

STATEMENT OF DR. MAMIE A. PARKER
ASSISTANT DIRECTOR FOR FISHERIES AND HABITAT CONSERVATION
U.S. FISH AND WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

BEFORE THE HOUSE COMMITTEE ON RESOURCES SUBCOMMITTEE ON FISHERIES AND OCEANS, REGARDING
THE NATIONAL FISH HATCHERY SYSTEM

May 24, 2005

Mr. Chairman and Members of the Subcommittee, I am Dr. Mamie Parker, Assistant Director for Fisheries and Habitat Conservation, U.S. Fish and Wildlife Service (Service). Thank you for the opportunity to provide you with an overview of the National Fish Hatchery System (NFHS) and the role it plays in conserving, restoring, enhancing, and managing the nation's fishery resources and aquatic ecosystems for the benefit of present and future generations of Americans.

The NFHS is a key component of the Service's Fishery Program and necessary to accomplish the program's mission of working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and to support federal mitigation programs for the benefit of the American public. The NFHS has unique responsibilities among the nation's federal facilities, including helping to recover species listed under the Endangered Species Act, restoring native aquatic populations, mitigating for fisheries lost as a result of federal water projects, and providing fish and recreational opportunities to benefit Tribes and National Wildlife Refuges. In addition, the NFHS works closely with other Service biologists and with the states, tribes, and the private sector to complement habitat restoration and other resource management strategies for maintaining healthy ecosystems that support healthy fisheries across the country.

The role of the National Fish Hatchery System has changed and diversified greatly over the past 130 years as increasing demands are placed upon aquatic systems. In recent years, the Service has maximized the output of its work force by integrating the work of fish hatcheries and fisheries management. This integrated effort has resulted in cohesive, more efficient national restoration programs, such as those for Great Lakes lake trout, Atlantic Coast striped bass, Atlantic salmon, and Pacific salmon. The Service continues to work with its stakeholders – federal agencies, state resource agencies, tribal governments, and private organizations – to improve coordination and fishery conservation efforts. Even with these efforts and the improvements the NFHS has made over the past few years, the System still faces many challenges. Depleted natural resources and increasing pressures on aquatic habitats are some of the biological challenges that will need to be addressed in the future if the NFHS is to continue to fulfill its mission. Other issues include extensive legislative mandates that sometimes conflict, aging facilities, obligating funds in a timely manner, and conducting independent evaluations. Recommendations to address these issues were included in the Administration's assessment of the program last year using the Program Assessment Rating Tool. We believe that those recommendations will help ensure the National Fish Hatchery system fulfills its role in conserving, restoring, enhancing, and managing our nation's fishery resources and aquatic ecosystems.

The statement below provides more detailed information on the history and trends that guide the NFHS. In addition, there is a discussion of the current challenges facing the System and the Service's vision for the important role of the NFHS in maintaining the nation's fisheries resources.

History of the National Fish Hatchery System

The National Fish Hatchery System was established in 1871 by Congress through the creation of a U.S. Commissioner of Fish and Fisheries. From its beginnings, the NFHS has evolved to become the national leader in many aspects of aquatic species culture and brood stock management, especially for imperiled species. During its first half-century, the NFHS was used to provide a food source for settlers as eastern urban populations expanded westward. When the McCloud River Hatchery was opened in California in 1872, "improving on nature" was the prevalent thought of the conservation community. Desired species were introduced to watersheds outside of their natural ranges to increase the abundance of food fish in streams and rivers. This changed in the 1930s as the Great Depression began an era of massive construction projects that sought to harness the power of nature to provide water and power for newly created farmlands. The rapid construction of dams and impoundments across the country caused the NFHS to shift priorities from stocking watersheds to mitigating the effects of the water projects and providing recreational opportunities in the associated reservoirs. That era saw the number of National Fish Hatcheries reach a peak of 136 facilities in the year 1940.

From that point until the 1980s, states increased their capabilities. As a result, federal efforts focused less on stocking private lands and more on stocking fish in areas open to the public. The NFHS responded by stocking impoundments and tail waters at federal water development projects for recreational fishing purposes, chiefly with rainbow trout, a non-native species that could survive in the cool tail waters that displaced native warm water habitats. For this role, the NFHS operates under the authority of the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-666c) and numerous

other legislative acts authorizing specific federal water development projects. In the 1980s, focus of the NFHS shifted again with increasing public interest in the decline of species and habitat alteration. The Coordination Act as well as the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) is the primary authorization for these activities. This led to an emphasis on restoration and recovery of native and inter-jurisdictional species and less emphasis on stocking of non-native sport fish (except for those associated with federal water development projects).

