NATIONAL FISH HATCHERIES

Authority Needed to Better Align Operations With Priorities
## Abbreviations

- **GAO**: General Accounting Office
June 14, 2000

The Honorable George Miller
Ranking Minority Member
Committee on Resources
House of Representatives

Dear Mr. Miller:

The 66 national fish hatcheries of the Interior Department's Fish and Wildlife Service play a unique role among the nation's hatcheries.1 State, tribal, and private hatcheries primarily raise and stock fish for commercial and recreational fishing. In comparison, federal hatcheries help ensure the recovery of threatened or endangered species, restore native fish stocks to self-sustaining levels, mitigate fisheries lost as a result of federal water development projects, and supply fish to waters on Indian tribal and Service lands. Some hatcheries are old and were established to replace fish lost as a result of the construction and operation of federal dams and other federal water projects. More than 100 laws, treaties, executive orders, and court decisions affect hatchery operations. As a result of the many legal mandates enacted over the years, the hatcheries' functions have changed, and they are now being managed to meet a variety of goals.

This is the second of two reports that respond to your request for information to help evaluate the appropriate role for the national fish hatcheries.2 In October 1999, we reported on funding for the hatcheries and their fish production activities. This report addresses (1) whether the activities carried out at the national fish hatcheries are consistent with their statutory authorizations and (2) whether changes in existing laws would be appropriate to provide better direction to the Service on which

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1In a prior report, we noted there were 67 hatcheries; however, the Berkshire National Fish Hatchery in Massachusetts is currently in caretaker status and is being operated as an educational facility. See National Fish Hatcheries: Classification of the Distribution of Fish and Fish Eggs Needs Refinement (GAO/RCED-00-10, Oct. 15, 1999).

2Our first report provided a baseline assessment of current activities at the hatcheries. See National Fish Hatcheries: Classification of the Distribution of Fish and Fish Eggs Needs Refinement (GAO/RCED-00-10, Oct. 15, 1999).
programs to emphasize and to authorize the Service to make changes in how it manages the hatcheries.

Results in Brief

The laws governing national fish hatcheries authorize and direct the hatcheries to engage in a wide variety of activities. These activities include establishing and implementing programs for the protection and conservation of fish, some of which are either threatened or endangered; mitigating the impacts of constructing federal dams and other federal water projects; supporting recreational fishing; and supporting fishery resources on Service or tribal lands. The current activities of the hatcheries fall within these wide boundaries. In this context, the Service has identified five broad program categories that describe how it carries out its statutory responsibilities, including, for example, recovering native fish populations and stocking native and nonnative fish on Service or tribal lands to mitigate the effects of federal water projects. However, the Service believes that its most important mandate is to recover and restore native aquatic species and ecosystems that are either threatened or endangered.

Congressional direction on which programs that the Congress wants the hatcheries to emphasize would allow the Service to better align hatchery operations with the activities that the Congress believes should be the Service's highest priorities. Because the laws affecting hatchery operations were enacted over a long period of time and covered a broad range of issues, the Service has been charged with meeting a variety of goals that sometimes conflict or for which the hatcheries are not well located to carry out. Today, the Service finds itself struggling to address the many mandates incrementally added over the years while, at the same time, trying to maintain modern and efficient hatcheries in locations specified by law. For example, Service officials cite the restoration and recovery of over 100 species of fish listed as threatened or endangered as a high priority. However, many hatcheries continue to raise and stock game fish in order to mitigate for fish losses resulting from federal dam construction. Furthermore, the Service finds itself operating hatcheries in locations and spending resources to produce types of fish and operate programs that it might not have conducted but for current laws. Although the Service's funding has increased by 34 percent in constant dollars since fiscal year 1992, the funding allocated to the hatcheries has declined by about 15 percent in constant dollars in the same period. At the same time, the hatcheries have tried to maintain activities in all program areas but in so doing, have fallen short of production goals or have made compromises affecting fish quality. To obtain additional funding, the Service has sought
to obtain reimbursements from the beneficiaries of federal dams and other federal water projects and has succeeded in some cases. In other cases, however, the Service is prohibited from obtaining reimbursement or lacks clear authority to do so.

