



# Hydropower

## *Service Expertise*

The Federal Power Act authorizes the Service to condition a non-Federal hydropower license with fish passage facilities and, if the project is in Service managed land (e.g., utilizes part of a hatchery water intake system), to require measures that ensure the project is consistent with the management objectives of that land. The FPA also allows the Service to recommend license terms for the protection and enhancement of fish and wildlife resources. Other laws that define the Service's role include the Endangered Species Act, the Fish and Wildlife Coordination Act, the National Environmental Policy Act, and the Clean Water Act.

Service biologists are trained in fisheries and wildlife biology and have considerable experience in reviewing the environmental impacts of various types of land and water development projects. This technical knowledge and environmental expertise enables the Service to provide thorough evaluations of hydropower impacts on fish and wildlife and to develop hydropower license terms and conditions that will efficiently and effectively mitigate any damages that could not be avoided or minimized.

To address fish passage issues, the Service may prescribe the construction and operation of upstream and downstream fish passage facilities in hydropower licenses. Fish passage facilities, or fishways, provide fish safe, timely, and effective passage around hydropower projects for spawning, rearing, feeding, growth to maturity, dispersion, migration, and seasonal use of habitats. The Service may also recommend necessary river flows and other mitigation measures to protect aquatic resources impacted by dams.

In recent years, several species of salmon and mussels have been listed as threatened or endangered under the Endangered Species Act. Research indicated that more than 30 percent of the fishes and 70 percent of the freshwater mussels in U.S. river systems are rare or imperiled. These aquatic species and their habitats, as well as ESA listed terrestrial species such as the bald eagle, peregrine falcon, Indiana bat, and several wetland plants, are routinely considered by Service biologists in reviewing hydropower project licenses.