The evolution of the hatchery system from a primary source of food for settlers to restoring native and inter-jurisdictional species lost due to human activities as well as the states and tribes taking on responsibility for recreational fisheries on their lands has resulted in a much different hatchery system from the late 1800s. These evolutionary refinements and efforts to operate more effectively and efficiently resulted in the closure or transferring of 40 facilities between 1970 and 1998.

The National Fish Hatchery System Today

Today, the NFHS serves a wide array of roles through the 69 fish hatcheries, 7 fish technology centers, and 9 fish health centers located throughout the country. For example, hatcheries play a pivotal role in the recovery of 59 threatened and endangered aquatic species and the restoration of 111 native species. The NFHS also provides healthy fish populations that support recreational fishing opportunities related to federal water control structures. The NFHS works with over 250 federal, state, tribal, and non-governmental partners to help restore declining species and mitigate the impacts of habitat loss and invasive species, and also serves local communities by providing public education programs in aquatic resource conservation. In addition, the NFHS contributes to a vibrant economy indirectly by jobs tied to both recreational and commercial fishing.

Through innovation and continual adaptation, the NFHS has pioneered fish culture techniques for a variety of recreationally valuable and imperiled species such as striped bass, lake trout, salmon, pallid sturgeon, paddlefish, alligator gar, and numerous other aquatic species. Many of these innovations are shared with the private sector. NFHS facilities also provide educational programs in aquatic resource conservation for many Tribal entities and local communities.

The work restoring depleted fish populations and their habitat is implemented under the guidance of multi-state fishery management, restoration, and Endangered Species Recovery plans. The NFHS has established performance goals that measure how well the system is accomplishing recovery tasks identified in Recovery plans and management tasks in Hatchery Management Plans. While fish propagation is a strategy included in many management plans, the NFHS also works with partners to provide technical assistance to ensure that habitat restoration, genetic considerations, fish health issues and other aspects of aquatic species restoration are well coordinated. National Fish Hatcheries also perform extensive mitigation work, helping ensure that viable and healthy fisheries are maintained in water affected by federal dam construction. The NFHS is exploring how to recover funds from other federal agencies for this mitigation work as part of an effort to properly allocate costs and to improve effectiveness and efficiency of the system.

NFHS facilities ensure that hatchery fish are able to survive in the wild, and Fish Health Center and National Fish Hatchery biologists develop and implement plans for fish health management for all propagation programs. The combination of prompt disease diagnosis and recommendations for corrective actions reduces mortality during rearing, increases survival after release and helps protect wild fish from inadvertent exposure to disease. The fish health program is also involved with partners in efforts to protect the nation's fishery resources from the introduction of fish diseases from foreign sources. Fish Technology Centers develop and provide new tools for use by the Service and partners in managing aquatic resources. In addition, scientists at Fish Technology Centers and National Fish Hatcheries develop genetic management plans to ensure that refugia populations and broodstocks preserve natural genetic diversity appropriate for restoring native populations.

Challenges Facing the National Fish Hatchery System

Although the NFHS provides a wide array of benefits to the American public, the System still faces many challenges. Broad challenges, such as depleted natural resources and imperiled aquatic habitat, are well beyond the control of the NFHS but other Service and partner programs are helping to address these issues. The program has been making strides in addressing challenges that the program has some control over, such as helping to recover aquatic species.

In 2002, the results of the NFHS PART assessment rated the program as "Adequate" and indicated that the program needed to address issues concerning its mission, program design, performance measures, and several specific issues. In response, the Service and the NFHS implemented a series of actions to improve the program. Some of these actions included adopting a mission statement and goals, scheduling periodic strategic planning and program result evaluations, and seeking reimbursement for some mitigation production programs. For example, in 2002, the NFHS established a performance goal to implement 45 percent of priority recovery tasks identified for the NFHS in Recovery plans for threatened and endangered aquatic species in FY2004. The program was able to exceed this target by implementing 62 percent of those tasks.

This past year, the NFHS underwent a follow-up assessment using the PART with great improvement as a result of these

and other activities. The program is now rated as “Moderately Effective.” The program still faces challenges including recovering funding for mitigation production from other agencies and limitations to opening and closing hatcheries to accomplish program goals.