We recommend that the Congress provide direction on which programs it wants the hatcheries to emphasize and provide the Service with authority to open, close, change, move, and consolidate hatcheries. We also recommend that the Congress provide the Service with clear authority to seek reimbursement for all hatchery operations and maintenance expenses associated with federal water projects from federal water development agencies and/or project beneficiaries.

**Background**

Over the past century, a variety of federal laws were enacted to construct fish hatcheries as well as to address specific fish problems, advancements in fish research, and changes in policies for fish protection. (See app. I for a listing of selected laws.) To accommodate requirements that have changed over the years, the national fish hatcheries added responsibilities or changed their operations. For example, the Saratoga National Fish Hatchery in Wyoming has been producing rainbow trout eggs since 1915. In 1984, it began producing lake trout eggs; and in 1996, it assumed responsibility for maintaining the endangered Wyoming toad.

The Service is responsible for maintaining the nation’s 66 national fish hatcheries located in 34 states. These hatcheries are overseen by six of the Service’s seven regional offices. The Alaska Region does not have national fish hatcheries.
While overall funding for the Service has increased from fiscal year 1992 through fiscal year 1999, operating and maintenance funding for the national fish hatcheries, as measured in constant 1999 dollars, has declined by about 15 percent. Appropriations for fiscal year 1992 were $46.7 million in constant 1999 dollars, compared with $39.5 million for fiscal year 1999. During the same period, total operating appropriations for the Service rose by 34 percent, from $493 million to $661 million, as measured in constant 1999 dollars. However, the hatcheries’ share of these appropriations declined from about 9 percent to 6 percent.
National Fish Hatcheries try to achieve the goals of the laws authorizing their creation; treaties; and/or the various laws subsequently enacted, such as the Endangered Species Act, that require them to meet additional goals. In 1996, the Service established, with input from stakeholders such as states, tribes, and sport fisherman, the roles and responsibilities of the Service, including the national fish hatcheries, for fishery resources. Subsequently, the Service established and defined five hatchery program categories that reflect its current legal mandates. The five hatchery program categories are not specifically addressed in the Service's 1997-2002 strategic plan under the Government Performance and Results Act of 1993 but are encompassed in two strategic fish goals established in the plan: (1) Through 2002, interjurisdictional fish populations are conserved through conservation efforts related to approved management plans and (2) by 2002, the population levels of 20 percent of identified declining aquatic species are stabilized or increased through proactive conservation measures.

The Service has developed performance measures for each of the two strategic goals. Annual performance measurement reports track progress on activities, financial investments, and results data. Strategic goals reports will be prepared periodically to report progress toward the longer-term 5-year goals and measures.

Table 1 describes these five program categories.
Table 1: Five Hatchery Program Categories

<table>
<thead>
<tr>
<th>Program Categories</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Recovery</td>
<td>The stocking of native fish to help reestablish self-sustaining populations at levels of abundance and spatial distributions sufficient for delisting.</td>
</tr>
<tr>
<td>Restoration</td>
<td>The stocking of native fish to help reestablish self-sustaining populations at levels of abundance and spatial distributions well above the threshold for delisting or listing.</td>
</tr>
<tr>
<td>Mitigation</td>
<td>The stocking of nonnative and native fish to replace or maintain harvest levels lost as a result of federal water projects.</td>
</tr>
<tr>
<td>Fish and Wildlife Service and tribal lands</td>
<td>The stocking of nonnative and native fish to enhance harvest, outreach, and educational activities on national wildlife refuges (or harvest on tribal lands) but not with the intent of reestablishing or maintaining self-sustaining populations.</td>
</tr>
<tr>
<td>Partnership management</td>
<td>The stocking of nonnative or native fish to enhance the harvest but not with the intent of reestablishing or maintaining self-sustaining populations or mitigating the adverse effects of federal water projects.</td>
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Some hatcheries operate an array of programs. For example, hatcheries such as Gavins Point in South Dakota and Creston in Montana operate programs that include restoring and recovering threatened and endangered species, mitigation, tribal stocking, and stocking fish on Service lands.

