



Department of
Environmental
Conservation

Lake Ontario Atlantic Salmon Fisheries Management Plan 2023-2026

Kathy Hochul, Governor | Basil Seggos, Commissioner



Lake Ontario Atlantic Salmon Fisheries Management Plan 2023 - 2026

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Management philosophy

Atlantic salmon (*Salmo salar*) will be managed to provide for enhanced species diversity in Lake Ontario and the expansion of year-round tributary fishing in select Lake Ontario tributaries; where possible, taking advantage of opportunities for increasing natural reproduction to reestablish wild populations of this native species.

Goal

Provide an Atlantic salmon fishery during the summer months in the Salmon River; develop fall/winter fisheries in select tributaries; and increase production of wild Atlantic salmon where possible.

Guiding principles

- The Atlantic salmon fishery in Lake Ontario and its tributaries will be managed as a recreational sportfishery that is dependent on stocking.
- The primary focus of management is to increase numbers of adult Atlantic salmon returning to Lake Ontario tributaries for enhanced angling opportunity.
- The secondary focus of management is to increase natural reproduction of Atlantic salmon.
- DEC will not place overly burdensome regulations on the Atlantic salmon fishery to promote natural reproduction.
- Management objectives will be achieved through partnerships and input from volunteer anglers to the greatest extent possible.
- An adaptive approach to management will be employed and adjustments will be made based on new information or new management needs.

Need

Atlantic salmon are a high value, charismatic sportfish desired by many anglers. Catch and catch rates for this species are relatively minute when compared to other salmonines in the Lake Ontario fishery. DEC has a management and stewardship obligation to enhance availability of this sportfish to satisfy the desires of anglers and enrich the natural reproduction of this species, which is integral to Lake Ontario's natural heritage.

Rationale

Atlantic salmon are native to Lake Ontario and are not widely available in North America. Anglers have expressed a desire for enhanced opportunities to catch Atlantic Salmon, especially in Lake Ontario tributaries. The Lake Ontario Fish Community Objectives (Stewart et al. 2017) establish an objective to restore recreational fisheries for Atlantic salmon in Lake Ontario and select tributaries, including the Salmon River. The Salmon River Fisheries Management Plan establishes an objective to improve the summer sport fishery by increasing returns of Atlantic salmon (NYSDEC 2018).

Scope

This plan outlines goals, objectives, and strategies for improving the Lake Ontario Atlantic salmon fishery for the four-year period 2023-2026. The scope will be adjusted in future years based on the knowledge learned within this period.

Historic Atlantic salmon management

Atlantic salmon were extirpated from Lake Ontario by the late 1800s. Attempts at stocking Atlantic salmon began as early as the 1860s and several unsuccessful stocking programs were sporadically implemented through the 1950s (Parsons 1973). The last attempt by DEC to re-establish a self-sustaining Atlantic salmon population in Lake Ontario was during the 1980s and 1990s. This program was not able to achieve consistent survival of stocked fish and did not produce the expected returns in either the lake or tributary fisheries. Since 2003 DEC has stocked 50,000 Atlantic salmon smolts annually in Lake Ontario in an attempt to produce a minor fishery and maintain the presence of this native species in Lake Ontario. The U.S. Geological Survey (USGS) also stocked Atlantic salmon in the Salmon River from 2009-2022 to support Atlantic salmon research. DEC stocking prior to 2016 used the Little Clear strain, which was derived in part from outlet spawning West Grand Lake strain. This strain did not perform well in developing Lake Ontario tributary fisheries for Atlantic Salmon. Beginning in 2017, all Atlantic salmon smolts stocked by DEC were Sebago strain, which is an inlet spawning strain that is expected to result in enhanced returns of Atlantic salmon to Lake Ontario tributaries.

Current Atlantic salmon fishery

The Atlantic salmon fishery in Lake Ontario and its tributaries is minor compared to other coldwater species. Catch rates in the Lake Ontario open lake and tributary creel surveys have improved in recent years but total estimated catches in the open lake remain less than 2,000 fish. The only Lake Ontario tributaries with consistent Atlantic salmon fisheries are the Salmon River and Oak Orchard Creek, however, returns of Atlantic salmon in Sandy Creek (Monroe Co.) and South Sandy Creek (Jefferson County) were also documented in 2022. Tributary fisheries have also improved in recent years, but they remain minor compared to other salmon and trout.

Challenges to Atlantic salmon management

Survival of stocked fish

The overarching impediment to developing Atlantic salmon fisheries in Lake Ontario has been poor survival of stocked fish. Atlantic salmon are particularly susceptible to thiamine deficiency, and this may have played a role in past failures to develop the fishery in Lake Ontario. Thiamine deficiency can cause impaired reproductive success (e.g., poor egg quality, reduced embryo/fry survival) in salmon and trout in Lake Ontario, however, thiamine deficiency in Atlantic salmon can also result in adult mortality (Ketola et al. 2000). Thiamine deficiency in Lake Ontario salmon and trout has been linked to a diet rich in alewife (*Alosa pseudoharengus*), which are high in thiaminase (an enzyme that breaks down thiamine).

However, the alewife population in Lake Ontario has declined markedly since the 1990s (Weidel et al. 2021), and Atlantic salmon have access to other prey items, such as round goby (*Neogobius melanostomus*) and invertebrates, during parts of the year when they occupy nearshore waters and tributaries (fall-spring). Incorporating these other prey items into their diets during parts of the year may help mitigate the effects of thiamine deficiency.

Limited hatchery capacity

DEC is challenged to produce the number of Atlantic salmon needed to provide a sustainable fishery in Lake Ontario. All production of DEC stocked Atlantic salmon occurs at DEC's Adirondack Hatchery and allocations for Lake Ontario must take into consideration other waters that require stocked fish. Limited hatchery capacity is one of the reasons that the program is constrained to four Lake Ontario tributaries. Hatchery capacity could be expanded by stocking fall fingerlings, however, recent experimental stocking of fall fingerlings in the Salmon River by USGS have shown poor returns compared to DEC spring yearling Atlantic Salmon stocking in the same location. Fall fingerling stocking by Ontario Ministry of Natural Resources and Forestry (OMNRF) has also shown poor returns compared to spring yearling stocking (Desjardins 2017); therefore, fall fingerling stocking will not be pursued as part of this plan.

Limited stocking capacity

The total number of salmon and trout stocked into Lake Ontario each year is managed to maintain effective predator prey balance, therefore increasing the number of Atlantic salmon stocked in Lake Ontario above and beyond the stocking target identified in this plan (200,000 yearling smolts) requires either 1) decreasing stocking of another species, or 2) increasing the total stocking cap. Decreasing stocking of other popular sportfish in favor of more Atlantic salmon is unlikely to gain angler support without first demonstrating that stocking Atlantic salmon can generate high quality tributary fisheries. Increasing the total stocking cap is dependent on concurrent increases in the Lake Ontario preyfish population, and any increases to Atlantic salmon stocking would also be dependent on competing demands by other salmon and trout fisheries.

Competition with Pacific salmon

In some cases, Chinook salmon (*Oncorhynchus tshawytscha*) appear to displace Atlantic salmon in Lake Ontario tributaries, or dilute Atlantic salmon numbers to a point that they become difficult to catch/detect, negatively impacting Atlantic salmon behavior and angler catch rates. These phenomena have been hypothesized in the Salmon River during years when angler reports indicate good numbers of Atlantic salmon during the summer and early fall with subsequent low catch rates during the Chinook salmon spawning run based on angler survey results. Juvenile steelhead (*Oncorhynchus mykiss*) also directly compete with juvenile Atlantic salmon for in-stream habitat during their first year, or two of life, which may negatively impact survival of juvenile Atlantic salmon in Lake Ontario tributaries.

Lack of available summer habitat

Atlantic salmon will return to tributaries during the summer when conditions are suitable. However, most Lake Ontario tributaries have extremely limited coolwater habitat during the summer months. The Salmon River currently supports a small summer run of Atlantic salmon

and is the best Lake Ontario tributary for developing of a significant summer fishery. However, the amount of coolwater habitat available in the Salmon River during the summer months is currently unknown and may limit the number of Atlantic salmon that the river can support. Coolwater summer habitat is also a limiting factor for juvenile survival and increased natural reproduction.

Few opportunities for data collection

Collecting data on adult Atlantic salmon in Lake Ontario and in tributaries is critical to evaluating the success of management actions. Evaluation is challenging, as relatively few Atlantic salmon are caught compared to other salmonines and most are released. The Lake Ontario open lake creel survey typically observes very few Atlantic salmon and traditional fisheries sampling techniques (e.g., electrofishing and trap netting) may not effectively sample adult Atlantic salmon in Lake Ontario tributaries.

Selected tributaries

Salmon River

The Salmon River is the premier Lake Ontario tributary fishery in New York and further development of the summer Atlantic Salmon fishery provides the potential for a destination fishery. The Salmon River has the most public fishing access of all Lake Ontario tributaries and has sufficient coolwater habitat to support a summer-run Atlantic salmon fishery. The river historically supported large runs of native Atlantic salmon (Parsons 1973) and recent stocking efforts have begun to produce successful summer returns. The Salmon River Fisheries Management Plan (NYSDEC 2018) identifies Atlantic salmon and Skamania strain steelhead as playing a key role in the development of a summer fishery. However, summer returns of Skamania have declined, likely due to DEC's inability to separately hold early returning Skamania adults from the summer until spawning in March due to new disease prevention protocols instituted in response to Viral Hemorrhagic Septicemia (VHSv). This change in hatchery practice may have led to the gradual loss of the Skamania's early returning trait, and Skamania have been phased out of production in the DEC hatchery system. The loss of a viable summer Skamania fishery places an increased need for developing the summer Atlantic salmon fishery in the Salmon River.

Oak Orchard Creek, Sandy Creek (Monroe County), and South Sandy Creek (Jefferson County)

Fall tributary fisheries for Atlantic salmon can be developed in streams that do not have sufficient cool water to support large summer returns (e.g., Oak Orchard Creek). DEC currently stocks 20,000 Atlantic salmon smolts in Oak Orchard Creek, and this tributary provides an increasingly popular fall Atlantic salmon fishery with increased catch rates in recent years (Prindle and Bishop 2020).

Sandy Creek and South Sandy Creek are desirable waters for developing fall Atlantic Salmon fisheries because they have good public fishing access, a history of supporting strong tributary fisheries for other salmonines, and they are no longer stocked with Chinook salmon. A limited and variable Chinook salmon fishery will likely persist in both streams due to natural reproduction and strays from other sites, but the absence of large Chinook salmon returns in

the future affords an opportunity to develop a diverse and unique fall tributary fishery that includes Atlantic salmon. Atlantic salmon stocking began in these tributaries in 2021 and good returns to the tributary fishery were documented in both streams in fall 2022.

Other potential tributaries

Irondequoit Creek

Irondequoit Creek was also identified as candidate stream for developing an Atlantic salmon fishery. The stream has excellent public fishing access and a history of providing a good steelhead fishery. The upper reaches of the stream have good water quality and offer the potential for natural reproduction. However, the creek flows into a large embayment that newly stocked smolts would need to migrate through before entering Lake Ontario. This embayment poses a concern for high predation on newly stocked smolts by warmwater predators (e.g., bass and walleye).

Irondequoit Creek is also stocked with several thousand catchable sized brown trout (*Salmo trutta*) to support an inland trout fishery. Inland brown trout stocking would need to be reduced if Irondequoit Creek was stocked with Atlantic salmon, as stocked brown trout are likely to prey upon newly hatched wild Atlantic salmon and limit successful natural reproduction.

Concerns over poor survival of stocked Atlantic salmon and predation on wild juvenile Atlantic salmon led us to prioritize Irondequoit Creek as an alternate location for developing an Atlantic salmon fishery. Irondequoit Creek will be re-evaluated after stocking for the low thiamine tolerant strain evaluation is completed in 2025 (see approach section below for details on the strain evaluation study).

Approach

Fish rearing

This plan establishes an Atlantic salmon stocking target of 200,000 yearling smolts. From 2023 – 2025 the U.S. Fish and Wildlife Service (USFWS) will raise 140,000 smolts for Lake Ontario stocking at Eisenhower National Fish Hatchery in Vermont, and DEC will raise 60,000 yearling smolts at Adirondack State Fish Hatchery. Fish production after 2025 is uncertain but DEC is hopeful that we will be able to continue our partnership with USFWS to produce Atlantic salmon smolts for stocking in Lake Ontario.

Stocking

We intend to improve survival of stocked fish by concentrating stocking of large numbers of spring yearling smolts low in the watershed, stocking fish at water temperatures between 46-50° F, and evaluating a newly developed low thiamine tolerant strain of Atlantic salmon.

- Stock spring smolts
 - Only spring smolt Atlantic salmon will be stocked into Lake Ontario.
- Stocking low in the watershed
 - Atlantic salmon smolts will be stocked near the stream mouth. Atlantic salmon stocking in the Salmon River has typically been done in Beaverdam Brook

(approximately 15 miles upstream at the DEC Salmon River Hatchery). Upstream stocking may result in higher predation as the fish migrate out to Lake Ontario. Fish stocked in this manner may also be more likely to become stream residents rather than migrating out to the Lake. Stocking smolts near the stream mouth produces successful fisheries for other salmonines (e.g., brown trout and steelhead) in many Lake Ontario tributaries, and is successful with Atlantic salmon in Oak Orchard Creek.

- Stocking when water temperatures are 46-50°F
 - Lake Superior State University has had success releasing Atlantic salmon smolts in the St. Mary's River using a 46°F water temperature-based release protocol (Johnson 2017).
- Pen-rear a subset of smolts
 - DEC partnered with the Tug Hill/Black River Trout Unlimited Chapter to conduct an experimental pen-rearing project with Atlantic salmon smolts in the Salmon River estuary, in 2021 and 2022, to determine if survival and imprinting is higher for pen-reared vs. direct-stocked fish. Pen-rearing has improved the survival of other stocked salmonines in Lake Ontario (Connerton et al. 2017, Bishop et al. 2004) but this was the first Atlantic salmon pen-rearing project in Lake Ontario. However, logistical issues at the pen-rearing location led the fish to be delivered later than planned and higher than normal mortality in the rearing pens resulted in the fish being released early in both years. The Salmon River pen-rearing project was suspended after 2022 unless an alternate location can be found. DEC may consider pen-rearing Atlantic salmon at Oak Orchard Creek and/or Sandy Creek if there are interested volunteers at those locations.
- Evaluate different strains of Atlantic salmon
 - DEC will partner with the USFWS to evaluate the relative performance of the traditional Sebago strain and a newly developed low thiamine tolerant Sebago strain. Hatchery broodstock for the low thiamine tolerant strain was developed by USFWS using eggs collected from Atlantic salmon in Lake Champlain and exposing them to low thiamine conditions during egg incubation. The resulting offspring are hypothesized to have a better tolerance for low thiamine conditions (William Ardren, U.S. Fish and Wildlife Service, personal communication). Thiamine deficiency is one of the potential impediments to developing Atlantic salmon fisheries in Lake Ontario and, if successful, this strain has the potential to greatly improve the survival of stocked Atlantic salmon and the amount of natural reproduction in Lake Ontario tributaries.
 - From 2023-2025, the USFWS will provide genetically marked lots of Atlantic salmon smolts using parentage-based tagging (PBT). PBT is a technique where the genetic information of the female parents of all stocked fish is recorded. When an adult fish is subsequently caught and sampled, genetic analysis can determine which lot of stocked fish the sampled fish came from.

Explore opportunities for habitat enhancement

Improved spawning habitat and juvenile rearing habitat are needed for large increases in natural reproduction of Atlantic salmon in Lake Ontario tributaries. Projects that provide increased coolwater habitat are particularly important for juvenile survival during the summer

months. Increased coolwater habitat will also improve the potential for summer returns of adult fish to the tributary fishery. Several fish habitat improvement projects have been implemented in the Salmon River in recent years and more work is planned to take place in the future (Bishop et al. 2018). Baseline habitat assessments are planned for other Lake Ontario tributaries and habitat restoration projects will be developed based on the habitat assessments.

