

Recovery Plans: development & implementation

Native to nearly every major river north of the Housatonic, as many as 500,000 adult Atlantic salmon once returned to U.S. rivers each year to spawn. Today, less than 2,000 adults return annually and only to rivers located in northernmost corner of the U.S. In 2000, the U.S. Fish and Wildlife Service and NOAA-Fisheries jointly listed the Gulf of Maine distinct population segment (GOM DPS) of Atlantic salmon as endangered under the Endangered Species Act.

As endangered species are in jeopardy of becoming extinct, their protection and recovery is a priority. Recovery plans outline what actions are needed to protect and recover the species to the point where it can persist into the foreseeable future and remain viable.

Defining “recovery” and identifying what criteria must be met for recovery to occur is perhaps the most fascinating and challenging aspect of recovery planning. For example, what exactly is “recovery”? Is it simply based on the total number of returning adult salmon? What if enough salmon return to one river that the recovery criteria are met, but no salmon return to any of the other rivers they once occupied? Has recovery occurred? Once a species has been recovered, how do we make sure it “persists”? Populations fluctuate naturally over time—how much fluctuation can occur before a population is no longer adequately persisting? Finally, what is the “foreseeable future”? In terms of species persistence, 10-20 years is generally regarded as foreseeable (after that, we cannot make predictions confidently). Thus, to be considered recovered, a species must not be at risk of becoming threatened or endangered within this time frame. In addition, populations should be viable. Viable Salmonid Population criteria essentially say that a viable population has a negligible risk of extinction within a 100 year time period.

ENDANGERED SPECIES ACT OF 1973

AN ACT To provide for the conservation of endangered and threatened species of fish, wildlife, and plants...

Section 4(f)(1) RECOVERY PLANS—The Secretary shall develop and implement plans for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species. The Secretary, in development and implementing recovery plans, shall, to the maximum extent practicable...

(B) incorporate in each plan—

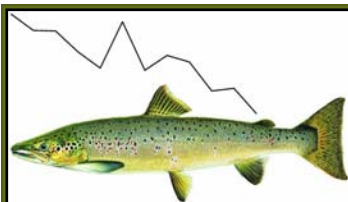
(i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;

(ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and

(iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

Excerpt from the Endangered Species Act

These are some of difficult questions that individuals involved with developing the recovery plan for Atlantic salmon grappled with on a daily basis—from the time of listing in 2000 to the release of the final plan in 2005. And these questions continue to affect decisions as we enter the implementation phase of recovery and begin to carry out the actions identified as necessary to halt and reverse the decline of the GOM DPS and enable it to persist into the foreseeable future.



Quick Fact: for the purposes of the ESA, the terms *conserve*, *conserving*, and *conservation* mean “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act [the ESA] are no longer necessary.”

(Artwork by Tomelleri)