Although the range of hatchery programs may be broad, Service officials said that because of the continuing decline in aquatic species, they place the highest priorities on recovering threatened or endangered species and restoring other native fish to self-sustaining levels. These two programs have been the Service's highest priorities since the 1970s and have caused some populations to increase. The following are examples:

- In 1973, the Apache trout was listed as endangered under the Endangered Species Act. The recovery plan developed for the Apache trout called for hatchery breeding and stocking of the trout. According to an official at the Alchesay-Williams Creek National Fish Hatchery in Arizona, the Service's efforts have increased the population of Apache trout, and it may be removed from listing under the act in 2004.
• Lake trout disappeared from the Great Lakes beginning in the mid-1950s. Over the past 10 years, Service hatcheries have stocked more than 220 million lake trout eggs and juvenile fish in the Great Lakes to help rebuild naturally reproducing populations. Self-sustaining populations have returned to most areas of Lake Superior, and there is recent evidence that stocked lake trout in Lake Huron are naturally producing.

In order to increase its restoration and recovery efforts, the Service has redirected approximately $5.6 million in funding from discontinued hatchery programs, such as redirecting almost $500,000 in 1997 from private aquaculture activities to programs for improving the health of wild salmon and lake trout, and the recovery of mitigation costs. In addition, $2 million in new funding has been directed toward restoration and recovery since 1994.

The Service also, however, continues to emphasize mitigation to compensate for the effects of federal water projects. For example, the construction of federal dams on the upper White River in Arkansas lowered water temperatures to the point where native bass, catfish, and sunfish could not survive below the dams. As a mitigation effort that provides recreational fishing opportunities, the Norfolk National Fish Hatchery in Arkansas produces nonnative trout to stock these colder parts of the river. Because the trout are not able to reproduce and achieve self-sustaining populations in these waters, continued restocking is necessary.

Additional Authority Would Enable the Fish and Wildlife Service to Better Align Hatchery Operations With Its Highest Priorities

In some cases, the Service is not authorized to make changes to hatchery operations in order to align them with its highest priorities—recovery and restoration of native aquatic species, some of which are threatened and endangered species. Currently, most hatchery production continues to focus on mitigating the effects of federal water projects, principally by restocking lakes and rivers for recreational fishing. Furthermore, while funding for the hatcheries has declined by over 15 percent since 1992, the Service continues to pursue the many objectives set forth for it in numerous legal mandates. This has contributed to some operational inefficiencies and a decline in performance. The authority to open, close, change, move, and consolidate hatcheries would enable the Service to

4Water released from behind a dam is generally much deeper and colder than the shallower and warmer river water.
better target its resources. In addition, the authority to obtain reimbursement from federal water development agencies and/or the beneficiaries of federal water projects could help support hatchery operations.

The Service Cannot Always Manage Hatchery Operations in Accordance With Its Priorities or for Efficiency

While the Service's highest priorities for national fish hatcheries are recovery and restoration, most fish produced by the hatcheries are for mitigation purposes—that is, to replace fish losses resulting from the creation of the dams at federal water projects and thereby to maintain recreational fishing opportunities. While some hatcheries are working to recover threatened and endangered species; others are conducting de facto mitigation (in the absence of specific statutes) because they believe they are obligated to do so; and still others are supporting recreational fishing as their sole objective. We reported in October 1999 that 60 percent of the fish and 80 percent of the fish eggs distributed by the hatcheries were for mitigation efforts or for stocking game fish in federal, state, and tribal waters for recreational fishing. In addition, in some instances, the laws make it difficult for hatchery program managers to justify the operational and structural changes needed to address what they believe are the hatchery program's highest priorities because the hatcheries are operating programs required by laws that were passed many years ago for then-pressing reasons.

Several hatchery managers expressed frustration with their inability to both comply with the Service's priorities of restoration and recovery and, at the same time, satisfy stakeholders—such as states, tribes and sport fisherman—whose interests may differ from those priorities. They attributed this difficulty in part to changing guidance provided by the Service over time. The issue of recreational fishing illustrates this problem. Executive Order 12962, in furtherance of the Fish and Wildlife Act of 1956 and other laws, states that federal agencies should promote recreational fishing to the extent permitted by law. However, the Service's five hatchery program categories do not include recreational fishing. Service management decided not to identify recreational fishing as a program category because recreational fishing would benefit from meeting the five identified hatchery program categories. Furthermore, according to the 1994 Report of the National Fish Hatchery Review Panel, some species

5See National Fish Hatcheries: Classification of the Distribution of Fish and Fish Eggs Needs Refinement (GAO/RCED-00-10, Oct. 15, 1999).
produced and stocked for recreational fishing purposes have been competitors with or predators of native fish species, such as those protected under the Endangered Species Act. According to nearly all of the 29 regional officials and the 12 hatchery managers whom we contacted, it is important to clarify the relationship between recreational fishing and other hatchery programs.