Desired outcomes

Initial benchmarks for success in the open lake fishery, tributary fishery, and for increased natural reproduction are:

Lake fishery

- Annual total estimated catch of 2,000 Atlantic salmon in the open lake fishery.

Tributary fishery

- Annual total estimated catch of 1,000 Atlantic salmon in Oak Orchard Creek, Sandy Creek (Monroe County), Salmon River, and South Sandy Creek (Jefferson County).

Natural reproduction

- Consistent annual detection of wild young of the year (YOY) Atlantic salmon in the Salmon River system.
 - Wild YOY Atlantic salmon have been previously reported in the Salmon River system, but sampling effort and wild YOY detections were inconsistent year to year.
 - Increased stocking numbers, improved stocking practices, and the development of a standard sampling protocol should result in more consistent detections of YOY Atlantic salmon in the Salmon River.
- Presence of wild YOY Atlantic salmon in Oak Orchard Creek, Sandy Creek (Monroe County), and South Sandy Creek (Jefferson County).
 - Wild YOY Atlantic salmon have never been detected in Oak Orchard Creek, Sandy Creek, or South Sandy Creek.
 - It is possible that natural reproduction has been occurring in some of these systems and has gone undetected due to low sampling effort. However, the production of wild YOY Atlantic salmon has likely been low, especially in Sandy Creek and South Sandy Creek where fish have not been recently stocked. Measuring any level of natural reproduction in these streams will be an accomplishment that will serve as a first step in an incremental process toward increased natural reproduction in these systems.

Objectives and strategies

<i>Fish Culture Objective</i>	<i>Strategies</i>
Develop additional hatchery capacity to support the Lake Ontario Atlantic salmon fishery management objectives.	<p>Partner with the USFWS to raise 140,000 yearling smolts at Eisenhower National Fish Hatchery from 2023-2025.</p> <p>Pursue continued partnership opportunities with USFWS for fish production beyond 2025.</p>

<i>Fisheries Management Objectives</i>	<i>Strategies</i>
Develop an Atlantic salmon fishery in the Salmon River during the summer and early fall fishing season	<p>Increase the number of Atlantic salmon smolts stocked in the Salmon River to 50,000.</p> <p>Direct stock Atlantic salmon smolts in the Salmon River estuary when water temperatures are near 46-50 o F.</p> <p>Evaluate the relative performance of the low thiamine tolerant Atlantic salmon strain.</p>
Develop fall/winter tributary fisheries for Atlantic salmon in Oak Orchard Creek, Sandy Creek (Monroe County) and South Sandy Creek (Jefferson County).	<p>Increase the number of Atlantic salmon smolts stocked in Oak Orchard Creek to 50,000.</p> <p>Establish Atlantic salmon stocking policies of 50,000 smolts in Sandy Creek and South Sandy Creek.</p> <p>Direct stock Atlantic salmon smolts near the stream mouth when water temperatures are near 46-50 o F.</p> <p>Explore opportunities for pen-rearing Atlantic salmon in Oak Orchard Creek and Sandy Creek.</p> <p>Evaluate the relative performance of the low thiamine tolerant Atlantic salmon strain.</p>

<p>Improve the post-stocking survival of Atlantic salmon.</p>	<p>Stock only spring yearling smolts.</p> <p>Concentrate stocking low in the watershed. Stock Atlantic salmon smolts at water temperatures close to 46-50 °F.</p> <p>Experiment with pen-rearing Atlantic salmon smolts.</p> <p>Evaluate the relative performance of the low thiamine tolerant Atlantic salmon strain.</p>
<p>Evaluate sport fishery quality and stocking methods to inform adaptive management strategies.</p>	<p>Monitor the quality of the sport fishery through the Lake Ontario Creel Survey, covering both lake and tributary fisheries.</p> <p>Explore options for angler diary programs to monitor Atlantic salmon catches in tributaries during the summer months.</p> <p>Develop a tool for anglers to collect fin clip information from angler caught fish to evaluate pen vs. direct stocked Atlantic salmon in the Salmon River.</p> <p>Use genetic parentage-based tagging to evaluate the relative performance of Sebago strain vs low thiamine tolerant Sebago strain Atlantic salmon smolts.</p> <p>Experiment with using traditional fisheries sampling techniques (e.g. trap netting) to collect adult Atlantic salmon in Lake Ontario tributaries.</p> <p>Work with cooperating anglers to collect tissue samples from angler caught Atlantic salmon for parentage-based tagging analysis.</p>
<p>Maintain and improve high quality habitats to support all life stages of Atlantic salmon.</p>	<p>Complete planned fish habitat enhancement projects in the Salmon River.</p> <p>Conduct habitat assessments in Oak Orchard Creek, Sandy Creek, Salmon River,</p>

	<p>and South Sandy Creek to determine the extent of coolwater habitat available during the summer months and assess their capacity to support natural reproduction.</p> <p>Explore opportunities for habitat improvement projects that increase coolwater habitat, spawning habitat, and juvenile rearing habitat in Lake Ontario tributaries, with an emphasis on the Salmon River, Oak Orchard Creek, Sandy Creek, and South Sandy Creek.</p> <p>Actively seek conservation easements on Oak Orchard Creek, Sandy Creek, and South Sandy Creek.</p> <p>Opportunities for habitat improvement at alternate locations may also be explored.</p>
<p>Promote responsible stewardship of Atlantic salmon sport fisheries.</p>	<p>Develop fish identification products for Atlantic salmon and make them available to anglers in print, online, and social media formats.</p> <p>Conduct public outreach to improve Atlantic salmon identification and increase angler appreciation and participation in the Atlantic salmon fishery.</p>

Public outreach

Public outreach is needed to increase support for the Atlantic salmon program and to strengthen existing partnerships.

Partnerships

Existing partnerships with other agencies and angling organizations (e.g., USGS, USFWS, local TU chapters) will be strengthened by providing information about the Atlantic salmon fisheries management plan. DEC will keep its partners apprised on progress being made to accomplish the goals and objectives in this plan by publishing an annual report on Atlantic salmon management, presenting results at public meetings, and meetings with interested angling clubs.

Fish identification and stewardship

Atlantic salmon can be easily confused with brown trout, and other salmonines, and proper fish identification is extremely important for evaluating the success of the program. Angler creel surveys rely on anglers reporting information on released fish, and the ability of anglers to properly identify Atlantic salmon is critical for obtaining accurate survey data. DEC will develop Atlantic salmon specific fish identification information and provide this information to anglers to ensure effective reporting of Atlantic salmon catch and fin clip information. Fish Identification information should be included with any information dissemination related to the Atlantic salmon program. Misidentification can also lead to anglers harvesting more, and smaller, fish than regulations allow, which may negatively impact our ability to achieve fishery and natural reproduction goals.

Plan evaluation

Evaluations of progress towards meeting plan objectives:

- monitor changes in the fishery via direct sampling methods,
- determine the relative success of different stocking techniques and strains, and
- index production of YOY Atlantic salmon in Lake Ontario tributaries.

Evaluation of the fishery

The Atlantic salmon fishery in Lake Ontario and tributaries is monitored annually through the Lake Ontario Creel Survey. DEC will also explore the use of angler diary programs to provide additional data on the summer tributary fishery.

Stocking evaluation

A combination of creel survey results, fin clipping, and genetic parentage-based tagging will allow for evaluation of stocking methods and the relative performance of Atlantic salmon strains. Pen-rearing vs. direct stocking and April vs May direct stocking will be evaluated in the Salmon River using fin clips. Sebago strain vs. a low thiamine tolerant Sebago strain will be evaluated using parentage-based tagging in Oak Orchard Creek, Sandy Creek, Salmon River, and South Sandy Creek (Table 1). Fin clip information and tissue samples for genetic analysis will be obtained through the Lake Ontario Creel Survey, sampling adult fish in tributaries, sampling at fish cleaning stations, and through partnerships with cooperating anglers.

Table 1. Atlantic salmon marking plan 2022-2025 (AD = adipose fin clip, LV = left ventral fin clip, RV = right ventral fin clip, and PBT = genetic parentage-based tagging).

Years	Source	Study	Mark	Strain	Number stocked	Stocking location	Stocking/Release date
2022	DEC	Pen vs direct	ADLV	Sebago	15,000	Salmon River pen	May (46-50°)
2022	DEC	Pen vs direct	LV	Sebago	15,000	Salmon River direct	May (46-50°)
2022	USGS	April vs May direct stocking	ADRV	Sebago	15,000	Salmon River	May (46-50°)
2022	USGS	April vs May direct stocking	RV	Sebago	15,000	Salmon River	April
2023	FWS	Pen vs direct	ADLV	Sebago	15,000	Salmon River pen*	May (46-50°)
2023	FWS	Pen vs direct	LV	Sebago	15,000	Salmon River direct	May (46-50°)

2023	FWS	Strain evaluation	PBT	Sebago	20,000	Salmon River	May (46-50°)
2023	FWS	Strain evaluation	PBT	Low thiamine	20,000	Salmon River	May (46-50°)
2023	FWS	Strain evaluation	PBT	Sebago	10,000	Oak Orchard Creek	May (46-50°)
2023	FWS	Strain evaluation	PBT	Low thiamine	10,000	Oak Orchard Creek	May (46-50°)
2023	DEC	N/A	None	Sebago	20,000	Oak Orchard Creek	May (46-50°)
2023	FWS	Strain evaluation	PBT	Sebago	15,000	Sandy Creek	May (46-50°)
2023	FWS	Strain evaluation	PBT	Low thiamine	15,000	Sandy Creek	May (46-50°)
2023	DEC	N/A	None	Sebago	20,000	Sandy Creek	May (46-50°)
2023	FWS	Strain evaluation	PBT	Sebago	10,000	South Sandy Creek	May (46-50°)
2023	FWS	Strain evaluation	PBT	Low thiamine	10,000	South Sandy Creek	May (46-50°)
2023	DEC	N/A	None	Sebago	20,000	South Sandy Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Sebago	20,000	Oak Orchard Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Low thiamine	20,000	Oak Orchard Creek	May (46-50°)
2024	DEC	N/A	None	Sebago	10,000	Oak Orchard Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Sebago	15,000	Sandy Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Low thiamine	15,000	Sandy Creek	May (46-50°)
2024	DEC	N/A	None	Sebago	20,000	Sandy Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Sebago	20,000	Salmon River	May (46-50°)
2024	FWS	Strain evaluation	PBT	Low thiamine	20,000	Salmon River	May (46-50°)
2024	DEC	N/A	None	Sebago	10,000	Salmon River	May (46-50°)
2024	FWS	Strain evaluation	PBT	Sebago	15,000	South Sandy Creek	May (46-50°)
2024	FWS	Strain evaluation	PBT	Low thiamine	15,000	South Sandy Creek	May (46-50°)
2024	DEC	N/A	None	Sebago	20,000	South Sandy Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Sebago	15,000	Oak Orchard Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Low thiamine	15,000	Oak Orchard Creek	May (46-50°)
2025	DEC	N/A	None	Sebago	20,000	Oak Orchard Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Sebago	20,000	Sandy Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Low thiamine	20,000	Sandy Creek	May (46-50°)
2025	DEC	N/A	None	Sebago	10,000	Sandy Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Sebago	15,000	Salmon River	May (46-50°)

2025	FWS	Strain evaluation	PBT	Low thiamine	15,000	Salmon River	May (46-50°)
2025	DEC	N/A	None	Sebago	20,000	Salmon River	May (46-50°)
2025	FWS	Strain evaluation	PBT	Sebago	20,000	South Sandy Creek	May (46-50°)
2025	FWS	Strain evaluation	PBT	Low thiamine	20,000	South Sandy Creek	May (46-50°)
2025	DEC	N/A	None	Sebago	10,000	South Sandy Creek	May (46-50°)

* 2023 Salmon River Pen fish will be moved from Eisenhower National Fish Hatchery to Salmon River State Fish Hatchery in mid-April and held for approximately 3 weeks prior to direct stocking.

Tributary sampling for returning fish

DEC will consider using traditional fisheries sampling techniques (e.g. trap netting, electrofishing, seining) to sample adult Atlantic salmon in Oak Orchard Creek, Sandy Creek, Salmon River, and South Sandy Creek. The timing of sampling and specific methods will vary between streams as the effectiveness of these methods for this purpose is uncertain.

Tributary sampling for young of year fish

The presence of YOY Atlantic salmon will be measured by seining or backpack electrofishing in the four stocked Lake Ontario tributary systems.

Public outreach

Outreach efforts will be evaluated on an annual basis to ensure that our efforts and overall communication are achieving desired results.

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Appendix A. Assessment of Public Comment

Draft Lake Ontario Atlantic Salmon Fisheries Management Plan 2022 - 2032

A draft of the Lake Ontario Atlantic salmon fisheries management plan was released for public review on July 1, 2022, with the comment period extending through August 14, 2022. Public comment was solicited through a DEC press release distributed statewide, and an announcement distributed to all subscribers to the DEC Delivers Fishing Line newsletter [approximately 150,000 recipients].

A total of 43 public comments were received (Appendix A). Some comments expressed general support or opposition for the entire plan, but most focused on specific elements of the plan.

Comments were grouped into themes according to which part of the plan they referenced (21 themes). Recurring or similar comments were bundled together with reference to specific comments from Appendix A and a DEC response is provided for each common comment within a theme. General comments in support or opposition to the plan, and comments outside the scope of the plan are shown in theme #1 but a DEC response is not provided.

Theme #1: General comments that are not directly related to any topic in the plan (15 comments)

Comments generally indicating support but not commenting on any specific information contained in the plan (comments 7, 11, 18, 22, 23, and 43).

Comments generally indicating opposition but not commenting on any specific information contained in the plan (comments 10, 17, 29, and 34).

Comments in which all or part of the comment is related to waters or species outside the scope of the plan. For example, Finger Lakes, St. Lawrence River tributaries, Province of Ontario waters of Lake Ontario, Lake Erie, brown trout, steelhead, and Chinook salmon (comments 16, 18, 24, 25, and 26).

Theme #2: Comments related to the entire plan (10 comments)

Comment

DEC should not pursue development of an Atlantic Salmon fishery in Lake Ontario because Atlantic salmon management has a history of failure in Lake Ontario and is therefore a waste of resources that should be directed to support the fishery for other species (comments 1, 3, 4, 5, 9, 16, 19, 25, and 39).

DEC Response

There is an assumption among many Lake Ontario anglers that DEC, and our federal partners, have put a large amount of resources toward Atlantic salmon restoration in New York waters of Lake Ontario from the 1980s to present. The reality is that we have never put sufficient resources into the program to determine the feasibility of establishing Atlantic salmon fisheries in New York waters of Lake Ontario and its tributaries.

Atlantic salmon have been stocked in New York waters of in Lake Ontario since the 1983, but stocking numbers have always been very low compared to other salmon and trout. The highest Atlantic salmon stocking rates occurred from 1991-1995 with spring yearling smolt stocking that ranged from 129,000 – 178,000 and represented only 3% - 6% of the total salmon and trout stocking in New York waters of the Lake Ontario. In other years during the 1980s and 1990s, Atlantic salmon stocking totaled between 25,000 and 102,000 fish (fall fingerlings and spring yearling smolts combined). From 2003 – 2020 DEC stocked only 50,000 spring yearling smolts in Lake Ontario. This low stocking number produced minor, but consistent, returns to the open lake and tributary fisheries. In 2021 and 2022, stocking numbers were increased to 95,000 to begin supporting efforts identified in the draft plan. In fall, 2022 returns of Atlantic salmon were documented in the Lake Ontario tributary creel survey in all four tributaries stocked with Atlantic salmon.

Atlantic salmon stocking prior to 2016 also used the Little Clear strain which was based on an outlet spawning strain of Atlantic salmon. Stocking since 2016 has used Sebago strain, which is an inlet spawning strain and is expected to provide improved returns to Lake Ontario tributaries. Since switching to the Sebago strain we have seen increases in returns to both the open lake and tributary fisheries despite lower than desired stocking numbers.

