

North American Commission

NAC(01)8

United States Trial Application of the Decision Structure to Aid the Council and Commissions of NASCO and the Relevant Authorities in Implementing the Precautionary Approach to Management of North Atlantic Salmon Fisheries

(Tabled by USA)

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While the United States does not have any fisheries, recreational or commercial, for sea run Atlantic salmon, we have attempted to apply the provisional decision structure to salmon management measures in the United States. We have chosen to apply the decision structure to the Gulf of Maine distinct population segment of Atlantic salmon and to use it to examine the determination that listing under the Endangered Species Act was the proper management decision in light of stock status.

1. Is the stock threatened by external factors?

Yes

It has been determined that the Gulf of Maine distinct population segment of Atlantic salmon is threatened by the following factors: disease; inadequacy of existing regulatory mechanisms which do not remove the threat posed by agricultural water withdrawals, disease and aquaculture; existing aquaculture practices; interceptory fisheries; and low marine survival. Other factors identified as having possible effects include sedimentation, obstructions to passage caused by beaver and debris dams and poorly designed road crossings, inputs of nutrients, chronic exposure to insecticides, herbicides, fungicides and pesticides, removal of vegetation along streambanks, and predation.

If yes, take special management measures as appropriate.

The United States has listed the Gulf of Maine distinct population segment as endangered under the Endangered Species Act (ESA). The listing makes it illegal to “take” these fish. “Take” is defined to mean “to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture or collect.” The ESA requires that a recovery plan be developed to restore a species to health. The ESA also requires that all federal agencies consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service to ensure that any action they authorize, fund or carry out is not likely to jeopardize the listed salmon.

The United States has also implemented a river specific stocking program for the Gulf of Maine distinct population segment of Atlantic salmon. Broodstock have been collected from six of the eight listed rivers and their progeny are being stocked back into their river of origin. Because full scale stocking did not begin in most of the rivers until 1996 and several year classes are necessary to present a trend, it will not be known until at least 2001 if fry stocked fish will make a significant contribution to adult returns in listed rivers.

The State of Maine has developed and implemented a Conservation Plan to address some of the threats listed above. That plan examines threats posed by agriculture, aquaculture, forestry and recreational fishing and includes measures in response to each of these. The plan also includes the development of Watershed Councils on each of the eight rivers.

2. Assess status of the stock (abundance and diversity)

Conservation escapement goals have been established for these rivers and are defined as the number of 2SW returns needed to fully use the spawning habitat. The estimated 2SW returns to US rivers in 2000 represent less than 2% of the conservation escapement goals.

In addition to adult counts, surveys are conducted to enumerate redds and estimate parr abundance. Traps have also been used to estimate outmigrating smolts. While substantial increases in parr abundance (126%) have been observed in response to stocking efforts, smolt production has only increased modestly (3%).

Genetic analysis of these populations is ongoing.

3. If either abundance or diversity are unsatisfactory, then seek to identify the reasons

Current abundance and diversity of Atlantic salmon populations in the Gulf of Maine distinct population segment are unsatisfactory and there is a significant risk of extirpation if current threats are not fully addressed.

Implement pre-agreed procedures and monitor the effect of measures

Listing under the ESA comes with a set of prohibitions that offer protection to threatened and endangered species. In addition, the development of a comprehensive recovery plan is required. The recovery plan must contain objective, measurable criteria which, when met, would result in a determination that the species is recovered, and estimates of the time and cost required to carry out the measures needed to achieve the plan's goals. Implementation and effectiveness of the recovery plan is monitored annually with a more formal review once every five years.