**Atlantic Salmon Collaborative Management Strategy**

 **Virtual Public Meeting Agenda**

**Date:** May 28th, 2020

**Time:**  9:30 – 1:00

**Location:** Virtual

**Questions and Answers:**

**Q:** *Can the recovery criteria for returns and these reports use the same definitions for "naturally reared" in the future? terminology is confusing "wild", "naturally reared",...*

**A:**  In the Final recovery plan, the decision was made that parr should be part of the equation for downlisting from threatened to endangered.  The logic was built around the fact that all freshwater life stages will experience the major threats identified at the time of listing (Dams and Marine survival), whereas smolts can be stocked to avoid the threat of dams and therefore would only experience the marine survival threat.  So the idea being that if we observed an increasing trend in the survival of the naturally reared population that that would likely be indicative of improvements surrounding the threat of dams and marine survival.    The other side of the equation is factoring this into our assessments.  Since parr haven't been factored in as naturally reared in the past, bringing them into the equation now will create a fairly noticeable anomaly in the assessment results that will set 2019 apart from all previous years.  This will mean that 2019 could not be compared to previous years unless we go back and try to adjust previous years data to reflect the change, which will be a considerable amount of work. This is especially true in estimates of the population growth rate (the one where >1 demonstrates growth). It will take the USASAC a while to QC-QA these data.  Given that the recovery plan was just released last year, the assessment committee has not had time to prepare for these changes including figuring out the best way to account for them in the assessment, as well as building the rationale that explains the sudden shift in the naturally reared component of adult returns.  The Assessment Committee is well aware of this issue and is working on ways to resolve this discrepancy.

**Q:** *For the Merrymeeting Bay SHRU-What volunteer opportunities exist for fieldwork in the Kennebec drainage?*

**A:** For volunteer opportunities in the MMB SHRU, please reach out to Jennifer Noll at Jennifer.b.noll@maine.gov or Paul Christman at paul.christman@maine.gov.

**Q:** *What is the status of developing a Kennebec River strain?*

**A:** It hasn’t gone beyond the discussion level yet. We have had acknowledgement from most resource agencies and NGO’s that it is essential to recovery of salmon in Maine but it will take a great deal of effort to make happen.

**Q:** *What can the public do to help make a broodstock program [in the Kennebec] a reality? Public pressure?*

**A:** Make sure that this stays part of our conversations as we move forward. Furthermore, additional hatchery capacity that can support broodstock and their progeny will need to be identified.

**Q:** *What can be done to trap/catch/net salmon in the lower Kennebec below the lowest dam-those fish that do not find the fishway?*

**A:** Any effort to handle salmon below Lockwood is very risky for salmon. At the moment there isn’t any way that it can be done safely.

**Q:** *Is any electrofishing being done in the lower Sebasticook and the outlet stream that drains China Lake?*

**A:** Not currently.  As most people know runs to the Kennebec have been relatively small so the likelihood of strays finding a tributary like Outlet Stream is small and our lack of resources keeps us from sampling beyond the bare minimum.  We often rely on local people to let us know if they see any salmon.  When they have, in the past we do what we can to make the time to visit the site.

**Q:** *How can we expand the Kennebec River salmon recovery program?*

**A:** This is a good example of how getting involved can help.  Volunteering for us and attending meetings such as this are what we use to push our program forward.  Don’t forget to advocate at other meetings such as hydroelectric relicensing’s.  Be available and be vocal!

**Q:** *You had mentioned more widespread redds which was encouraging...were there any redds in the Sheepscot above the modified head tide dam and former Coopers Mill dam where habitat is now accessible.*

**A:** Yes.  We had adult salmon spotted all the way up to Sheepscot Pond as well has seeing our first redds above Sheepscot Pond!