DEC now has the opportunity to partner with the U.S. Fish and Wildlife Service (USFWS) to stock a moderate number of spring yearling smolts (200k), on an experimental basis, to evaluate a new variant of the Sebago strain that may be better adapted to lower thiamine levels to mitigate thiamine deficiency.

Stocking 200k spring yearling Atlantic salmon will allow DEC to assess the feasibility of developing Atlantic salmon fisheries in Lake Ontario tributaries, and through partnering with the USFWS, this effort will not take resources away from programs that support fisheries for other species of salmon and trout.

Comment

It is customary to have the scientific name follow the common name in the first text reference in a technical document (comment 31).

DEC Response

Scientific names were added to the final plan.

Theme #3: Comments related to ‘guiding principles’ (9 comments)

Comment

Atlantic salmon are a native species in Lake Ontario and should not be managed as a put, grow, and take fishery (comments 6, 28, 32, 33, 35, 36, 37, 38, and 42).

DEC Response

The plan focuses on increasing the number of adult Atlantic salmon returning to Lake Ontario tributaries for the primary purpose of increasing fishing opportunity. Increasing natural reproduction is an important but secondary objective. The plan recognizes Atlantic salmon as a native species that is essential to Lake Ontario’s natural heritage but we desire to take a ‘walk before we run’ approach by first determining if the number of adult fish returning to tributaries can be increased through stocking, which is a necessary step towards establishing natural reproduction. Therefore, the draft plan had a guiding principle that stated, “The Atlantic salmon fishery in Lake Ontario and its tributaries will be managed primarily as a put grow take fishery using stocked fish”. This guiding principle was revised in the final plan to state, “Atlantic salmon in Lake Ontario will be managed for a recreational sportfishery that is dependent on stocking”.

Comment

Atlantic salmon are a native species that should be protected from harvest until the population increases to a larger level (comments 6, 28, 32, 35, 36, 38, and 42), and/or the implementation of additional regulations should be considered in the future (comment 37).

DEC Response

The plan has a guiding principle that states, “DEC will not place overly burdensome regulations on the Atlantic salmon fishery to promote natural reproduction”. The fishing regulations for Atlantic salmon in Lake Ontario are already very conservative (1 fish per day and 25” minimum size) and Atlantic salmon harvest in both the open lake and tributaries is very low. Placing a catch and release only regulation on Atlantic salmon is unlikely to have a population level impact because harvest is already very low. However, it would prevent anglers from harvesting a trophy fish, and would require anglers to release some fish that were unlikely to survive due to potential hooking mortality.

Theme #4: Comments related to the ‘need’ statement (1 comment)

Comment

The plan states that “DEC has a management and stewardship obligation to enhance availability of [Atlantic Salmon] to satisfy the desires of anglers and enrich the natural reproduction of this species, which is integral to Lake Ontario’s natural heritage.”. How is the need statement determined (comment 9)?

DEC Response

The need statement is rooted in the General Powers and Duties of the Department as per section 11-0303 of the Environmental Conservation Law. The rationale for the need statement is included in the plan. “Atlantic salmon are native to Lake Ontario and are not widely available in North America. Additionally:

- Anglers have expressed a desire for enhanced opportunities to catch Atlantic Salmon, especially in Lake Ontario tributaries.
- The Lake Ontario Fish Community Objectives (Stewart et al. 2017) establish an objective to restore recreational fisheries for Atlantic salmon in Lake Ontario and select tributaries, including the Salmon River.
- The Salmon River Fisheries Management Plan establishes an objective to improve the summer sport fishery by increasing returns of Atlantic salmon (NYSDEC 2018).”.

Theme #5: Comments related to ‘historic Atlantic salmon management’ (2 comments)

Comment

The plan should provide greater detail on earlier attempts to re-establish Atlantic salmon in Lake Ontario, including stocking efforts by the U.S. Geological Survey (comment 41). This section should also be revised to provide a distinction about the purpose of Atlantic salmon stocking from 2003-2020 compared to the 1980s and 1990s (comment 31).

DEC Response

The final plan was updated to reference the stocking by the U.S. Geological Survey and to clarify the difference in the stocking purpose during the 2003-2020 time period. However, a more detailed discussion on past efforts in the 1980s and 1990s was not included. The purpose of the Lake Ontario Atlantic salmon fisheries management plan is not to summarize the history of Atlantic salmon management, but rather to outline what actions DEC plans to take over the next five years. Brief descriptions of past efforts and potential challenges to Atlantic salmon management are included for context.

Theme #6: Comments related to the ‘current Atlantic salmon fishery’ (3 comments)

Comment

This section compares Atlantic salmon catch rates to brown trout catch rates. This comparison lacks context because brown trout stocking numbers are far higher than Atlantic salmon stocking numbers (comments 31, 35, and 41).

DEC Response

The reference to brown trout catch rates was removed from the final plan.

Theme #7: Comments related to ‘survival of stocked fish’ (4 comments)

Comment

The authors should consider including impaired reproductive success when discussing thiamine deficiency and not just adult mortality (comment 31).

DEC Response

The final plan was revised to include impaired reproductive success more clearly when referencing the potential impacts of thiamine deficiency on Atlantic salmon.

Comment

This section talks about alewife and goby populations in Lake Ontario when discussing thiamine deficiency. Smelt populations are low, would higher smelt populations help with thiamine deficiency (comment 28)?

DEC Response

Higher rainbow smelt populations may help mitigate thiamine deficiency, however, their populations have been relatively low in Lake Ontario for many years. See [Weidel et al. 2022](#) for a full report on the status of Lake Ontario prey fish populations.

Comment

Predation may be more important than low thiamine levels in driving survival of stocked Atlantic salmon in Lake Ontario. Cayuga Lake, which has a forage fish community very similar to Lake Ontario, has an excellent lake and tributary fishery for Atlantic salmon (comment 40).

DEC Response

Predation on newly stocked fish certainly plays a large role in survival of stocked fish. The approach, and objectives and strategies sections of the plan are heavily focused on improving stocking methods to reduce predation and improve the survival of stocked Atlantic salmon.

Comment

Are there data to show that round goby, which are primarily benthic, will compensate for thiamine deficiency during those long periods when Atlantic Salmon will be suspended in the region of the thermocline in search of pelagic prey? Is there data to support the notion that thiamine deficiency has declined in susceptible predators (comment 41)?

DEC Response

DEC expects that Atlantic salmon in Lake Ontario will primarily eat alewife and other pelagic preyfish. However, there are periods of time (i.e., fall, winter, spring) when Atlantic salmon are in nearshore waters, or tributaries, and will have access to other prey items such as round

goby and invertebrates. The plan states that incorporating these other prey items into their diets during parts of the year may help mitigate effects of thiamine deficiency. However, uncertainty about thiamine deficiency remains. One of the strategies in the plan is to evaluate a strain of Atlantic salmon that may be better suited to surviving in low thiamine conditions. There are data to suggest that thiamine levels in lake trout have increased in recent years.

Theme #8: Comments related to ‘limited hatchery capacity’ (3 comments)

Comment

The plan only addresses fish hatchery production from 2023-2025 (comment 36). DEC should consider prioritizing the Lake Ontario tributary stockings over inland stocking for a time to meet stocking targets (comment 35).

DEC Response

DEC is partnering with the U.S. Fish and Wildlife Service to raise 140,000 Atlantic salmon smolts for stocking in Lake Ontario from 2023-2025 and can produce 60,000 Atlantic salmon smolts at the Adirondack State Fish Hatchery for stocking in Lake Ontario. We are hopeful that this partnership with the U.S. Fish and Wildlife Service will continue in future years, which would resolve the issue of limited hatchery capacity for addressing the stocking target of 200,000 yearling smolts.

Comment

DEC should Increase stocking capacity by raising fall fingerling fish at the USGS Tunison lab and then raise them to yearlings by stocking them into the Salmon River Hatchery smolt release pond (comment 37).

DEC Response

The smolt release ponds at Salmon River Hatchery are no longer being used due to fish disease issues in the smolt release ponds. These ponds were used for stocking coho salmon, and the coho in the smolt release ponds routinely had disease problems. Coho salmon at Salmon River Hatchery are now held in outside raceways at the hatchery and stocked via stocking truck in the spring.

Comment

DEC should recognize that hatchery capacity can also be limited by human resources and the ability of the hatcheries to stock fish (comment 31).

DEC Response

DEC recognizes that staff capacity can limit the ability to raise and stock fish.

Theme #9: Comments related to ‘limited stocking capacity’ (8 comments)

Comment

DEC should not reduce stocking of Chinook salmon (or other species) to increase the number of Atlantic salmon stocked in Lake Ontario (comments 5, 9, 13, 15, 30, and 33), and the section of the plan titled “limited stocking capacity” that states “the total number of salmon and trout stocked in Lake Ontario each year is capped and that Atlantic salmon stocking cannot be increased without reducing stocking of another species” should be re-written or removed as it creates confusion (comments 32 and 36).

DEC Response

This section of the plan has been misinterpreted. The stocking numbers outlined in the plan do not require any reduction in stocking of other species. The section of the plan that discussed this topic is titled “limited stocking capacity” and is part of larger section discussing the many challenges to Atlantic salmon management in Lake Ontario. The point we were trying to make is that although some anglers may desire an increase in the number of Atlantic salmon stocked above and beyond what is stated in the draft plan, the cap in the number of predators we stock each year prevents us from exceeding the stocking target of 200,000 smolts without reducing stocking of another species. This section was revised in the final plan to eliminate confusion.

Theme #10: Comments related to ‘competition with Pacific salmon’ (3 comments)

Comment

Juvenile habitat use by Atlantic salmon and coho salmon is very different and there should not be any concern over competition between these species (comments 21, 35, and 37)

DEC Response

Competition between juvenile Atlantic salmon, juvenile steelhead, and juvenile coho salmon was identified in the plan as a potential challenge to Atlantic salmon management. This section was revised in the final plan to remove the reference to competition with juvenile coho salmon.

Theme #11: Comments related to ‘lack of available summer habitat’ (5 comments)

Comment

Large warmwater embayments at the mouth of Lake Ontario tributaries do not act as a thermal barrier to Atlantic salmon migration and these streams should be considered for stocking as part of this plan (comments 6, 28, 33, 37, and 41).

DEC Response

Lake Ontario tributaries were selected for Atlantic salmon stocking based on locations we expected to have the best survival of stocked fish and locations where there was a need in the fishery. We considered locations with large embayments at the stream mouth such as Irondequoit Creek, Little Sandy Creek, Skinner Creek, and Lindsey Creek because they had the potential for summer run adults and natural reproduction. However, we chose not to pursue these locations because of concerns over predation on newly stocked fish as they migrate out through the embayments and concerns about the warmwater embayments acting as thermal barriers to summer run adults. Several comments noted that Little Sandy Creek and Irondequoit Creek had successful summer runs of adult fish in the 1980s and 1990s and that the embayments did not act as thermal barriers. The final plan was revised to remove the reference to warmwater embayments acting as thermal barriers. However, the stocking sites identified in the “Selected Tributaries” section remained the same. Irondequoit Creek is still identified as a “other potential tributary” and may be considered for stocking after the low thiamine tolerant strain evaluation is complete in 2025.

Theme #12: Comments related to ‘few opportunities for data collection’ (1 comment)

Comment

In addition to angler diaries, trained individuals should be utilized to collect relevant data. Partnerships with colleges that offer a fisheries biology curriculum should be explored. Cleaning stations would be a prime data collection location (comment 35).

DEC Response

DEC plans to work with anglers and agency/academic partners to collect data on Atlantic salmon, and this may include partnerships with colleges/universities if the opportunity arises. DEC also routinely collects information on harvested fish at cleaning stations. The final plan was updated to include sampling at cleaning stations.

Theme #13: Comments related to ‘selected tributaries’ (4 comments)

Comment

DEC should concentrate efforts to develop Atlantic salmon fisheries on the Salmon River first and consider other streams later (comments 8 and 37).

DEC Response

The Salmon River has the best potential for developing a summer fishery and for natural reproduction. However, the Salmon River also receives the largest returns of Chinook salmon, coho salmon, and steelhead which may negatively impact Atlantic salmon. Stocking Atlantic salmon in other Lake Ontario tributaries has produced good results and provides diverse fishing opportunities. Atlantic salmon stocking in Oak Orchard Creek has produced similar returns to the fishery as the Salmon River. Initial results after one year of stocking also show

good returns to Sandy Creek and South Sandy Creek. Stocking 50,000 Atlantic salmon yearling smolts in each of the four selected streams should provide quality fishing opportunities in the Salmon River and the other tributaries.

Comment

The Monitor Mills Dam on South Sandy Creek was partially breached in 2022. Will more Public Access be pursued above Monitor Mills (comment 28)?

DEC Response

The Monitor Mills Dam was partially breached in 2022 and crews from the U.S. Fish and Wildlife Service are in the process of surveying the dam to determine if it is passable by fish and invasive sea lamprey. The dam has acted as a sea lamprey barrier since the sea lamprey control program began on Lake Ontario. The barrier limits access to spawning grounds for sea lamprey and helps control sea lamprey populations in Lake Ontario. DEC is working with the Great Lakes Fishery Commission, Fisheries and Oceans Canada, and the U.S. Fish and Wildlife Service to determine if fish passage can be installed on South Sandy Creek while maintaining an effective sea lamprey barrier. If fish passage is achieved, DEC may attempt to secure fishing access above Ellisburg, NY.

Comment

Developing a summer Atlantic salmon fishery on the Salmon River is described as being “unique in the Northeastern United States”. There are other rivers in the Northeast that have Atlantic salmon fisheries in the summer months. What makes the Salmon River fishery literally “unique” (comment 31)?

DEC Response

The final plan was revised to remove “unique in the Northeastern United States” from this paragraph.

Theme #14: Comments related to ‘other potential tributaries’ (8 comments)

Comment

DEC should not stock Atlantic salmon in Irondequoit Creek because the stocked inland brown trout fishery is too important (comment 2).

DEC Response

Irondequoit Creek may be considered for Atlantic salmon stocking after stocking for the low thiamine strain evaluation study is complete in 2025. If Atlantic salmon stocking is added to Irondequoit Creek, inland brown trout stocking may be reconsidered.

Comment

The Niagara River should not be considered an alternate or potential tributary. As mentioned in the plan it already has a significant steelhead fishery, along with lake trout, Pacific salmon, and brown trout. Other Lake Ontario tributaries should be considered before the Niagara River (comments 37 and 33).

DEC Response

The Niagara River was not included in the final plan.

Comment

Irondequoit Creek should be prioritized over Sandy Creek (Monroe Co.). Irondequoit Creek has more public access and more cold-water habitat (comments 6 and 41).

DEC Response

Irondequoit Creek was considered for developing an Atlantic salmon fishery. However, concerns over poor survival of newly stocked fish as they migrate out through Irondequoit Bay led us to prioritize other streams. Irondequoit Creek will be re-evaluated after stocking for the low thiamine tolerant strain evaluation is complete in 2025.

Comment

DEC should stock Atlantic salmon in skinner creek, fix the fish passage at Rt 81, close the stream to fishing for 3-5 years, and monitor the situation (comment 9).

DEC Response

Skinner Creek was considered for developing an Atlantic salmon fishery. However, concerns over poor survival of newly stocked fish as they migrate out through Sandy Pond led us to prioritize other streams with a history of producing strong fisheries for other migratory salmon and trout.

Comment

Can Atlantic salmon be stocked in marsh creek (comment 12)?

DEC Response

Marsh Creek is a tributary to Oak Orchard Creek. Atlantic salmon are stocked in Oak Orchard Creek and some of these fish will likely return to Marsh Creek. Stocking in Marsh Creek would require stocking fish higher upstream in the watershed, which is inconsistent with the stocking strategy identified in the plan.

Comment

High quality tributaries such as Little Sandy should be given high priority for alternate stocking sites in the future because they can provide recreational fisheries, have public fishing access,

are not stocked with Pacific salmon, and can potentially have natural reproduction (comment 37).