One of the challenges facing the NFHS is that of aging facilities which form the heart of the System. In order to fulfill its diverse responsibilities, our hatcheries operate and maintain a huge complex linkage of wells, pumps, valves, piping, filters, heaters or chillers, ultraviolet or ozone treatment systems that keep water clean and moving 24 hours a day, seven days a week. These critical water management structures are crucial to the work performed within the NFHS, and are the reason the Service can hold, produce, rear, and distribute aquatic species. These mission critical components make up two-thirds of the NFHS’s real property assets, which together have an asset replacement value approximated at \$1.07 billion.

Over the next five years the NFHS will continue to focus its maintenance efforts on improving its critical water management assets as measured by the Facilities Condition Index (FCI), a ratio of deferred maintenance needs to replacement costs. FCI indicates when replacement is more appropriate than repair, tracks the performance of hatchery systems maintenance programs, and provides the performance metric for NFHS maintenance under the Department’s strategic plan. Deficiencies in critical assets are identified through annual and Comprehensive Condition Assessments by inspections of each asset by qualified personnel who determine the deferred maintenance and replacement cost of a property item. The results of these inspections are used to determine the FCI.

Finally, although the emphasis of the NFHS has shifted toward conservation and recovery of species, the System still operates under more than 100 laws, treaties, executive orders, and court decisions promulgated over more than a century and covering a broad range of System-related issues. Some of these laws required the establishment of specific hatcheries, some required the protection of declining species, and others required the System to address habitat loss and alteration associated with water resource development projects. Both the 2002 and the 2004 PART have identified this as a serious concern, especially as it relates to production of fish for mitigation of lost fishery resources as a result of federal water control structures.

The Fisheries Program’s Vision for the Future

Preliminary surveys conducted by the Service show that recreational fishing contributed to more than \$40 billion annually to the American economy in 2001 alone. A 1996 economic analysis conducted independently by the American Sportfishing Association showed that recreational fishing’s overall economic impact to the economy was \$108.4 billion annually, including 1.2 million jobs and \$28.3 billion in personal income.

Despite the efforts by the Service and others to conserve fish and other aquatic resources, a large number are in decline. More than 400 aquatic species either have, or need, special protection in some part of their natural or historic range, and the number of species listed as threatened or endangered under the Endangered Species Act has risen. Species declines are linked largely to habitat loss or alteration (including flow changes, sedimentation, and pollution) and the impacts of harmful or invasive or transplanted species. We believe it is necessary to identify and implement actions that will reverse these trends before it is too late.

Completion of the Service’s Fisheries Program’s Vision for the Future in 2002 is a major milestone along a critically important pathway that the Program is traveling with its stakeholders and partners. The Vision for the Future establishes a clear vision for the program that states, “The vision of the Service and its Fisheries Program is working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and to support Federal mitigation programs for the benefit of the American public.”

Working more closely with partners and stakeholders, the NFHS identified a clear set of national priorities, addressing a wide range of issues and challenges. This collaborative process led to the development of the Fisheries Program Draft “Strategic Plan for 2004-2008”, a document that will guide aquatic resource management within seven Focus Areas:

- Partnerships and Accountability
- Aquatic Habitat Conservation and Management
- Aquatic Species Conservation and Management
- Public Use
- Cooperation with Native Americans
- Leadership in Science and Technology
- Workforce Management

The Service’s Fisheries Program will focus its efforts and activities on what it is best positioned to contribute, using science and partnerships to protect our nation’s aquatic resources. An example of this renewed focus on partnerships is the NFHS role in the National Fish Habitat Initiative, which is a concerted effort to join all federal, state, and local entities in recovering and restoring aquatic habitat modeled after the successful North American Waterfowl Management Plan.

Conclusion

In summary, I would like to thank the Subcommittee for the opportunity to provide you with an overview of the National Fish Hatchery System (NFHS) and the role it plays in conserving, restoring, enhancing, and managing the Nation's fishery resources and aquatic ecosystems for the benefit of future generations of Americans.

The National Fish Hatchery System continues to enjoy the tremendous support of our partners, who highly value the hatchery products and services, including maintaining healthy brood stocks for recovery, restoration and recreation, and sharing advances in applied science. The System remains committed to producing healthy fish and wildlife, healthy habitats, healthy people, and a healthy economy, and we remain steadfast in our efforts to sustain and improve on this important program. With the continued support of your Subcommittee, Congress, and our many partners, the NFHS will face its challenges and carry its successes well into its second century.