**Q:** *Could you please comment on how habitat suitability is being determined and quantified in reaching the 28, 594 units of SUITABLE and accessible habitat*

**A:** Habitat suitability was first assessed during the critical habitat evaluation at the HUC 10 watershed scale (e.g. the Machias River is a HUC 10 watershed). Biologists were asked to rank habitat based on the presence or absence of habitat features that salmon select for. HUC 10 Watersheds were scored based these scores as well as habitat quantity and barriers that block or impede barriers. At this point finer scale assessments of habitat suitability have not been completed, although these discussions are ongoing. We recognize that factors such as climate change, land use practices (past and present), and invasive species continues to impact habitat and that habitat suitability will often need to be reassessed to determine its value to Atlantic salmon conservation.

**Q:** *Has there been any discussion of re-assessing habitat suitability again, especially in light of some of the temperature work that has been done in recent years?*

**A:** Yes – there are several exercises that are ongoing to refine our assessments of habitat suitability. These include identifying climate resilient and climate vulnerable habitats, describing freshwater and marine habitat parameters based under current and anticipated future climate scenarios, and identifying reach level productivity.

**Q:** *Is it reasonable to report the conclusion that downgrading criteria have been met based on the preliminary broodstock habitat suitability?*

**A:** Yes – the habitat requirement for downlisting is 7500 units of habitat in each of the three SHRUs. That criteria has been met in all three SHRUs base on current assessments of habitat quantity, quality and connectivity.

**Q:** *How much will a June 15 start for broodstock collection compromise the ability to get enough Penobscot fish captured. Run is in high gear right now, and if current weather continues, we may be too warm for fish handling soon.*

**A:** Every year is little different however, accepting broodstock by June 15th is still slightly ahead of the typical median of the run; there should be fish in the river during that time.

We have set a target for 2020 of 400 (200F, 150M, 50G).  Ultimately we need only 320 (160F, 160M/G combo) to fulfill smolt production.  If we fail to achieve that number we will incorporate eggs from Green Lake domestic broodstock to make up the difference.

Fish captured for broodstock will be minimally handled at Milford; all tagging and sampling will occur at the hatchery which will mitigate against some of the potential thermal stress at the trap.

**Q:** *When can we expect Union River to be Partially Accessible?*

**A:** We have categorized habitat accessibility as either accessible, partially accessible, or inaccessible.  An *accessible* watershed either has no dams blocking access to it, or else has a dam with a fishway that has proven to be highly effective.  *Partially accessible* watersheds are upstream of dams that have fishways that are not highly effective or have never been evaluated.  Watersheds upstream of dams that do not have swim-through fishways are considered *inaccessible*.

The Ellsworth Project on the Union River is a useful example of how these categories are applied.  Currently, the project lacks an upstream swim through fishway.  There is a trap at the Ellsworth Dam, but fish must be trucked to habitat upstream.  Currently, no fishway exists at the Graham Lake Dam, which is part of the FERC-licensed project.  Given that there are no swim-through fishways at the project, the Union River watershed is currently considered inaccessible.  Although a new license has yet to be issued for the project, we expect that it will require the construction of fishways for Atlantic salmon at both the Ellsworth and Graham Lake Dams by year 15 of the license.  Once those fishways are operational, the habitat upstream will be considered partially accessible.  The habitat will not be considered accessible until passage effectiveness studies have been conducted that indicate that these fishways are highly effective.

**Q:** *How do you think the FERC committee has affected our ability to contribute to the FERC relicensing process compared to the "old way" of doing business?*

**A:** The FERC Standing Committee has significantly improved communication and coordination between state and federal fisheries agencies.  Engaging the University of Maine has also improved our technical review of FERC fish passage reports.

**Q:** *How will recovery criteria be assessed if redd counting is the only tool available to monitor adults once the Cherryfield dam is free swim? Redd counts are not easily tied to solely "wild origin" parents.*

**A:** On all other rivers without traps, escapement is estimated based on spawner counts (redd surveys). A regression that is based on the historic trap catch at Cherryfield was refined in 2020 for estimating the number of salmon. Determination of origin depends on lifestages stocked that correspond to the return cohort, known ratios from smolt trapping or historic return rate ratios where smolt have been used. Ultimately, since recovery is based on “naturally reared” salmon and egg, fry and parr are in that category, it should be simple to say that estimated escapement is naturally reared origin except where smolts were stocked. With adult stocking, their offspring would be considered naturally reared.