DEC Response

Little Sandy Creek was considered for developing an Atlantic salmon fishery. However, concerns over poor survival of newly stocked fish as they migrate out through Sandy Pond led us to prioritize other streams with a history of producing strong fisheries for other migratory salmon and trout. It may be considered in the future based on the results experienced during the tenure of this 5-year plan.

Theme #15: Comments related to ‘approach – fish rearing and stocking’ (9 comments)

Comment

While the near-term fish rearing portion of this plan appears promising (2023-2025), the plan mentions a reduction of 50,000 fish and uncertainty of hatchery capacity beginning in 2026. While we understand hatchery capacity being in question, why isn't this plan's goal to produce 200,000 fish for the entire term (comment 38)?

DEC Response

The scope of the final plan was revised for a five-year term in place of the ten-year term in the draft plan so that uncertainty around hatchery capacity could be resolved and addressed in an updated plan for future years. The stocking target in the final plan was revised to maintain the 200,000 yearling smolt stocking target for the duration of the plan (2022-2026).

Comment

Were all 95,000 Atlantic salmon smolts stocked by DEC in 2022 raised at Adirondack Hatchery? How does the intended 46-50 degree stocking temperature target fit in with current and overall stocking demand (comment 31)?

DEC Response

All 95,000 Atlantic salmon smolts stocked by DEC in 2022 were raised at Adirondack Hatchery. Given the large numbers of fish that DEC stocks each spring, the 46-50 °F temperature target for stocking is likely to be a challenge to hit perfectly at every location, every year. It is a target that we will strive to reach as close as we can.

Comment

Follow methods employed by the hatchery at Lake Superior State University (comment 14).

DEC Response

The stocking practices identified in the plan are similar to those used by Lake Superior State and Michigan DNR in the St. Mary's River and Lake Huron.

Comment

Stocking when water temperatures are 46-50F. Where did the smolt stocking temperature range of 46-50F originate? Can you provide reference (comment 27)?

DEC Response

The temperature range is based on stocking practices in the St. Mary's River and other Lake Huron tributaries. The reference is: Johnson, J.E. 2017. Review of Attributes of Landlocked Atlantic Salmon in Relation to their Management in Lake Huron. Michigan Department of Natural Resources, Fisheries Report 17, Lansing, MI.

Comment

The experimental pen-rearing project for Atlantic salmon in the Salmon River Estuary is not an ideal situation. Logistical and environmental constraints have led to high mortality in the pens and the project should not continue at this location (comments 27, 28, 35, 37, and 42).

DEC Response

The experimental pen-rearing project in the Salmon River is no longer active. The pens could not be put in the water until early May (several weeks later than planned). This resulted in fish being stocked into warmer water and being held later in the season, which led to higher-than-expected mortality. Pen-rearing will be considered at other locations if an opportunity arises. DEC is also exploring alternative strategies to increase the survival of smolts stocked in the Salmon River.

Theme #16: Comments related to thiamine deficiency (3 comments)

Comment

Is there an opportunity for genetic modification to limit the impact of thiamine deficiency (comment 24)?

DEC Response

One of the strategies identified in the plan is to evaluate the relative survival of a modified Sebago strain of Atlantic salmon that may be more resistant to low thiamine conditions.

Comment

The low thiamine tolerant strain of Atlantic salmon is apparently untested in the wild since no literature is cited on its performance. If it performs poorer than the standard Sebago strain, does that mean that it is less viable in the wild due to low thiamine, or inherently more vulnerable to predation? If both strains exhibit low survival, it might be unclear if thiamine is an issue (comment 40).

DEC Response

The evaluation of the low thiamine tolerant strain outlined in the plan is the first evaluation of this potential new strain in Lake Ontario. DEC is working with the U.S. Fish and Wildlife Service to evaluate the low thiamine tolerant strain in both Lake Ontario and Lake Champlain. The purpose of the evaluation is to determine if one of the strains provides a better return to the open lake and tributary fisheries than the other strain. Investigating the mechanisms for why one strain may perform better, or worse, than the other is done after the initial evaluation, if those research questions are deemed a priority.

Comment

The low thiamine tolerant strain evaluation study uses genetic parentage-based tagging. How will genetic samples be analyzed? Will samples of young-of-year fish be analyzed to determine which strain they originate from? A sampling protocol and sampling kits should be provided to volunteer anglers to assist in sample collection (comment 40).

DEC Response

DEC plans to contract with a genetics lab to process and analyze tissue samples for genetic parentage-based tagging. Genetic samples will be collected from adult Atlantic salmon in Lake Ontario and tributaries to determine strain and parentage. In the future, wild young-of-year smolts could be analyzed to determine strain. DEC plans to provide volunteer anglers with sampling kits to help collect tissue samples from angler caught Atlantic salmon.

Theme #17: Comments related to ‘approach – explore opportunities for habitat enhancement (3 comments)

Comment

The plan should include dam removal on the Salmon River and other systems (comment 24).

DEC Response

The plan identifies tributary habitat evaluation and restoration as a priority action. Dam removal on the Salmon River would only open up a small stream distance as there is a natural barrier not far above the lower dam (Salmon River Falls). There are no dams on Sandy Creek (Monroe Co.). DEC is working with the Great Lakes Fishery Commission, Fisheries and Oceans Canada, and the U.S. Fish and Wildlife Service to see if fish passage can be installed on South Sandy Creek while maintaining an effective sea lamprey barrier.

Comment

What methods will be used to increase cool-water habitat in Lake Ontario tributaries (comments 31 and 37)?

DEC Response

The specific approach to habitat restoration is not defined at this time. Baseline habitat assessments are planned for several Lake Ontario tributaries beginning in 2023, and the specific methods used to improve cool-water habitat will be based on the habitat assessments. The Final plan was updated to describe this approach to tributary habitat restoration.

Theme #18: Comments related to ‘desired outcomes’ (4 comments)

Comment

The draft plan identifies a desired outcome of consistent young-of-year Atlantic salmon catches in the Salmon River. Inconsistent catches in the Salmon River in past years were likely due to the level of sampling effort and do not represent inconsistent natural reproduction (comments 21, 33, and 37)

DEC Response

DEC plans to implement a standardized sampling program to assess young-of-year Atlantic salmon in Lake Ontario tributaries. This will resolve the issue of inconsistent sampling effort and provide improved understanding of Atlantic salmon natural reproduction.

Comment

Has natural reproduction been detected in U.S. or Canadian waters (comment 24)?

DEC Response

Yes, Atlantic salmon natural reproduction has been detected in the Salmon River for several year classes.

Theme #19: Comments related to ‘objectives and strategies’ (8 comments)

Comment

Eggs should be collected from summer run Atlantic salmon in the Salmon River because these fish are likely to have genetic traits that support survival in Lake Ontario and a propensity to run the tributaries in the summer (comments 21, 28, 32, 33, 35, 37, 38, and 42).

DEC Response

The U.S. Geologic Survey attempted to collect summer run, adult Atlantic salmon in the Salmon River from 2013-2021. These efforts resulted in low numbers of adult fish and subsequently low stocking numbers from their offspring. Yearling Salmon River wild strain Atlantic salmon were stocked in the Salmon River in 2016-2019, but stocking numbers were less than 10,000 fish per year (rang 2,363 – 9,515) (Connerton 2017, 2018, 2019, and 2020), and never approached the current stocking target of 50,000 yearling smolts. Collecting sufficient eggs from summer run Atlantic salmon in the Salmon River has a very high

opportunity cost and is not logistically feasible without having more adult fish in the system. DEC will revisit this if the number of adult Atlantic salmon returning to the Salmon River increases to level that allows for consistent egg collections.

Theme #20: Comments related to ‘public outreach’ (1 comment)

Comment

How will DEC keep its partners apprised on progress being made to accomplish the goals and objectives of this plan (comment 38).

DEC Response

DEC plans to provide updates on the status of the goals and objectives in the plan at public meetings, meetings with interested angling clubs, and in annual reports.

Theme #21: Comments related to ‘plan evaluation’ (3 comments)

Comment

Evaluation of the plan should not focus on using creel survey results but should monitor survival of Atlantic salmon in existing habitats (comment 6). What other methods will be employed to collect data to evaluate the plan (comment 41)?

DEC Response

The Lake Ontario tributary creel survey and open lake creel survey are the primary evaluation tools, but other methods will also be used. The plan also identifies angler diary programs, and fishery independent sampling using traditional fish sampling techniques, for example, electrofishing and trap netting for adult fish, and using seine nets or electrofishing to sample young-of-year fish.

Comment

Can a Hotline be established for the reporting of AS catch (comment 28)?

DEC Response

DEC is considering options for anglers to report Atlantic salmon catches.

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Connerton, M.J. 2017. New York Lake Ontario and upper St. Lawrence River stocking program 2016. Section 1 *in* NYSDEC 2016 Annual Report, Bureau of Fisheries, Lake Ontario Unit and St. Lawrence River Unit to the Great Lake Fishery Commission's Lake Ontario Committee.

Appendix B. List of all public comments

1. The Atlantic Salmon programs in the past have been a waste of time and resources on Lake Ontario. These fish are not "targetable" fish and they don't tend to return well to tribes. There are other species stocked into Lake Ontario that bring people's hard earned money to the counties surrounding Lake Ontario for open water and tributary anglers. I understand the money allocated for this is probably federal, so I'm wasting my time with this email. Coho's, Brown Trout, or Steelhead would all show a greater return on investment than the Atlantic Salmon.
2. According to the draft plan "Irondequoit Creek was also identified as candidate stream for developing an Atlantic salmon fishery" and "Irondequoit Creek is also stocked with several thousand catchable sized brown trout to support an inland trout fishery. Inland brown trout stocking would need to be eliminated if Irondequoit Creek was stocked with Atlantic salmon, as stocked brown trout are likely to prey upon newly hatched wild Atlantic salmon and limit successful natural reproduction."

I strongly oppose using Irondequoit Creek as an option for stocking Atlantic salmon and eliminating inland brown trout stocking here. There are few inland trout fishing opportunities around Monroe County and the Rochester area. Eliminating this creek from spring brown trout stocking will have a severe impact on the spring trout fishing experience and put more pressure on the few remaining locations in the region.
3. I am strongly against the Atlantic salmon Management plan. I read the proposal and feel the resources should be used for the existing LO stocking program. This new plan aims to improve tributary fishing at the cost of degrading the open water fishery. To date, Atlantic stocking has been a failure. Thiamine deficiency is an issue and hoping the round goby will be the answer is foolish. Just look at the 2021 Alewife data, they are plentiful, and sure to be the main forage. The plan requires cool- water tributary habitat, for success. The Salmon River has limited resources. Oak Orchard and Sandy creek are hardly a cool water environment. There seems to be too many unknown variables for your plan to succeed. I have been fishing LO for many years and feel your plans budget better spent INCREASING Chinook, and Coho stocking.
4. I was reading over the Atlantic salmon management plan and I keep wondering why we keep trying to push this project. Your own management plan explains how Atlantic's are susceptible to thiamine deficiency. The Canadians have proved this is a waste of time by stocking hundreds of thousands of Atlantic's and having less than 25 returning adults year after year. Stop wasting tax money, resources and hatchery space on a species that isn't going to survive well. If the stocking to return rates of any other species was this horrible, the DEC would cancel the program. We see great returns of cohos with not a ton of stocking.
5. Good afternoon....just writing this email to say I am against the Atlantic program.....it has been tried and tried continuously with no great success....the Chinook salmon is and always will be the #1 game fish in the great Lakes and stocking numbers on Chinook should not be effected due to a Atlantic program that has a proven track record on not working!!

6. I've read the plan several times. I am highly disappointed in the plan.

Atlantic Salmon is a heritage species. To treat it as a "grow, put, and take" program speaks to treating this historic species as simply a production fish to fill coolers and stringers.

Instead of truly putting a program in place to see if the species can right itself in some of the streams that could possibly support them. The Salmon river has shown success of a summer fishery. So has South Sandy and Irondequoit in the 80's and early 90's, as well as the salmon with great returns in the mid 2000's.

The strategy should be to find the greatest survival in our current habitats, to study if there are and streams that promote natural reproduction. There should be a moratorium on harvest of this species on the lake and tribs for 5 years to measure results on if this program has any merit for future consideration.

If from a science perspective to truly see survival and possible summer runs, you would never choose Hamlin's Sandy creek where summer temps reach the low 80's. Back in the 80's fish stocked in Irondequoit creek returned strong with fish in the summer and fall. It's a stream with many springs already promotes wild steelhead, has an extremely long river course with miles and miles of good canopy cover that keeps the stream much cooler than most in NYS.

Yes the bay has predators but also is deep with cooler thermal relief. As I work on Priority Waters projects where the state is intent on resurrection of native heritage Brook trout streams why would you treat another historic heritage species any different.

There is no reason to simply lump LL Salmon into the Grow put and take program just because they will swim in LO with other Salmonids. All the other species are actually invasives other than Lake Trout.

The language around expecting more fish to show up in creel census's is simply short sighted on the effort that should be looking at survival of LL salmon in our current habitat. Will they return? Will they return in summer and early fall as is their historic tendency. And then what if any impact they have on sport fishing.

I honor the fact that you've authored a plan, but I think your strategy completely misses the target of treating these fish as a historic heritage species. They don't HAVE to be lumped in with the rest of the LO salmonid program. At least not until you've separated it and protected it to see if it could ever be viable in the current environment.

7. I want to tell you how much I appreciate your efforts to restore Atlantic salmon in Lake Ontario. I fish the Salmon River often, sometimes 50 or more times a year. The possibility of encountering an Atlantic salmon is part of the motivation for this. Five years ago I caught a large Atlantic swinging a fly in the Douglaston Salmon run and there is no way to express the enjoyment of that experience. I think it would be wonderful to have more of these splendid fish present. This sentiment is shared by many of my friends who also fish the river. Please understand our support of your efforts.

8. Thank you for the opportunity to comment on the draft NYSDEC Bureau of Fisheries Report #: cr1919. I applaud and fully support the Bureau of Fisheries efforts to establish an Atlantic salmon fishery in Lake Ontario and especially a summer fishery in the Salmon River. This program is very important to me and many of my friends who are tributary anglers. The chance to catch one of these magnificent native fishes adds greatly to our experience and enjoyment on the Salmon River. I have personally caught and released 5 Atlantic salmon in the Salmon River since 2016 including a 31" fish. (see photo)

I urge you to disregard the negative comments made by the Lake Charter Lobby and boat anglers who say that the Atlantic salmon program in Lake Ontario is a waste of time and money. As you know the Salmon River alone gets more angler hours effort than the entire boat angler effort according to recent NYSDEC creel census data. Based on this data, the tributary angler's views should be more important in making these decisions. Please continue the Atlantic salmon program! If cuts are needed they should be made in the Chinook salmon program.

9. After carefully reading the draft plan I only have one comment or suggestion I would like to make. Whereas the number of available Atlantic salmon smolts is limited; and Salmon River is the "premier Lake Ontario tributary"; has the most public fishing access of all the Lake Ontario tributaries; has the most coolwater habitat available during the summer months; and gets the most angler effort I believe you should concentrate your efforts on this river. Once the goal of establishing a summer Atlantic salmon fishery on the Salmon River is reached then look into the possibility of developing Atlantic salmon fisheries in the other less suitable tributaries.

10. Hello, My opinion on this proposal is as follows. Historically, Atlantic Salmon stocking efforts have been unsuccessful and there is no evidence or research in the plan documenting a successful outcome. There is no foundation to reach this goal. How was the documented 'Need' determined? Where does this statement come from specifically for Atlantic Salmon:

DEC has a management and stewardship obligation to enhance availability of this sportfish to satisfy the desires of anglers and enrich the natural reproduction of this species, which is integral to Lake Ontario's natural heritage.

The plan is to start a 10 year project that has not been successful in the past, then make adjustments based on knowledge learned. Re-read that sentence. Cut stocking of other successful salmon species when few to NO rivers to stock and maintain Atlantic Salmon for this project? It does not read well at all. I am not for it.