Furthermore, long-standing relationships between hatcheries and stakeholders make it difficult for some managers to make recovery and restoration the hatcheries’ highest priorities. For these stakeholders, other objectives, principally recreational fishing, are a higher priority. Several Service officials said that these stakeholders do not fully understand the direction and emphasis of the Service’s priorities for restoring and recovering native fish and see it as an abdication of federal involvement in recreational fishing.

Hatchery managers also attribute the problem of both complying with the Service’s priorities and satisfying stakeholders to the array of laws governing hatchery operations. For example, in fiscal year 1999, 38 hatcheries were involved in mitigation activities related to the construction of federal dams. In 13 cases, the statutes authorizing hatcheries require them to carry out mitigation activities. In the other cases, the Service recognizes a de facto responsibility for conducting fish mitigation activities, even though a hatchery might not have been established initially as a mitigation hatchery. For example, the Uvalde National Fish Hatchery in Texas was established in 1935 to provide fish to farm ponds. The farm pond program was phased out in the mid-1970s, when the hatchery’s fishery program changed to providing channel catfish and largemouth bass to federal and state waters as de facto mitigation for federal water development projects.

In addition to the challenges of balancing priorities, hatchery managers are unable to make certain operational and structural changes that would help create efficient and modern hatcheries. Specifically, some hatcheries are located in specific geographic locations that may no longer be appropriate. Since the Service is unable to move or close a hatchery mandated by earlier laws, hatchery officials are forced to make compromises that make it more

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6The report was prepared by The Conservation Fund under contract to the Fish and Wildlife Foundation, which was asked by the Director, Fish and Wildlife Service, to conduct an outside evaluation of the federal fish hatchery program.
difficult or expensive to successfully raise the needed fish species. For example, the hatcheries may use sources of water created by the projects to rear fish. While the water may be ideal for cold-water fish, such as trout, the hatcheries may need significant retrofitting to produce warm-water fish that could be threatened or endangered. This is the case with the Willow Beach National Fish Hatchery in Arizona, which was constructed in 1962 to mitigate for fish losses associated with Hoover Dam's construction. Annually, the hatchery stocks approximately 150,000 rainbow trout in the Colorado River from Lake Mead south to the Mexican border. After more than 30 years of trout production, the hatchery also began rearing and distributing endangered Razorback sucker and Bonytail chub. In order to produce these warm-water species, the Service installed extensive solar panels at the hatchery to heat the water needed to raise these endangered fish.

Other hatcheries are in locations that are not conducive to producing healthy fish or are producing them at greater expense, such as the Warm Springs National Fish Hatchery in Oregon and the Iron River National Fish Hatchery in Wisconsin. The Warm Springs hatchery produces Spring Chinook salmon to provide harvest opportunities and protect wild fish populations. However, the hatchery's location has made it difficult to maintain good water quality without the use of specialized equipment. Water temperatures are too warm in the summer, so chillers must be used to cool the water. Without chillers, the salmon's health is jeopardized, thereby resulting in higher fish mortality. Water quality is also of concern at the Iron River National Fish Hatchery. The hatchery gets its water from a source that is 2 miles away. The water contains a significant amount of sediment, which contaminates fish spawning and rearing equipment, making it difficult to rear fish successfully.

Maintaining Existing Programs With Declining Funds Has Impaired Hatchery Operations

Operation and maintenance funding for the national fish hatcheries declined by about 15 percent during fiscal years 1992 through 1999, down from $46.7 million in fiscal 1992 to $39.5 million in fiscal 1999, as measured in constant 1999 dollars. By comparison, during this same time period, states received over $200 million annually from federal excise taxes on fishing and boating equipment to fund freshwater and saltwater sport fish management projects.

