included additional known cold-water sources across the province as part of the expanded protected areas. The government of New Brunswick continues to make announcements of new areas protected, and ASF continues to be pleased with the locations identified. You can find the maps of currently identified areas within New Brunswick on the following site: https://www2.gnb.ca/content/gnb/en/departments/erd/promo/nature_legacy/involved.html

The Miramichi Lake smallmouth bass eradication project, as you are most likely aware, did not execute in August and September 2021. All permits, equipment, human resource, and infrastructure were in place to start the eradication on the morning of 17 August 2021, when protesters at the lake delayed project commencement and ultimately caused the project to be postponed until 2022. Please refer to a more fulsome description in the Regional Affairs Committee report. Also, a comprehensive presentation is planned for the Board meeting on 11 November 2021.

The cold-water refugia project partnership continues since starting in 2020. It builds off 9 previous enhancements by the MSA between 2014-2019. Thermal refugia are key to helping the watershed become more resilient to climate change and provide salmon critical habitat during warm periods in summer. Three sites have been completed so far (Wildcat Brook, McKenzie Brook, and Morse Brook), with five planned for construction in 2022. Surveys, designs, and construction are primarily funded through DFO's Nature Fund, with additional funding support from the Atlantic Salmon Conservation Foundation.