Suggestion: Shutdown Skinner creek to any fishing. Fix the passage under Route 81 to allow further migration of all fish. Stock Atlantic Salmon, smelt, and emerald shiners for 3 years at reasonable numbers to that creek size. Keep daily records of everything every half mile of the stream, rain, day time temperatures, water levels, water sample contaminants, water temperatures. etc. Whatever can be collected remotely. Check predation species throughout the creek and outlet. Closely monitor natural reproduction. Compile, share data, make and ask for suggestions. Continue observations for years 4 and 5 without restocking. Compile, share data, make and ask for suggestions.

11. Good morning First I'm a 50/50 lake and stream fisherman. If this new Atlantic salmon plan were approved, Simply I would sell my boat, the only reason I still keep a boat is for the killer Chinook salmon, I'm sorry, I just don't care about atlantics, we catch them in Cayuga.

12. I read the draft plan to stock Atlantic salmon in Lake Ontario. I am a recreational fisherman who resides in Scarsdale, New York, Westchester County. Last Fall and this Spring, I had the opportunity to experience the outstanding steelhead and Pacific salmon fishing in the Lake Ontario and Erie watersheds, and I'm excited that DEC is planning to try to re-introduce Atlantic salmon to their native grounds in Lake Ontario. I realize that the plans are primarily for a put take fishery, but if successful natural reproduction can be re-established, even on a limited scale, that would be a wonderful development. It's always my goal as a responsible conservationist and fisherman to see our native fish stocks return and replenish. I strongly support your efforts in the Lake Ontario watershed.

13. I was reading through the draft for the Atlantic Salmon Management Plan. My family has a property that has two tributaries that flow through it. One flows into beardsley creek, which goes into marsh creek, which flows into oak orchard. We have had chinook and suckers run in from the lake, and I wanted to see if there were any opportunities to have Atlantic salmon imprinted as eggs or smolt on our property. We do a few land grants and i provide water samples for science on the fly (<https://scienceonthefly.org/therivers>).

14. I strongly object to any cannibalization of chinook salmon stocking numbers to promote a fishery that has previously failed on numerous attempts. There is no summer stream fishery along Lake Ontario due to water levels and water temperature, as noted in your own proposal. Show me the stream angler survey numbers for July and August. Salmon stocking numbers have already been decimated the last few years. If anything, lower the rainbow/steelhead numbers instead of the salmon. The salmon fishery is a multi-million dollar enterprise for the lakefront counties. What is the business case for the Atlantic fishery?? I hear crickets.....Thank you for your consideration in this important matter.

15. Look at what Lake Superior State did with there Atlantic Salmon program & follow it & we will have great atlantic salmon fishing here

16. Thanks for taking my comments. I have been fishing Lake Ontario a relatively short time - about 20 years. I fish it for one reason.....KING salmon. We purchased a cottage on Lake O to be closer and access to the lake. Kings are King. Please do not reduce (please increase) stocking of king salmon.

17. Good Morning, I am submitting input regarding the Lake Ontario Atlantic Salmon Fisheries Management Plan. I do not support the plan for several reasons. The Lake O fishery has its own continuing management challenges with the current stocked species. Why risk jeopardizing a current world class King & Coho Salmon, Brown Trout, Steelhead, and Lake Trout fishery by adding another apex predator to offset a current management strategy. Atlantic Salmon fisheries exist within the state and it seems that re-directing a program to increase those locations would still create opportunity for anglers and spread the fishing out and not just focus on the Lake O south shore. Cayuga Lake bait populations seemed very strong this spring when I fished the north end; here is an example of an existing fishery that could be built even stronger by additional salmon stocking. Thank you for your consideration.

18. I do not support the Atlantic Salmon plan.
19. I am a fly fishing guide in the state of New York and I fully support developing the Atlantic salmon fishery as much as possible. In addition to Lake Ontario, I believe that the possibility of introducing the species to New York waters of Lake Erie must be examined. During law school, I wrote a policy evaluation paper on this very subject and have attached it to this email for your consideration as well. Whatever you guys decide, please do more with Atlantic salmon.
20. I am against the plan. Millions of dollars have been wasted over the past 30+ years on trying to do the same thing. Rather than adding Atlantics which will fail, add kings at the ratio of 1:2.4 to strengthen the fishery that drives so much of the shoreline economy. This is simply placating to a special interest group who was the only fishing group to give input for the plan. If this goes through and fails there will be many fishermen asking why so much time, money and resources were used for something that so many knew would fail AGAIN. And who was in charge of the decision making. Anyone who fishes the lake knows that the plan is based on B.S. when it states that the Atlantics will eat gobies as part of a diversified diet. This is laughable. A few gobies, emeralds, bugs, etc... can be diversified eating, but not when they spend the majority of the growing season in open water.
21. As an individual who has been involved with assisting the NYSDEC Region 7 in their attempts to restore Atlantic salmon in the Salmon River, I see a lot of similarities between this draft plan and what Region 7 and Tunison initially tried to accomplish. That focus was to create a summer fishery in the Salmon River and to attempt to achieve some level of annual natural reproduction. That effort began with a largescale Region 7/Tunison field attempt (when Les Wedge was the regional fisheries manager) to try to capture adult Atlantic salmon during summer in the river. The thought was that progeny from these early run summer ATS were what was needed to get the summer run established. These fish were held at Tunison until fall and spawned. That effort was resumed by Tunison several years later when GLRI funding became available. The point I wish to emphasize here is that we understood the need to get eggs from early run ATS to create that important summer fishery. Although the draft plan states a Fisheries Management Objective of developing a summer ATS fishery, I see no effort to get eggs from early returning salmon. If you are truly serious about trying to meet your objective to create a summer fishery, then you will need to do more than what you have laid out in this plan. Perhaps this is an area where Tunison could be of assistance.

I would also like to point out that the draft plan's emphasis to develop a thiamine resistant strain of Atlantic salmon is not all that different than what Region 7 and Tunison were attempting to do several years ago. The theory was that the adult ATS returning to the Salmon River we were targeting were first generation thiamine resistant survivors. Clearly with the USFWS involved you have substantially more resources to explore this important concept.

In my opinion, the catch of wild ATS YOY's in the Salmon River varied with our effort between years. When we put more effort in, we caught more wild YOY's. The first few years after initial discovery, detection effort was much greater and so were wild ATS YOY catches with fry being observed annually. After the novelty wore off annual effort was only about 3-4 total field hours/summer (very minimal for the size of the Salmon River). Even with that reduced effort we were able to catch wild ATS YOY's in some years. The bottom line is that the statement in the draft plan is a bit misleading because inconsistent detection of wild ATS YOY's was just as likely the result of inconsistent annual effort than the actual number of wild fry present in the river.

I have conducted habitat assessments of juvenile salmonids in Lake Ontario tributaries for almost 40 years (almost all of it published in peer reviewed journals). In all those assessments I have never encountered two more disparate salmonid species in terms of their preferred stream habitat than Atlantic salmon and coho salmon. ATS juveniles, both as fry and yearlings, prefer riffles and YOY coho are always in pools. There is zero potential for competition between these two species as juveniles.

Overall, I think the draft plan is well done and could provide future benefits for Atlantic salmon in Lake Ontario. Because I believe that establishing a summer fishery for Atlantic salmon in the Salmon River is highly desirable and could help elevate the profile of this important native species, I strongly suggest you consider additional steps that are really needed to achieve your objective of creating that summer fishery.

22. As an avid angler of Lake Ontario tributaries, I would love for Atlantic salmon to have an increased presence in the lake and more prevalent in the Eastern tributaries. These are native species that we as anglers now refer to as "unicorns" when caught, and that is a shame for the species and the states native fish. Spring and summer runs of these fish could also help local economies during those seasons as many regions rely on fishing tourism. Along with Lake Ontario they also should be stocked more in the finger lakes as they present a unique angling and economic opportunity for guides and clients. I fish Skaneateles lake year round and have only caught a handful of salmon as the state puts very low numbers in the lake for its size. These are beautiful, well respected and hard fighting fish. We as humans created the problems for their decline, it's only right that we fix this and allow anglers to connect with them for generations to come.

23. I support the Atlantic fisheries plan. If it works to make a summer fishery, fine. Nothing ventured nothing gained. The lake / river fishing that we have - the salmonoids - is an artificial fishery, stocked and maintained by stocking. If an Atlantic fishery takes hold, opponents will be there wading and fishing the summer fishery. The only downside is, I have the river (Salmon) pretty much to my self due to a lack of fishing pressure, which would be sure to change.

24. To Whom it may concern: In general the plan is well thought and organized, however, would recommend the following:
 - that the Plan include the eventual removal of dams not only on the Salmon River, but also the Fish Creek Drainage and other streams feeding in Lake Ontario.
 - Plan should any efforts by the Canadian Government to restore Atlantic Salmon to Lake Ontario.
 - the Plan should discuss efforts on the St Regis River, the Salmon River near Malone, and the Chateaugay Rivers.

-the Plan should address the potential for genetic modification to overcome thymine deficiency.

-has any natural reproduction been documented either in U.S waters or Canadian Waters.

25. Cap the pipe dream already !!!! How many more years is the dept gonna waste playing around with re-establishing this doomed species. its obvious the habitat for this species is non existent anymore . Until you can control bait quality in the lake and more so the dam releases and thereby the critical water temps for returning fish its basically throwing time and money down the drain. Having fished the Salmon River my entire life from the late 70's i can truly say there were only a handful of years that the atlantics came back in catchable numbers in the spring /summer. Many years they slowly suffocated in the upper fly zone along with the skamania's. Also notable : as the skamanias disapeared so did the atlantics. It was and occasionally still is a shame to see stunningly large skamania dead along with some atlantics every summer in the upper zone.

That being said, when is the dept gonna put some money towards a weir to get a real accountability of stocking methods !! The Douglaston run would surely allow for one. especially if it hits the pocketbook in a positive manner. If you dont really want to know the true return numbers then this venture is just more hocus pocus. the river has taken such a downward spiral, i often scoff at the statement of it being a world class fishery. First the Brown trout were screwed around with, no longer do you catch any springers in the upper fly, also its seems a rare occasion to see anybody get a brown in the upper sections anymore !! Then it was the skamania , the declining overall numbers tell this story ! Probably the most reliable fish in the year round fishery was just left to fizzle out. Get some new eggs from out west and bring em back !!!!

So my comment is its too late for the atlantics, plus most just die in the lake when they hit aroud 6 lbs.. The times and the environments have changed for these fish and they are never changing back. They have steadily gone down hill since the great reintroduction idea started. and has become a waste of time , energy and money.

26. A couple thoughts for you. #1- Please stock fewer Chinook in order to allow for the increase in Atlantic salmon stocking. I've fished Pulaski since junior high, 63yo now, and with the massive number of kings in the river most years all you do is attract a lot of lowlife's to the tributaries at the expense of honest fishermen. I truly believe most of NYS government could be funded with the tickets that should be issued each fall. #2- Water temperature is obviously the biggest problem for summer survival. Would it be possible to drill wells, that could be utilized during summer months, at the heads of the large pools to provide cold water refuge pockets? The river just below the hatchery creek with it's well supplement obviously provides a sizable holding area during summer months but of course is closed to fishing at that time of year.
27. Hi, and thanks for the opportunity to comment on NYDEC's draft plan. Scope – Page 4, suggest removing “in future years” and replacing with “throughout the ten year period”. We have been involved with Ontario's Atlantic salmon restoration efforts for over twenty years. During that time we have been in close contact with Roger Greil of the LSSU and Randy Claramunt of the State of Michigan. Both of these individuals have moved the yardsticks forward on Atlantic salmon stocking and management in a very positive direction. It is very important to have learned from those individuals and not begin a new project from seemingly a square one starting position. We are not suggesting that your plan is doing that but there are a couple of important points worth noting.

The plan identifies that smolts will be used as the principle age class for stocking yet smolts are not described. There may be an assumption that everyone knows what a smolt is? In addition, the importance of healthy fish needs some discussion. The reason that we mention this is because there were several times in previous years when during the stocking period NYDEC smolts were described as being small with reports of excessive fin erosion. A successful stocking program requires Atlantic salmon smolts to be of a specific size by a certain date, and be healthy. If the fish do not meet the size and date requirements they will not undergo smoltification. Page 5 – “Competition with Pacific salmon” – For several years several Ontario biologists had a similar opinion i.e. that “Chinook salmon appear to displace Atlantic salmon in Lake Ontario streams”. It now appears that this comment is changing. The current thinking is that this behaviour by Chinook and Atlantic salmon appears to take place during periods of low river flow at times when neither species is actively moving upstream. However, with cameras in place in the Ganaraska and Credit rivers it appears that during periods of adequate water flow both species will move upstream in unison. This behaviour seems to dispel previous thinking. Stocking – page 7 Stocking low in the watershed – Yes, in fact Michigan has consistent year to year successes (5-10+ % adult returns) with stocking at the mouth and stocking well offshore of a river mouth.

Stocking when water temperatures are 46-50F. Where did the smolt stocking temperature range of 46-50F originate? Can you provide references? As Lake Ontario has some similarities to that of Lake Huron in terms of a forage base, we would suggest that using 50F(10C) should work well. Ontario has begun using 50F (10C) and we are hopeful of an improved return this fall. Roger Greil (LSSU) and the Michigan DNR have been using 50F as the targeted smolt stocking temperature in Lake Huron for up to ten years because it has worked well with adult returns being consistent and ranging between 5-10+%.

Pen rearing – Due to the almost immediate increase in mortality after being transferred to a rearing pen, we are not convinced of any benefits of pen rearing that may outweigh mortality losses that seem to double each day.

Typo - Line 7, should be 15,000?

Evaluation of performance of Sebago strain with low thiamine tolerant Sebago strain – a worthwhile consideration. Thanks again for the opportunity to review your plan. Please send along any questions that you may have. Hopefully, both New York and Ontario will enjoy future successes.

28. Comments:

Management Philosophy and Goal

Both state increase natural reproduction, yet Guiding Principles says managed as Put-Grow-Take and secondary focus is natural reproduction. Why is natural secondary in Guiding Principles?

Guiding Principles States no overly burdensome regulations. Summer stream closures and higher enforcement may be needed in early years.

Historic Atlantic Salmon Management States 1980-1990s stockings failed. That is because the creeks were not closed in the summer during early years to protect returning adults and they were wiped out by poachers.

Challenges to Atlantic Salmon Management Survival talks about alewife and goby populations in Lake Ontario. Smelt populations are super low, would higher smelt populations help with thiamine deficiency?

Limited Hatchery Capacity mentions nothing about collecting returning adults at the hatchery on Salmon River. Shouldn't NYS prioritize collecting returning adults that have survived in Lake Ontario?

Lack of Available Summer Habitat says large embayments act as thermal barriers. Yet many Adult Atlantic Salmon returned to Little Sandy Creek in the summer. Unfortunately, the stream was not closed and the returning adults were poached out.

Selected Tributaries

Mentions South Sandy Creek. Early spring 2022 snow pack thaw saw Monitor Mills Dam breached, possibly this will open gravel spawning territory above all the shale rock in Ellisburg. Will more Public Access be pursued above Monitor Mills?

Approach

Stocking

Pen-rear a Subset of Smolts

To be successful will require salmon to be delivered earlier than May 4 because of warming river temps. Also 15,000+ salmon are too many for 3 net pens, overcrowding was a problem 2 years in a row.

Evaluate Different Strains of Atlantic Salmon States 2023-2025 USFWS Smolts. Scope talks to 10 year period but stocking in this section is 3 years? Why no plan to capture adults returning to Salmon River and collect eggs and raise to smolt?

Objectives and Strategies

Finally talks to remaining years of the 10 year plan. No mention of egg collection from adult AS which have survived in LO and successfully returned to Salmon River Hatchery. Why is this not a viable objective?

Public Outreach

Can a Hotline be established for the reporting of AS catch?

29. I'm not in favor of extending the Atlantic Salmon stocking program.

30. I am absolutely against the proposed program to increase the stocking of Atlantic salmon in Lake Ontario and its tributaries.