As a result of the decline in funds, hatcheries have not always been able to meet their production objectives or have had to make compromises that affected fish quality, according to Service officials. For example, the
Leavenworth National Fish Hatchery Complex in Washington State has had difficulty meeting production objectives in part because it has not had funding to replace outdated and dilapidated rearing ponds and holding and handling facilities for adult fish. Similarly, at the Dale Hollow National Fish Hatchery in Tennessee, the lack of funds has prevented the modernization of the aerator building, an oxygen-enriching facility. This facility is needed to reduce the number of fish health problems, such as partial blindness and tumors.

Hatcheries’ efforts to evaluate the effectiveness of their programs have also been affected by the decline in funds. The following are examples:

- The lack of funds has resulted in not tagging all juvenile fish for the Great Lakes lake trout restoration program, according to officials in the Northeast Region. These officials are concerned that unless a sufficient number of juvenile fish are tagged, restoration decisions will end up being based on incomplete information.
- At the Green Lake National Fish Hatchery in Maine, the manager said that funding shortages have permitted only minimal monitoring and evaluation of the Atlantic salmon recovery program. According to the manager, without adequate monitoring of the juvenile salmon released from the hatchery, the Service will be unable to determine why these salmon are not surviving. Hatchery officials in the Northwest Region also report that funding shortages have limited their monitoring of their Pacific salmon recovery efforts.

Funding declines have also reduced hatcheries’ ability to perform needed maintenance and have resulted in the loss of fish and a general state of disrepair at some hatcheries, according to program officials. As of April 2000, the Service was reporting a deferred maintenance backlog of about $274 million. Hatchery managers said that the deferred projects included ones that could cause the loss of juvenile fish and adversely affect the safety of hatchery personnel and the public. For example, at the Pittsford National Fish Hatchery in Vermont, about 15,000 juvenile salmon were lost because of a pump failure, and about 2.5 million juvenile fish were lost because of equipment failure at the North Attleboro National Fish Hatchery in Massachusetts. In addition, the Carson National Fish Hatchery in

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7This amount consists of $107 million in projects to be funded by the Resource Management Account and $167 million in projects to be funded by the Construction Account. The Department of the Interior’s Office of Inspector General has not audited these amounts.
Washington State has been unable to upgrade its water supply system, which increases the potential for water-borne viruses or microorganisms, such as giardia, to infect hatchery employees, residents, and visitors.

Concern about the level of funding for the national fish hatcheries is not new. In 1984, proposed legislation would have required reimbursement for the hatcheries' operating and maintenance expenses by (1) water or electric power users who benefit from federal water development projects and (2) the federal agency or state government that exercised jurisdiction over fishery management. While this legislation was not enacted, the Service has obtained and is seeking reimbursements for the cost of operating and maintaining the hatcheries from entities that benefit from federal water development projects.

As of April 2000, Service officials were evaluating, on a hatcherywide basis, cost recovery and cost reimbursement from project beneficiaries. Service officials believe that unless they can increase staff and obtain additional funding, they may be forced to reduce production and/or close some hatcheries. However, Service officials believe that their closing options would be limited because many of the hatcheries were set up by specific laws and sometimes for specific purposes. As a result, the hatcheries that could be closed might be those that provide the Service with the greatest flexibility or are those that are most needed to meet the Service's highest priorities.

The Service has been successful in some cases in seeking reimbursements. For example, in fiscal year 1999, the Department of the Interior's Bureau of Reclamation paid the entire $4.2 million operating expense for the Coleman National Fish Hatchery Complex in California and the entire $2.9 million operating expense for the Leavenworth National Fish Hatchery Complex in Washington State. In both cases, the Bureau required customers of water supplied from the Bureau's water development projects—such as purchasers of electric power—to pay a pro-rated share, on the basis of the amount of water purchased, of the operation and maintenance expenses associated with protecting fishery resources. In addition, the Service's Northwest Region is entering into a reimbursement agreement with the Bonneville Power Administration under which ratepayers will pay the

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*A water-borne single-celled animal that, when ingested, can cause abdominal cramping, severe diarrhea, fatigue, and weight loss.*
operating and maintenance expenses for some mitigation hatcheries in the Columbia River Basin.

