

## **Information on Atlantic salmon and the Endangered Species Act (ESA)**

### **Basics:**

- The Gulf of Maine District Population Segment of Atlantic salmon was listed under the Endangered Species Act (ESA) as endangered in 2000. The geographic extent of the listing was expanded in 2009. Also in 2009, critical habitat for the species was designated. Jurisdiction is shared between USFWS and NMFS.
- The purposes of the ESA are to provide a means for conserving the ecosystems upon which endangered and threatened species depend, and a program for conservation of those species.
- The ESA protects listed plants and animals several different ways. It requires coordination with the Services which can provide you with technical assistance about species biology and the project review process.
- As we are protected against harmful drivers through state automobile and truck drivers' licensing programs, species are protected through the review of adverse effects and the effects of "take" (more on that later), and, if appropriate, authorization of take through permits (like licenses).
- In all cases, every effort must be made to avoid and minimize the effects of the take.

### **What is "take"?**

- To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.
- Harm includes significant habitat modification that actually kills or injures a listed species through impairing essential behavior such as breeding, feeding or sheltering.

### **For Atlantic salmon, when conducting habitat restoration activities, what are some examples of activities that might result in take?**

- Removing any life history stage of the species by trapping, netting, electro-shocking;
- Holding adults, smolts, fry, parr in a bucket;
- Modification of the habitat to an extent that it harms the species (*e.g.* severe siltation of the water from uncontrolled construction site runoff; placing a barrier to up- or downstream migration or to movements associated with juveniles; activities that cause harmful water temperature increases or increases in chemicals);

- Modification of the habitat to an extent where water temperatures rise because of loss of shading effects of riparian zone trees.

### **If a Federal agency is involved in a project, how does that affect ESA rules?**

- If a Federal agency is involved in your project because a Federal permit is required, Federal funding available or other Federal involvement, the ESA charges it and all Federal agencies to aid in the conservation of listed species and requires that the agencies ensure that their actions (permitting, otherwise approving, funding, constructing, etc.) are not likely to jeopardize the continued existence of a listed species or adversely modify its critical habitat.
- That agency and the Service will work with you; this is called inter agency consultation.

### **Examples of Federal agency involvement in a stream restoration project:**

- The U.S. Army Corps of Engineers regulates discharges of fill material into waters of the U.S (except for a limited suite of exempted activities). If the projects they seek to authorize may affect salmon (e.g. a road-stream crossing replacement), they will consult with us.
- The NRCS designs, funds and assists in carrying out conservation activities in and around salmon habitat. If their projects may affect salmon (e.g. a road-stream crossing that may or may not need a Corps permit), they will consult with us.
- The FEMA funds flood remediation activities. If the projects they fund may affect salmon, they will consult with us.
- If the Maine Fisheries Resource Office (Scott Craig) designs, funds and assists in carrying out a conservation activity in or around salmon habitat, he will utilize a species recovery permit he has already received from us, and will follow the best management practices in his permit.
- If our Partners for Fish and Wildlife biologist, Fred Seavey, or Coastal Program biologist, Bill Bennett, assists with design, funding or carrying out a project, he will do an internal intraservice consultation to ensure that the project minimizes impacts to salmon.

### **What if a Federal Agency is not involved?**

- For projects not authorized, funded, or carried out by a Federal agency, the prohibitions provided under the ESA to protect species still apply. For instance, no person is authorized to “take” (kill, injure, harass, etc.) any listed species without appropriate authorizations from the Services.

- However, we provide technical assistance directly to individuals, companies, local government, landowners, to assist with project planning to avoid the potential for “take,” or when appropriate.
- To provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

### **What about the other route, section 10?**

- Incidental take permits are required when non-Federal activities will result in "take" of threatened or endangered species. A habitat conservation plan or "HCP" must accompany an application for an incidental take permit.
- The purpose of the habitat conservation planning process, and subsequent issuance of an incidental take permit, is to authorize the incidental take of a listed species, not to authorize the activities that result in take. This process ensures adequate minimizing and mitigating of the effects of the authorized incidental take to the maximum extent practicable.

### **What are Habitat and General Conservation Plans?**

- This is a more complicated route, and we are at this point in time discussing whether to develop what is called a General Conservation Plan....that we the USFWS develops and you could utilize on a case by case basis.
- Alternatively, a State agency, landowner, NGO, could develop its own Habitat Conservation Plan.
- Lots more information at:

<http://www.fws.gov/endangered/esa-library/pdf/consultations.pdf>

<http://www.fws.gov/endangered/esa-library/pdf/hcp.pdf>

### **Basic principles for installing a stream crossing that will not result in adverse effects/take or adverse modification of Atlantic salmon critical habitat beyond the minor adverse effects caused by temporary construction activities:**

- **Don't pinch the stream.** Determine bankfull width and size the structure properly.
- **Set the structure at the proper elevation.** Even properly sized structures that are set at the wrong elevation cause problems.

- **Structure must have a natural stream bottom.** This is installed at the time of construction and must remain over the long term.
- **Make the structure invisible to the fish.** If a salmon can swim to the structure, it should be able to pass through the structure.

### **For More Information:**

Help with the ESA? USFWS staff in Maine, including:

- Wende Mahaney or Anna Harris [Wende Mahaney@fws.gov](mailto:Wende.Mahaney@fws.gov) [Anna Harris@fws.gov](mailto:Anna.Harris@fws.gov)

Technical assistance with setting priorities, design, financial assistance, planning, construction?

- Partner's for Fish and Wildlife biologist Fred Seavey [Fred Seavey@fws.gov](mailto:Fred.Seavey@fws.gov)
- Gulf of Maine Coastal Program biologist Bill Bennett [William Bennett@fws.gov](mailto:William.Bennett@fws.gov)