This program as proposed would reduce the total stocking of chinook salmon in Lake Ontario and therefore reduce the opportunity to catch chinooks in Lake Ontario and its tributaries. The lake and tributary fisheries for chinooks have huge economic impact (lake charters, guides on the rivers, significant spending by fisherman in many Lake Ontario communities, sales of fishing licenses, sales tax collection, fishing tackle sales, etc.) that is being effectively discounted.

We have a successful 50 year chinook and coho salmon stocking program in Lake Ontario that will now be potentially reduced by the Atlantic salmon proposal because of limits on hatchery space and financial resources as well the limits on prey species within Lake Ontario.

And even at its best, the total return in terms of the number of Atlantic salmon will be extremely small given the resources that would be directed at the Atlantic salmon program.

Other issues are at play including a resurgence of the lamprey eel population (supposedly due to Covid restrictions). Also there is the sudden decision, which breaks a 50 year precedent, by DEC to start relying at least partially on natural chinook reproduction in the Salmon River when there is essentially limited to no understanding of the factors that determine the success of that spawning. That in turn impacts decisions about stocking numbers. A very convenient and curious circumstance; start counting natural reproduction of chinooks, reduce stocking numbers of chinooks as a result, and simultaneously create an Atlantic stocking program.

Again, count me against this Atlantic salmon program proposal. A huge amount of resources and dollars would be invested in a program with a minimal return.

31. I am pleased to have an opportunity to review and comment on the draft Lake Ontario Atlantic Salmon Management Plan. I have read through the plan several times and offer below some general and section specific comments.

General comments: I applaud the authors for adopting a more realistic set of goals and objectives than have often times been associated with Atlantic salmon (AS) plans in the northeast US. Specifically, there is no mention of “restoring” self sustaining populations- well done! Kudos for the candor. I noted that there was no representation from any member of the Fish Culture Section on the list of authors, which given the critical role of fish production and stocking criteria specified in the plan is unfortunate. On a minor note, I believe it is customary to have the scientific name follow the common name in the first text reference in a technical document, so the authors may wish to add this in the topic sentence of the first paragraph.

Section Specific comments:

Historic AS Management: It seems a bit contradictory to state that “The last attempt to create an AS fishery was during the 1980's and 1990's, but then follow that with “Since 2003 DEC has stocked 50,000 ASto produce a minor fishery.” Perhaps some modification to the first sentence referenced would provide greater “separation” between the management intentions for those time periods. I suggest that AS were also stocked to maintain their presence as a native species within the Lake Ontario system, which was totally reasonable even though restoration to self-sustaining status was not. The authors may or may not wish to address this relatively minor point.

Current AS fishery: Comparing the current catches of AS and brown trout (BT) in Lake Ontario, with no mention of BT stocking numbers or regulatory framework omits some relevant context. Hasn't the stocking ratio been something on the order of 5 or 6 BT:1 AS? Additionally, differences in current angling regulations are worthy of mention in my view. Acknowledging these differences does not in my mind diminish or weaken an overall conclusion that survival (and attendant angling catch) of AS in the Lake Ontario system have been disappointing.

Challenges to AS management: When referring to thiamine deficiency impacts, the authors may wish to add impaired reproductive success to AS, not just adult mortality. The authors know this, non-technical readers might not. Not including fall fingerling stocking as part of this plan is a sound decision- well done! The authors may wish to include recognition that hatchery capacity is more than cubic feet of water and raceways. Overall capacity can be limited by human resources (staffing), and the ability to get all species transported and stocked within the desired spatial and temporal windows.

Selected tributaries: The authors should explain why a summer fishery for AS in the Salmon River is literally unique (my emphasis added), or dial back that descriptor a notch or two. There are other rivers in the Northeast that have AS fisheries in the summer months. I certainly agree that the Salmon River is the best candidate NY has for creating a summer fishery, and the size of some returning fish could be truly noteworthy.

Approach-Stocking: A moot point given it is August, but were all 95,000 AS smolts to be stocked by DEC in 2022 raised at Adirondack Hatchery? How does the intended 46-50 degree stocking temperature target fit in with current and overall stocking demands? Huge numbers of fish are being transported/stocked in the spring, none of which are considered low priority by fishery management interests. How do the AS stocking criteria fit into the existing stocking schedules and competing priorities? This key aspect of the plan would benefit from Fish Culture Section input. Experimental evaluation of a thiamine deficiency tolerant strain of AS is both cool and exciting- hope it pans out. This specific element reinforces my prior comment regarding thiamine deficiency impacts on AS. Approach- Explore opportunities for habitat enhancement: Are there specific approaches to increasing cool water habitat availability that the authors have in mind- this seems a bit vague though really intriguing? Some specific ideas, if available, would be useful in discussing this aspect of the plan, and perhaps in finding sponsors/funding for implementation of same. Bottom line- This is an interesting plan that avoids the traditional traps/temptations regarding AS by recognizing that the present day Lake Ontario system is not the same system in which this species flourished long ago. AS belong in the Lake Ontario species mix- enough said! I wish you good fortune in finishing and implementing the plan.

32. TU 589 would like to start out by saying we are pleased to see that there is an Atlantic salmon management plan. We look forward to continuing our partnership with the DEC assisting in establishing wild populations in the waters that once held the largest population of land locked atlantics in the world.

With that being said there are few areas we feel do not align with our mission. The first being that the plan states the fishery will be managed as put, grow and take. We feel it would be better stated that it will be managed as a recreational sport fishing for a heritage species. If greater populations of Atlantic salmon were established, it would provide a unique summer fishery and angling opportunity on the Salmon River.

While we would ultimately like to see year-round catch and release on Atlantic salmon at least in the Salmon River, we realize that is unlikely to happen and therefore would like to emphasize the need to maintain the one fish no smaller than 25-inch limit currently in place.

One question we have is why aren't we going to use adult returning fish in the stocking efforts? These fish would seem to be the desired genetic stock.

The plan discusses creating sustained wild fish production but doesn't go into detail on how that is going to be done. Sustainable wild fish production is the end goal of TU 589 as these fish are a heritage species. This is why we feel it should not be labeled as a put, grow and take fishery.

TU 589 would like it to be known that we believe the DEC has good intentions with the plan and we hope to see it succeed. A larger population of returning Atlantic salmon would be a great benefit to the area.

33. Before anything else, let me convey my disappointment and displeasure to read that a guiding principle of the management plan is to manage Lake Ontario's Atlantic Salmon as a "put grow and take" fishery. For Atlantic salmon (a heritage, native species) I find that notion not only undesirable, but offensive. In all honesty, I would find a multi-year moratorium of the killing of any Atlantic salmon preferable (for many reasons) to a "put grow and take" initiative

For more than fifty years I have had the good fortune of being able to pursue the varied species of Lake Ontario salmon; both as a lake and tributary angler. This included fishing for Atlantic salmon in Little Sandy during the summer and fall of 1985 and 1986 (and I can assure you that the large water embayment did not act as a thermal barrier to fish migration). As I am sure you know, it is common knowledge that Atlantic salmon have always been more "warm water tolerant" than all other salmonid species. I say these things as a means of conveying my commitment and dedication to the Lake Ontario Sports Fishery which I sincerely hope to enjoy continued success, particularly, I would add, in terms of the creation of an Atlantic salmon fishery in the tributaries of Lake Ontario. It is with that goal in mind that I offer some comments and suggestions on the draft Lake Ontario management plan for while I believe, overall, that the plan to be well done, I think additional considerations and efforts could increase the probability of this plan resulting in desirable and successful outcome for the Lake Ontario Sports Fishery.

Previously I indicated that I had the good fortune of fishing for Atlantic salmon in Little Sandy Creek beginning the Fourth of July weekend of 1985 and ending late in the fall of 1986. As I pointed out the embayment did not act as a thermal barrier to the migration of Atlantic salmon. The predictable pattern of migration during that time was that subsequent to substantial rainfall, the Atlantics could be found in a large portion of Little Sandy Creek (particularly downstream from Norton Road). The fish would remain in the stream until the water began to drop and at which point the salmon would drop out of the creek until the next noticeable rain event (upon which they would return in substantial numbers once more). Whether these fish dropped back to the lake each time or merely dropped down into the embayment was never established. I make these points only to suggest that if aspects and choices of the management plan are predicated on the belief that warm water embayment's (like that of Little Sandy Creek and Irondequoit Creek) would be prohibiting factor in determining a tributaries viability as a potential stocking location, perhaps these matters need to be revisited and reconsidered. Additionally, the draft plan suggests that should the selected tributaries fail to produce the expected returns, that the Niagara River might an alternative. This makes little sense to me given my belief that warm water embayment's are unlikely to serve as a thermal barrier to fish and, additionally, the Niagara River, historically, was never a river that witnessed any meaning presence of Atlantic Salmon. It never was an Atlantic salmon river and why, in the absence of compelling scientific and fisheries research, we would consider stocking tens of thousands of yearling smolts into that water is beyond my capacity to comprehend (unless there are some less obvious factors in play here).

As noted in the draft, that while wild YOY Atlantic salmon have previously been detected in the Salmon River, the detections were inconsistent from year to year. I have some knowledge of this process and have, in fact, personally participated in the YOY collection, and suggest that a major contributing factor was the variation in effort from year to year. Therefore, it pleases me to read in the draft that there will be increased stocking numbers and “improved stocking practices” in hopes of “more consistent detections of YOY Atlantic salmon in the Salmon River”. More consistent detection efforts will result in more consistent detection of wild YOY Atlantic salmon. Of course another critical factor related to a greater detection of wild YOY Atlantic salmon is through a greater presence of returning mature salmon. I support the plan to evaluate various strains of Atlantic salmon, including those that are low thiamine tolerant. Although it seems to me that this is an initiative that should have already been accomplished, I am happy to see that it is a component of the stoking effort delineated in the draft plan.

An important component of the goal of the Lake Ontario Atlantic Salmon Fisheries Management Plan is to “Create an Atlantic salmon fishery during the summer months in the Salmon River” It therefore seems logical and desirable to expend efforts to capture mature, returning adults to the Salmon River during the summer months, hold those fish until the fall, spawn them (and subsequently return their offspring to the river). And then repeat this process year-to-year. These mature, summer-returning adult salmon have obviously overcome numerous obstacles and impediments and are clear evidence of the existence of a summer Atlantic fishery in the Salmon River. For a number of years, this was exactly the approach of the Tunison Laboratory of Aquatic Science in Cortland, New York and yet, that logical and promising effort has been discontinued (for reasons unknown to be). And in spite of the compelling logic of the Tunison approach I see no mention or evidence for a similar effort in the current Atlantic salmon plan. I believe that there should be and that if they Department of environmental chooses not to do so then the Tunison Lab should, once more take on this responsibility.

An aspect of the management plan appears on page 5 of the draft wherein it is stated that “based on prey consumption every 2.4 Atlantic salmon stocked in Lake Ontario would require a reduction of one Chinook salmon”. I fail to see the logic of referencing this data and including it in the draft plan. I am familiar with the “predictor equivalency ratios” and know also for every 2.2 brown trout stocked it “could” require a reduction of one Chinook salmon yet, when decisions are made to increase the number of brown trout into Lake Ontario I don’t recall a similar argument being made. Or when stocking of domestic rainbows was discontinued and replaced with a comparable number of brown trout, I do not recall any discussion about the relative “predictor equivalency ratios” being taken into consideration and then the subsequent adjustment to brown trout stocking levels. But the comparison between Atlantic salmon and brown prey consumption was not made (nor should it have been) but the comparison was made between Atlantic and Chinook salmon. It is common knowledge that there are very different and strongly held opinions amongst boat (particularly charter boats) and tributary anglers regarding the desirability and value of any Atlantic salmon stocking and restoration initiative. Why, then “throw red meat” into the discussion? In what way does doing so promote the probability of New York State Department of Environmental Conservation achieving its desired outcomes for both the Lake and Tributary fishery? I don’t believe that it does. It “muddies the water” (which, I’m afraid to say) might have been the reason for its inclusion.

As previously stated, I believe that overall the plan is well done and I thank you for that effort. I strongly support the objective of creating a viable and sustainable Atlantic fishery in the Salmon River (and all of Lake Ontario for that matter) and therefore feel that considerations and suggestions that I have presented here would assist the department in achieving (and contributing to) the objective of creating (and restoring) a viable, sustainable Atlantic fishery in Lake Ontario (and the Salmon River in particular).

34. I am absolutely against this plan.

35. I am encouraged to see that a Lake Ontario Atlantic Salmon Fisheries Management Plan is being drafted. I fully support an effort to improve the survival of stocked Atlantic salmon and increase the number of adult Atlantic salmon that return to Lake Ontario tributaries to spawn.

A diligent effort toward the restoration of this native species is long overdue. Increasing the numbers of these amazing sportfish will serve to improve New York's natural resources and enhance the quality of recreational angling opportunities. Measures to conserve and protect the Atlantic salmon should be implemented at the same time. These philosophies would be consistent with what the NYSDEC mission statement and the Bureau of Fisheries mission promote.

I look forward to seeing a final Lake Ontario Atlantic Salmon Fisheries Management Plan. My comments appear in the attached document [shown below].

Increased survival of stocked fish: To increase survival of stocked fish, I agree in theory with pen rearing. However, the current situation on the Salmon River is far from ideal. Established pen rearing protocol has not been followed. Problems include location and placement of pens, fish condition, timing of arrival, water temperature, pen densities, lack of shading, water flow surges and high boat traffic. With appropriate changes this would likely be more successful. As to a thiamine issue, as stated round goby seem to help counteract that, and it seems the diet of the Atlantic salmon is more varied than just feeding on alewife.

Increasing the number of adults: This should be a priority. However, steps must be taken to protect these fish from the perils they face during the annual pacific salmon run. The inability of many tributary fishermen to ID the fish they have landed, despite written and posted information, may be why the numbers of Atlantic salmon recorded in the survey data by the creel techs are low, while some cleaning stations have reported much higher numbers of Atlantic salmon. This indiscriminate harvest will continue to threaten the restoration of this native species. A 'pacific salmon season' in the tributaries where only 'black mouth' fish were kept would protect all Atlantic salmon from indiscriminate harvest and allow mature Atlantic salmon the opportunity to spawn. Protecting this species would help to retain adult individuals in the population while also enhancing angling opportunity and its positive economic impact.

Put, grow and take fishery: I agree with the use of stocked fish to increase the number of adult individuals in the population. But I totally disagree with the 'take' aspect as part of this management plan. It greatly devalues this fish, a native species that is part of our heritage.

If individuals are continually 'taken' from the population that does not facilitate an increase in the number of adults, nor the retention of mature adults necessary for spawning. Couple that with the fact that an adult fish takes less food to maintain body weight than it does to 'grow' another to that same size. The 'put, grow and take' philosophy certainly does not align with the mission statements to conserve, enhance, improve or protect this resource.

Increase natural reproduction: A prime opportunity exists for increasing natural reproduction to reestablish wild populations of Atlantic salmon using the USGS Tunison Lab capture/spawn program. The protocol is in place and the facility is already set up. It should continue to be utilized. Adult Atlantic salmon that return to the tributaries are the desired genetic stock and the opportunity to collect gametes from these individuals should be a priority. At the same time an effort to retain more adult Atlantic salmon in the system would add to the overall success of natural reproduction. A robust adult population should be well established before angling opportunity includes any option to harvest this native species.

Limited hatchery capacity: As stated above, the USGS Tunison Lab should continue to be utilized. It is newer than any facility the DEC currently operates and has shown it can successfully rear quality Atlantic salmon. The Salmon River should continue to be the focal point for stocking these fish. As to the DEC Atlantic salmon hatchery, consider prioritizing the Lake Ontario tributary stockings over inland stocking for a time and stock the Lake Ontario tributaries at a higher percentage.

Limited stocking capacity: By their own admission DEC currently stocks a small number of Atlantic salmon in Lake Ontario, which provides for a limited fishery. For this management plan to be successful it would seem prudent to stock higher numbers of Atlantic salmon, at least initially. The 'poor' catch rate for Atlantic salmon has been compared to catch rates for brown trout and steelhead, species that have been stocked at four to five times the total number as Atlantic salmon, as well as at larger sizes than the Atlantic salmon. It is curious that this draft management plan would single out Chinook salmon as being the species that would have the stocking reduction if the DEC were to increase Atlantic salmon stocking. It would make more sense to decrease stocking numbers across the board – for all other trout and salmon species to facilitate stocking more Atlantic salmon.