In some cases, the Service is precluded from obtaining reimbursements or it is questionable whether the Service could obtain reimbursement. For example, in 1991, the Department of the Interior’s Office of Inspector General found that language of applicable legislation authorizing federal projects makes it unlikely that project beneficiaries could be required to repay the operation and maintenance expenses for the Lahonton, Hotchkiss, Jones Hole, and Jackson national fish hatcheries. The Inspector General’s report stated that the statutes authorizing the projects specify that expenses to operate and maintain hatcheries are not to be included as part of project expenses. Also, according to Service officials, in some cases, it is questionable whether the Service could obtain reimbursements because the legislation authorizing the projects and hatcheries does not address the issue or because the Service is not legislatively required to perform mitigation services but has traditionally done so as part of its overall mitigation responsibilities. For example, all of the funding for the Warm Springs National Fish Hatchery in Oregon comes from the Service because the hatchery’s authorizing legislation does not clearly state that some of the funds can be obtained through reimbursement agreements with hatchery beneficiaries. Additionally, the Jackson National Fish Hatchery in Wyoming is operated as a de facto mitigation hatchery for the Palisades Reservoir on the Snake River, although the authorizing legislation requires the hatchery only to improve the fishery on the upper Snake River drainage area. As a result, the Service has not sought reimbursement from the Bureau of Reclamation, which operates the dam.

Finally, at the Willow Beach Hatchery in Arizona, the expenses associated with mitigation activities are not reimbursed, but a portion of the hatchery’s expenses associated with threatened and endangered fishery activities is reimbursed. Although the hatchery was originally constructed to propagate trout as mitigation for the impacts associated with the construction of the Bureau of Reclamation’s Hoover Dam, the hatchery has not been reimbursed for mitigation activities. However, in 1994, the hatchery began producing Razorback suckers and Bonytail chubs—both endangered species—as part of the federal effort under the Endangered Species Act to maintain and recover genetically diverse populations of these species. In 1995, the Service entered into a memorandum of understanding with the Bureau for financial and personnel assistance for the threatened and endangered species program. Under this agreement, the
Conclusions

The Service operates the national fish hatcheries to achieve the goals of the laws that originally authorized the hatcheries as well as various subsequent laws, such as the Endangered Species Act, that require the Service to meet additional responsibilities. Collectively, the Service has been charged with meeting a variety of goals that are not always consistent or for which the hatcheries are not well located or equipped to carry out. While recovery and restoration are the Service’s highest priorities, Service officials believe they are obligated to provide mitigation of fish losses at federal water projects that provide recreational fishing opportunities, and, consequently, they have been reluctant to redirect resources from mitigation to the Service’s higher-priority activities. Service officials also have had to spend the agency’s limited funds on maintaining hatcheries at mandated geographic locations that may not be the most suitable for raising threatened or endangered species. Consequently, the Service finds itself struggling to address the many mandates added over the years while at the same time trying to maintain modern and efficient hatcheries. In addition, while the Service has been successfully reimbursed in some cases for its mitigation expenses at federal water projects from the project’s beneficiaries, in other cases, the Service is prohibited or lacks clear authority to do so. In our view, congressional guidance is needed on which programs the Service should emphasize. Furthermore, the Service needs the authority to make changes to better align its hatchery operations with its highest priorities, including the authority to open, close, change, move, or consolidate hatcheries. We further believe that it would be useful to clarify the Service’s authority to obtain reimbursement from federal water development agencies and/or project beneficiaries for mitigation services provided at federal water projects.

Recommendations to the Congress

To assist the Service in accommodating the variety of laws that it implements in its management of the hatchery program, we recommend that the Congress provide direction on which programs it wants the hatcheries to emphasize. Furthermore, to allow the Service to more efficiently and effectively align its operations with congressionally directed priorities, we recommend that the Congress authorize the Service to open, close, change, move, and consolidate hatcheries.
To provide an additional source of funding for hatchery operations that mitigate the impacts of federal water development projects that benefit third parties, such as water users or electric power recipients, we recommend that the Congress provide the Service with clear authority to seek reimbursement from federal water development agencies and/or project beneficiaries for all hatchery operation and maintenance expenses associated with such projects.