Competition with pacific salmon: The draft management plan makes a statement about competition between juvenile steelhead, coho salmon and Atlantic salmon for instream habitat during their first year or two. I can only speak to the Salmon River, but I know from personal experience (having spent many hours during the spring and summer seasons fishing this river) that juvenile steelhead stocked by the hatchery in the spring have usually left the river before the fall, juvenile coho that are caught are in the slack, slow water and juvenile Atlantic salmon are always in the riffles and fast water. I don't believe this is a viable concern.

Lack of available summer habitat: There are known thermal refuge areas on the Salmon River where Atlantic salmon hold. Similar conditions are seen on other Atlantic salmon rivers like the Miramichi in New Brunswick, a river that often has warmer water than the Salmon River but continues to have annual summer returns. This should not deter moving forward with this management plan.

Few opportunities for data collection: In addition to angler diaries, trained individuals should be utilized to collect relevant data. Partnerships with colleges that offer a fisheries biology curriculum should be explored. Cleaning stations would be a prime data collection location.

Fish identification and stewardship: Fishermen who flock to the tributaries for the pacific salmon run have rarely shown a true desire to learn fish ID despite information in print, posted or online being readily available. Most just don't care to learn fish ID.

36. Upon reading the proposed management plan for Atlantic Salmon I have concerns.

As a heritage fish and a species whose value as a game fish far exceeds most others I think it shows a lack of forward thinking to manage them as a put and take fishery. Every effort should be put forward to re-establishing these fish as a premier wild fishery complete with all protections in place until a foothold for natural reproduction can be attained. At the very least a total ban on harvesting of any size should be implemented at least in the Lake Ontario watershed. This would take someone doing their homework and some trial and error on which tributaries would offer the best chance for success, but the benefits gained from re-establishing this prestigious game fish could very well be worth it.

I travel each summer to the Canadian Maritimes and spend upwards of four to five thousand dollars to fish for Atlantic salmon. I would welcome the opportunity to do this in my own back yard. More importantly it would draw other anglers like me from other locations throughout the US to spend their angling dollars here.

37. As an angler who pursues Atlantic salmon, and as a retired DEC Special Assistant for the Salmon River that for 25 years has been involved in the management of both the Salmon River and Lake Ontario, I greatly appreciate the effort being put into developing a L.O. Atlantic Salmon Fisheries Management Plan. I understand the delicacy that has pervaded for years the discussion of this species as it relates to the overall fishery within the diverse angling community. I believe that many misconceptions and conspiracy theories particularly within the charter and lake fishing community have clouded the ability of the department to move forward on a realistic and successful plan for this species which is part of the heritage of NYS. Having worked for many years with Atlantic salmon management in the Salmon River with Region 7 Fisheries Managers Cliff Creech, Les Wedge, Dan Bishop, and Scott Prindle, along with partners such as Jim Johnson [USGS], and many of you that have been involved with writing this plan I believe that the comments that I can offer on the draft plan will hopefully help you in finalizing the plan that you will adopt for the next 10 years.

Guiding principles: Atlantic salmon will be managed primarily as a put grow and take fishery. Need: Atlantic salmon are a high value sport fish which are integral to L.O.'s natural heritage. Comment: I find this to be contradictory. As a native/heritage species and for the serious anglers that pursue this fish, many of which would pursue it here if a viable fishery can be established, this contradiction will be seen negatively and truthfully insulting. Alternative: Atlantic salmon in L.O. and its tributaries will be managed as a recreational trophy sport fishery for a native /heritage species that will be dependent on annual stocking and any supplemental natural reproduction that can be achieved in the tributaries. I believe this better represents the Rational for the management of Atlantic salmon that is stated in the draft plan. It elevates how the fish is perceived by the angling public. As we all know perception can be everything.

Stated in the principles: increasing natural reproduction is a secondary focus and in the next bullet you state that DEC will not place overly burdensome regulations on Atlantic salmon to promote natural reproduction. Again I find this contradictory and truthfully why pigeon hole yourself into position that if you do need to have additional regulation you have stated you won't. A personal experience I have seen on the Salmon River in the summer fishery was a incident where 18 Atlantic salmon were in the pool below the Altar Bridge in which a number of anglers were throwing musky size spoons with treble hooks into the water trying to snag the fish. The history of illegal snagging still haunts this fishery and may necessitate additional regulations in the summer to promote a sport fishery for these fish. Don't leave any options out if you really want to attract anglers that are interested in Atlantic salmon.

Historic Atlantic salmon management: As a young man/angler I fished the tributaries that were stocked in the period of 1983 to 1987. While fishing Little Sandy Creek in the summer of 1986 I caught 56 Atlantic salmon in the month of June and July. Personal communication from Regional Fisheries Biologist at the time Les Wedge indicated from stream surveys at the time that natural reproduction of Atlantic salmon was found and amounts of 29 yoy per acre of water were found in the system. There are comments I would like to present here that correspond to Lack of Available Summer Habitat, Large warm water embayments that act as thermal barriers to migration, Irondequoit Creek and Little Sandy Creek. Comment: There was no thermal barrier in Sandy Pond which in late June and July can reach temperatures close to 80F that stopped Atlantic salmon migrating into the stream whenever there was a spate of rainfall. These fish easily migrated though the warm water embayments. The biggest obstacle to Atlantic salmon migration was human intervention. Illegal harvesting of fish by snagging, netting, putting Clorox into the stream etc. Little Sandy Creek proved that even a small stream under the right conditions could produce summer runs of fish and being a high quality stream have natural reproduction occur. Warm water embayments were not an obstacle to migration. High quality tributaries such as Little Sandy that do mostly occur in the Eastern basin should be given high priority for alternate stocking sites in the future because they can provide recreational fisheries, have PFR, are not stocked with Pacific salmon, and can potentially have natural reproduction. This fills both objectives of the plan. I also believe that the Salmon River based on the work already done on Atlantic salmon provides the greatest opportunity for establishing a recreational fishery in a sizable cold water river with the potential to support a summer run and natural reproduction and should be given the highest priority in the plan. Limited Hatchery capacity: This has been an ongoing issue and is not resolved in the plan. As a ten year plan that doesn't have an answer for stocking after the next three year experimental stocking of Lake Champlain fish is concerning. I was involved with the development of a plan to utilize Tunison as a source of raising salmon and more importantly salmon that resulted from the collection of Lake Ontario surviving returning adults. That was a priority for developing a summer run component of the Salmon River Fishery. I believe there has been some misinformation that the DEC has received that gives the perception that Tunison had high mortality of collected adults. The accepted mortality in the New England Salmon Restoration Program for holding collected adults up to 6 months is 50%. On one of the best years Tunison collected 67 adult salmon in June through July. By spawning time in mid November 5 salmon died, 5 were killed for disease protocol testing, and 57 were spawned and rejuvenated to be restocked in the Salmon River. That is way above the 50% survival rate. Tuninson has the capacity the raise 70K fall fingerlings and 30K smolts. Yes the fall fingerling program did not produce the results hoped for but given the opportunity to utilize the Salmon River hatchery smolt release pond to raise those fall fingerlings to yearlings instead of stocking them directly in the river could potentially help the departments future stocking goals. As a side note all of the fall fingerlings were to be fin clipped. I recently saw a data sheet in which 60K were stocked unclipped. How do we know that some of the unclipped fish returning to Beaverdam Brook which were perceived to

be Adirondack Hatchery fish were not in fact Tunison fish stocked in the brook? I guess what I am getting at is leave no option out if you want to increase stocking levels to the 200k number once the experimental program is completed in the next three years.

Limited stocking capacity: I understand what you were trying to say but feel you either need to rewrite this section or eliminate it. It has already raised the conspiracy theory of eliminating Pacific salmon for Atlantic salmon to new heights, especially among the charter and lake anglers. It has once again pitted lake vs. trip anglers. I am sure you have already heard this.

Competition with Pacific salmon: Of all the competitive interactions the one that is not going to be a factor is Coho salmon. Totally different habitat requirements for juvenile Coho and Atlantic salmon.

Available summer habitat : Continued work by the DEC, USGS, and USFWS should be completed that will identify summer refuge areas in the Salmon River that will benefit all salmonids and can be incorporated into ongoing stream bank restoration. All the work that was initiated to Region 7 and USGS with the help from USFWS to identify cold water thermal areas in the Lower Salmon River Reservoir that may be available for a future bubbler system that could enhance downstream temperatures below the dam and at the hatchery via the pipeline during the critical summer months should be completed to know if it is a possibility. This has been done on three rivers in Michigan and if it can be done here may be useful in future FERC licensing negotiations.

Other potential tributaries: The Niagara River should not be considered an alternate or potential tributary. As mentioned in the plan it already has a significant steelhead fishery, along with lake trout, Pacific salmon, and brown trout. It was by all historical accounts not an Atlantic salmon river. Utilize the available Atlantic salmon for stocking in more appropriate tributaries. Don't allow Regional lobbying for these fish in a stream that already has a fabulous existing fishery. If you just want to create a fishery then consider a location like Oswego Harbor where every spring Atlantic salmon are caught in the boat fishery. Enhance that fishery with an actual stocking.

Stocking: Pen rearing of Atlantic salmon could have great potential. The present program on the Salmon River can only succeed if we can find a different location that allows the pens to be put in earlier so the fish can imprint and be released at the correct temperatures listed in the plan, the product being delivered is of a higher quality, and the density in the pens is decreased. The existing project has been plagued with problems and under the existing situation may not show what the positive benefits of pen rearing could be. If the Salmon River pen project can't be corrected you should not abandon the project but move it to another tributary where it can be evaluated fairly, until such time as different opportunities to continue it on the Salmon River exist.

Evaluate different strains of Atlantic salmon: I see nothing in the plan about utilizing returning surviving Lake Ontario adult fish for spawning regardless of whether they are traditional Sebago or low thiamine tolerant Sebago strain. That is something that is included in the Salmon River Fisheries Management Plan. Again it goes back to don't eliminate any potential partners such as the USGS with their ability to collect returning adult fish that could be used for L.O. strain development.

Presence of wild YOY: Wild yoy have been detected in the Salmon River. I have been involved on all the surveys that have been done and if detections are inconsistent it is because the the surveys have been done inconsistently both in the ability to actually do them and the effort when they could be done.

To all the staff that participated in writing this draft plan I offer a sincere thank you for their efforts as a former DEC staff person, now a private citizen who supports your efforts, and as an angler who is grateful to be able to comment on the plan. Atlantic salmon as a formerly native fish deserve your continued efforts to restore them as part of the present-day Lake Ontario fish community. We all owe that to the fish.

38. DSR would like to start off by thanking and commending NYS DEC Fisheries for initiating a draft Lake Ontario Atlantic Salmon Fisheries Management Plan. This draft plan is well-constructed overall and represents a large step forward toward reestablishing wild populations of a native species that has been essential to New York's heritage.

Area of Concern 1: Near-term Harvest

Guiding principals- "The Atlantic salmon fishery in Lake Ontario and its tributaries will be managed primarily as a put grow and take fishery using stocked fish." o The document's first guiding principal seems to be in direct conflict with the plan's management philosophy, goal, and need.

For example, the plan's 'Need' is identified as "DEC has a management and stewardship obligation to enhance availability of this sportfish to satisfy the desires of anglers and enrich the natural reproduction of this species, which is integral to Lake Ontario's natural heritage."

Further, this guiding principal conflicts with the plan's desired outcome'. For example: "Lake fishery - Annual total estimated catch of 2,000 Atlantic salmon in the open lake fishery. Tributary fishery -Annual total estimated catch of 2,000 Atlantic salmon in the Salmon River and 1,000 Atlantic salmon in Oak Orchard Creek, Sandy Creek (Monroe County), and South Sandy Creek (Jefferson County). Natural reproduction -Consistent annual detection of wild young of the year (YOY) Atlantic salmon in the Salmon River system...etc."

DSR suggests placing a temporary moratorium on the harvest of Atlantic salmon until the plan's desired outcomes are consistently exceeded. From the outside looking in, it just seems like a temporary moratorium is a very logical step toward this plan achieving success. Allowing the continued harvest of this species while trying to recover its population seems counterproductive.

While the plan states, "DEC will not place overly burdensome regulations on the Atlantic salmon fishery to promote natural reproduction." This begs the question, why not? DEC consistently places temporary no-harvest regulations on many other species when population levels are struggling, even when public funds are being used for restoration efforts.

Further, "The Salmon River Fisheries Management Plan (NYSDEC 2018) identifies Atlantic salmon and Skamania strain steelhead as playing a key role in the development of a summer fishery. However, summer returns of Skamania have declined, likely due to DEC's inability to separately hold early returning Skamania adults from the summer until spawning in March due to new disease prevention protocols instituted in response to Viral Hemorrhagic Septicemia (VHSv). This change in hatchery practice may have led to the gradual loss of the Skamania's early returning trait, and Skamania have been phased out of production in the DEC hatchery system. The loss of a viable summer Skamania fishery places an increased need for developing the summer Atlantic salmon fishery in the Salmon River."

As pointed out directly in this document, the loss of a viable summer run Skamania fishery (and now also the loss of surplus brown trout stocking in the Salmon River), puts an even higher emphasis on the successful development of a summer Atlantic salmon fishery for the Salmon River. Again, the continued allowed harvest of this species in both Lake Ontario and the Salmon River only makes achieving this goal more difficult. Haven't we struggled to restore this native heritage species for long enough? Why make achieving this plan's desired outcomes even more difficult? A restored Atlantic salmon fishery, even in the relatively minor capacity that this plan seeks, would greatly benefit both lake and tributary fisheries. • While we realize a temporary moratorium may not be a popular idea with some anglers, the low angler participation of the summer fishery on the Salmon River reinforces a belief that most anglers won't go fishing if they can't catch their target species with a reasonable effort. Let's achieve the catch rates outlined in this plan and then back off of a moratorium as determined appropriate.

Area of Concern 2: Fish Rearing

"This plan establishes an Atlantic salmon stocking target of 200,000 yearling smolts from 2023- 2025, and 150,000 yearling smolts beginning in 2026. DEC and USGS will raise a combined total of 125,000 smolts in 2022 (95,000 DEC and 30,000 USGS). From 2023 – 2025 the U.S. Fish and Wildlife Service (USFWS) will raise 140,000 smolts for Lake Ontario stocking at Eisenhower National Fish Hatchery in Vermont and DEC will raise 60,000...Fish production after 2025 is uncertain and will require continued support from the federal hatchery system and/or additional capacity with the DEC hatchery system to maintain a 150,000 yearling smolt stocking target." o While the near-term fish rearing portion of this plan appears promising (2023-2025), the plan mentions a reduction of 50,000 fish and uncertainty of hatchery capacity beginning in 2026.

While we understand hatchery capacity being in question, why isn't this plan's goal to produce 200,000 fish for the entire term? The plan is constructed to be adaptive, lets adapt if unforeseen hatchery constraints prevent stocking 200,000 annually. This seems like a topic that DEC could keep anglers informed on in an annual meeting and adjust as needed.

Area of Concern 3: Stocking

"Evaluate different strains of Atlantic salmon. DEC will partner with the USFWS to evaluate the relative performance of the traditional Sebago strain and a new low thiamine tolerant Sebago strain. The low thiamine tolerant strain was developed by USFWS using eggs collected from Atlantic salmon in Lake Champlain and exposing them to low thiamine conditions during egg incubation. The resulting offspring are hypothesized to have a better tolerance for low thiamine conditions (William Ardren, U.S. Fish and Wildlife Service, personal communication). Thiamine deficiency is one of the potential impediments to developing Atlantic salmon fisheries in Lake Ontario and, if successful, this strain has the potential to greatly improve the survival of stocked Atlantic salmon and the amount of natural reproduction in Lake Ontario tributaries." While DSR supports the above strategy, we call to question the termination of the USGS Tunison Laboratory of Aquatic Science's similar program. The Tunison program captured adult Atlantic salmon that had successfully returned to the Salmon River from Lake Ontario and spawned them to rear their offspring. These adult fish have demonstrated that they could survive life in Lake Ontario and cope with the respective thiamine challenges. Now using a low-thiamine strain of Atlantic salmon from a different lake whose successful survival in Lake Ontario is unknown appears to be a step backward from the Tunison program that bolstered genes that have shown success in the Lake Ontario ecosystem.

Area of Concern 4: Reporting

“DEC will keep its partners apprised on progress being made to accomplish the goals and objectives of this plan.” o This statement begs the question, how? And, how often?

While in-person public meetings have been a challenge in recent years, DSR suggests DEC return to this style of meeting in the near future. This plan certainly seems like it could be included in the annual “State of the Lake” meeting and/or the “State of the Salmon River” meeting.

If meetings are to continue in virtual fashion, a stronger effort on DEC’s part to contact the public and solicit participation is needed. DSR again thanks the NYS DEC Bureau of Fisheries for recognizing the need for and importance of a management plan for Lake Ontario’s Atlantic salmon. Further, we express our gratitude for having the opportunity to offer our suggestions for improvement. We look forward to continuing to assist NYS DEC Fisheries with their efforts.

39. As President of Eastern Lake Ontario Salmon and Trout Association, I would like to express our organizations displeasure with the proposed Atlantic Salmon plan. We feel as an organization this is not a wise use of limited resources within the state. 30 years the DEC has been trying to establish the Atlantic Salmon to no avail. At this point the money and resources should be used on a species better suited for the angling community.

40. First and foremost, I support the stated goal of improving the sport fishery for Atlantic salmon in Lake Ontario and its tributaries. It would make a major improvement in opportunity, especially in the Salmon River during summer months.

Predation may be more important than low thiamine levels in driving survival of stocked Atlantic salmon in Lake Ontario. Cayuga Lake, which has a forage fish community very similar to Lake Ontario, has an excellent lake and tributary fishery for Atlantic salmon. The fishery is based on stocked yearlings. Further, brown trout in Cayuga are in better condition than those in Lake Ontario indicating a higher density of prey/predator in Cayuga Lake. Low prey density would result in decreased survival of stocked fish.

This “low thiamine” strain of Atlantic salmon is apparently untested in the wild since no literature is cited on its performance. If it performs poorer than the standard Sebago strain, does that mean that it is less viable in the wild due to low thiamine, or inherently more vulnerable to predation? If both strains exhibit low survival, it might be unclear if thiamine is an issue.

The plan doesn’t identify which agency will analyze the samples recovered from unmarked genetic parentage-based marking. Hopefully it will be the USFWS because it is probably expensive and required specialized equipment. Further the plan doesn’t mention sampling wild Atlantic salmon young for genetic parentage. It should be included since increased production of wild Atlantic salmon in the Salmon River is one of the plan’s desired outcomes and the results of sampling wild young could provide guidance on future stockings to accomplish this.

Also not identified in the plan is a sampling protocol for tissue sampling and preservation. A sampling protocol and sampling kits should be provided to anglers volunteering to participate in sample collections.

41. Thank you for the opportunity to comment on this laudable effort to establish a species native to the Lake Ontario ecosystem and of high value to anglers, an effort I encouraged in conversation with NYSDEC going back to Carl Widmer's time as Fisheries Manager for Region 8. While I am happy to see this action move forward, I find the plan problematic, especially in three areas, scope of the plan and data used to formulate it; site selection; and metrics to be used for evaluation. I should also mention that while I am the Secretary for the Monroe County Fisheries Advisory Board, what follows is my own opinion and does not reflect any official position of MCFAB.

In the section on historic management, it is indicated that Atlantic Salmon were extirpated from the lake by the late 1800's, but no indication of the causes is given. While overfishing is often cited, most references on the early fishery indicate that removal of tree canopy and subsequent warming of streams, along with shortening of available spawning habitat by dam construction were major factors in the extirpation. There could be greater detail on earlier attempts at reestablishment, but especially the last attempt in the 1980's and 1990's, indicated as failure, but without any supporting detail on numbers of fish stocked, status at stocking, efforts to measure returns and what the returns actually were. If a report on this effort was ever generated, it should be included as supporting information. This is significant as these returns are cited in rejection of one site, but it is possible that the site could be successful given the number of variables that have been modified for the currently proposed action, especially the strain to be stocked. Similarly, no mention is made of USGS efforts, numbers of fish stocked, duration of effort, monitoring undertaken, and results, but this data is significant in evaluating the Salmon River site.

The current fishery compares Atlantic Salmon to Brown Trout in absolute numbers from the Boat survey. These data would be more meaningful for comparison if expressed as percentages (Returns/Number stocked*100).

Challenges to survival of stocked fish are limited to discussion of thiamine deficiency, but are indicated as mitigated by decline in alewife numbers, and invasion of Gobi as an alternative food source. Are there data to show that Gobi, which are primarily benthic, will compensate during those long periods when Atlantic Salmon will be suspended in the region of the thermocline in search of pelagic prey? Is there data to support the notion that thiamine deficiency has declined in susceptible predators?

Concern is expressed over competition with other salmonids, and yet two of the streams selected have been stocked for many years with King salmon, and are likely to retain residual populations if claims by some anglers and biologists of natural reproduction are true. Competition with juvenile steelhead and coho salmon are also listed as possible negative impacts on Atlantic Salmon, but there is no mention of elimination of steelhead stocking in streams to be stocked with Atlantics, and certainly the flagship stream of this program, the Salmon River, will still receive large infusions of these other salmonids to maintain hatchery stock. If instream competition is a factor, more explanation of Atlantic Salmon biology would clarify the residence time required prior to smolting better than "during their first year, or two of life." Lack of available summer habitat is one area where a more in depth discussion of prior efforts might reveal pertinent data on likelihood of success of the program. The section mentions large thermal barriers to migration in Irondequoit Creek and South Sandy Creek. But I know from the personal experience of catching a 12 lb Atlantic in Irondequoit Creek and observing several other fish in July of the first return summer, and seeing the picture on the cover of the East Rochester newspaper of David Manuel with an 18 lb fish that he caught, and the picture in Sander's Guide of a large fish taken in Little Sandy Creek that summer, that these fish run in response to precipitation events, and were not dissuaded by Sandy Pond or Irondequoit Bay.

Finally, the data collection paragraph refers to what I see as the third inherent problem in this draft, and will be revisited after discussion of site selection.

I agree that the Salmon River is the best possible site for this effort. While I have been unsuccessful in finding summer Atlantics in my time angling there, I watched 4 mature Atlantics summer in a pool of Trout Brook from July into September two summers ago, so I know they are returning. And as Oak Orchard Creek has shown ability to support catchable fall returning fish, despite lack of habitat for natural reproduction or summer survival of pre-smolt fish, it would seem a good candidate for grandfathering into the program. Whether South Sandy Creek maintains temperatures below Ellisburg that would support either summer migrating adults or pre-smolt fingerlings better than the smaller streams in the area stocked in the 80s-90s attempt is questionable. My major objections in terms of site selection focus on the selection of Sandy Creek in Monroe County, and the rejection of Irondequoit Creek.

Sandy Creek is indicated as having good fishing access. I contest this. Using the Info Locator measuring tool, Sandy Creek offers approximately 26 miles of stream. Of this, less than 3 miles are in public ownership or have easements. While the effort being undertaken by the NYS Canal Corporation and NYSDEC to obtain conservation easements is laudable, including these in this analysis is counting chicks before the eggs hatch. No mention of thermal regime of Sandy Creek is made, but it has never been, to my knowledge, included in streams where trout have been stocked or identified as native. In my younger days, the stream was considered such a valuable smallmouth habitat that all angling was forbidden during the spawning season for bass. Won't young bass be a likely predator for pre-smolt salmon? I contend that the limited public access available and the natural limitations of the thermal regime, and the agricultural nature of much of the riparian area providing areas of disturbed or no existent canopy make the stream a poor selection both for establishment of a public fishery or potential natural reproduction. Stream length of Irondequoit Creek measures approximately 18 miles, excluding tributaries, and of that, approximately 11 miles are in public ownership, including most of the lower 6.5 miles up to the cataracts in Philbrick Park in Penfield, and significant pieces along route 96 and in Powder Mills Park. Much of the private stretch between Eyre Park in East Rochester and the canal is slow meandering mud bottomed stream that is rapidly negotiated by fish coming in from Lake Ontario. There is a good data set on stream temperatures at Blossom Road in Ellison Park and at Railroad Mills Road in Ontario County in the USGS Wattstore database. The headwaters areas contain native char, and the stream has been stocked with put and take brown trout for many years. The stream is rejected due to these stocked fish and their potential impact on Atlantic Salmon fry, but this objection ignores that Brown Trout and Atlantic Salmon coexist in many waters in their European range, and Atlantic Salmon and Char occupy the same waters in much of their North American range. It has also been DEC practice in recent years to stock brown trout to establish a put and take summer fishery in the Salmon River, so concern about in-stream predation seems to be at odds with that action. It should also be noted that King Salmon have never been stocked in Irondequoit Creek, so instream competition from the strays that do make it up the creek should be negligible. And if predation from walleye and bass on out-migrating smolts is such a concern in Irondequoit Bay, how are the out-migrating steelhead able to escape? From my standpoint, because it offers superior access to contribute to establishment of a fishery, and offers more suitable habitat for both in-migrating fish drawn by summer rains and for supporting naturally reproduced Atlantics to reach smolt stage, Irondequoit Creek offers a much better site in this part of the state for meeting the dual objectives of establishing a fishery and encouraging natural reproduction.

I am especially concerned on Sandy Creek for the potential "privatization" of a publicly created fishery. Creation of the Douglaston Salmon Run on the lower Salmon River effectively made first shot at in-migrating salmonids paid for with general public license fees the province of those willing to pay the exorbitant day use fees charged, especially during the salmon run. Action by two guides to establish a similar "pay to play" establishment on Oak Orchard Creek was met with action from Orleans County and NYSDEC. Many of the Lake Erie tributaries in Ohio have been leased by private guides to the exclusion of the public that pays to stock the fish. With such a low amount of public access, Sandy Creek offers a similar possibility of "privatization." Because approximately 50% of Irondequoit Creek, including most of the lower stream are in public ownership, this is not as likely a scenario to occur.

Finally, I find the plan to be unclear on metrics for evaluation of the program. Other than targets for return, little concrete data is indicated to be collected, and there is little detail on methods to be employed, frequency of collection, frequency of evaluation, or who will do the data gathering, and what roles the angler/volunteers indicated will play, other than pen rearing. If adaptive management is to be employed, I would suggest that a ten year period for reevaluation is too long. And the fact that Irondequoit Creek could be included 10 years down the road if the other sites "fail" is little consolation to a 71 year old.

I think consideration should be given to modifying the plan to reduce numbers stocked in the three smaller tributaries by an amount that allows inclusion of Irondequoit Creek, as it offers the best public access, greatest data set on water quality and thermal regime, and greatest likelihood of meeting both objectives in the program. Rejection of the site based on anecdotal reference to a previous effort where so many variables have changed between then and now is unacceptable, especially in light of the paucity of data presented to support the streams chosen.

As an afterthought, no mention is made of either climate change or environmental justice in the plan, and it is hard to see these site selections as meeting NYS goals in either of these areas as all the locations selected are remote from urban population centers (but Irondequoit Creek is a 10 minute drive from downtown Rochester) where most of the environmentally disadvantaged reside, and will require greater use of either fossil fuel or the electric grid to reach.

Thank you again for the opportunity to comment.

42. I fully support and appreciate a management plan for the Atlantic Salmon in Lake Ontario and its' tributaries.

The put, grow, and take method suggests killing the fish. I feel strongly it should be a catch and release policy. This would provide an opportunity to reproduce and does not seem overly burdensome as a regulation. I believe most anglers who enjoy catching these fish do not have the goal of killing them. Allowing natural reproduction increases numbers when stocking is restricted by the policy limits.

This policy also needs proofreading by more than one person. Throughout the entire paper, statements are made and then two or three sentences later are contradicted.

Being directly involved with the net pens this year, I am confident in saying that some major changes need to be made. There is no point in being forced to release weak and sick fish. What works for net penning Chinooks and Steelhead does not necessarily work for Atlantics.

I would strongly reconsider allowing Tunison to continue the work that they have been doing. They have the ability to hold the adults, spawn them, and raise the young fish for stocking. What better broodstock than the ones that have returned to the hatchery? They are the survivors, the fish that may be resistant to thiamine issues. I look at these fish as having great potential.

I want nothing more than to be able to have a greater opportunity to catch Atlantic Salmon in the Salmon River. I am willing to help in any way I can.

43. Thank you to all involved in devising a plan to re-establish the Atlantic salmon in its rightful place in the Lake Ontario ecosystem and sport fishery. Just this week I came across a short mention of your management plan at www.flyfisherman.com, and finally found time to read the draft in its entirety. I hope this email doesn't miss the cutoff for comments.

Even though I am from Virginia, both of my parents were born and raised in the Finger Lakes region of New York State, and I have been privileged to make more than 100 trips to the region in my lifetime. My mother's family farm was in the Sandy Creek area, near Pulaski, and my father met her while working at what was then Douglaston Manor farm.

Your Pacific salmon fishery is a phenomenal success story, especially for Pulaski and the surrounding area, but for many of us it's a bit too reminiscent of the crowded trout season opening days we suffered through as youngsters. I've fished for Coho and Chinook in the Alaska wilderness, and it was a wonderful experience, but I wouldn't travel the 600 miles from Virginia to New York to stand shoulder to shoulder to catch one.

Grant me a realistic chance to catch an Atlantic salmon, and I would make that trip tomorrow – and very possibly bring a large Trout Unlimited contingent with me. Atlantic salmon exert that kind of hold on many of us, and we always manage to find the time and money to make the trip: if the overall experience is worthy, and if there is any reasonable chance of a fish taking a fly.

My grandmother used to live with us part of the year, and she told me tales of Atlantic salmon running so thick in Sandy Creek and the Salmon River that people would "gig" them from horse-drawn wagons parked in shallow fords in the streams. I can't vouch for the historical accuracy of those stories, but I can verify that when I was finally able to fish the Salmon River in 1966, at age 12, I was horribly disappointed to learn that I had missed the days of massive schools of Atlantic salmon by approximately 100 years.

In your draft you describe the Atlantic salmon as a "high value, charismatic sportfish desired by many anglers". That is certainly accurate, yet it understates the allure of the fish and the almost irrational spell it casts over otherwise almost normal anglers. I've personally chased Atlantic salmon in New Brunswick, Nova Scotia and Iceland, and have friends who have gone as far as Russia to catch one. Yes, we probably had more mature things to do with our time and money, but that's how excited many, many anglers are about the idea of catching an Atlantic salmon.

Now that I've retired, remarried, and have an eight-year-old son, my days of repeating those trips -- or possibly going to Russia -- are probably done, so the idea of Atlantic salmon being geographically and financially accessible in New York State is beyond exciting.

In reading the draft, I am glad to see you have switched to the Sebago strain and are experiencing better success with it. Frankly, I never quite understood the strategy with the 'outlet spawning' strains, and I hope the Sebago success continues. I also hope the different stocking strategy (near the stream mouth) pays off. In years past I caught six-pound smallmouth bass in the Salmon River, and large northern pike as well, so I assume both species could pose a great risk to salmon smolts while still in the river.

After reading the draft, the one concern I have is the seeming timidity about strongly pushing the Atlantic salmon comeback due to potential conflict with those favoring Pacific salmon. I well understand the economic importance of the Pacific salmon fishery, but Pacific salmon are technically invasive, and Atlantic salmon are a native species, so I hope all reasonable efforts will be made to return the Atlantic salmon to its rightful place in the hierarchy.

My apologies, this became a much longer email than I planned. Thank you for allowing input on your Atlantic salmon management plan; I wish you much success.