Agency Comments

We provided the Department of the Interior with a draft of this report for review and comment. The Department generally agreed with the report's conclusions and recommendations. The Department suggested that our recommendation that it be given authority to close, change, move, and consolidate hatcheries also include the option to open hatcheries. We agreed and changed the wording accordingly. In addition, the Department provided technical corrections and suggested clarifying wording in selected places. We have incorporated those suggestions and comments into our report as appropriate. The Department's written comments are included in appendix III.

Scope and Methodology

To determine if hatcheries' activities are consistent with authorizing laws, we reviewed legislation and held discussions with Service officials at headquarters, regional offices, and hatcheries. We also visited 12 of the 66 national fish hatcheries. We chose the 12 hatcheries, 2 from each of the Service's six regions that have hatcheries, so that we would have a mixture of conservation and mitigation hatcheries that deal with threatened or endangered fish species, warm- or cold-water fish species, and native or nonnative fish species. The cross-section of hatcheries allowed us to evaluate different geographic fish issues in each of the six regions. Service officials agreed that this was an appropriate cross-section to provide an overall perspective on hatchery operations. Appendix II lists the facilities that we visited. To assess the impacts of the laws on hatchery operations, we spoke with officials in headquarters, regional offices, and hatcheries, and we obtained from them relevant data and reports—such as reports from special internal groups reviewing the national fish hatcheries. Because of the number of laws and legal mandates, we did not perform a detailed review of their requirements; instead, we reviewed the general purpose and intent of the major laws and compared those with hatchery program areas to determine consistency.
To determine if there is a need for the Congress to consider any changes in existing legislation to improve the management of the national fish hatcheries, we analyzed hatcheries’ goals and production objectives for fiscal years 1995 through 1999. This information came from annual reports and other documents obtained from the Service’s headquarters, six regional offices, and 12 hatcheries we visited. At the hatcheries we visited, we also reviewed authorizing legislation, management and operational plans for fiscal years 1995 through 1999, and other relevant data and reports. In addition, we interviewed officials at the Service’s headquarters, regional offices, and hatcheries to obtain their opinions of hatchery funding shortages, the impacts of the funding shortages, and the efforts undertaken to obtain additional funds for the national fish hatcheries.

We performed our work from October 1999 through May 2000 in accordance with generally accepted government auditing standards.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from the date of this letter. At that time, we will send copies to interested congressional committees; the Honorable Bruce Babbitt, Secretary of the Interior; the Honorable Jamie Rappaport Clark, Director, Fish and Wildlife Service; and the Honorable Jacob J. Lew, Director, Office of Management and Budget. We will also make copies available to others on request.

If you or your staff have any questions about this report, please call me at (202) 512-3841. Major contributors to this report were Bob Arthur, Doreen Feldman, Kathy Gilhooly, Araceli Hutsell, Bill Temmler, and Ed Zadjura.

Sincerely yours,

Jim Wells
Director, Energy, Resources, and Science Issues
## Appendix I

### Selected Laws Impacting Operations of the National Fish Hatcheries

<table>
<thead>
<tr>
<th>Law</th>
<th>Purpose</th>
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<tr>
<td><strong>Anadromous Fish Conservation Act</strong></td>
<td>Authorizes the Secretary of the Interior to enter into cooperative agreements with the states and other nonfederal interests for conservation, development, and enhancement of the nation's anadromous fish resources. Provides authority for the construction, operation, and maintenance of fish hatcheries wherever necessary to accomplish the purposes of this act.</td>
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<tr>
<td><strong>Atlantic Coastal Fisheries Cooperative Management Act</strong></td>
<td>Supports and encourages the development, implementation, and enforcement of the effective interstate conservation and management of Atlantic coastal fish resources. States affected include all states bordering the Atlantic Ocean.</td>
</tr>
<tr>
<td><strong>Atlantic Striped Bass Conservation Act</strong></td>
<td>Supports and encourages the development, implementation, and enforcement of effective interstate action regarding the conservation and management of the Atlantic striped bass. National fish hatcheries affected include those in Pennsylvania and states bordering the Atlantic Ocean north of South Carolina.</td>
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<tr>
<td><strong>Boulder Canyon Project Act</strong></td>
<td>Provides for the construction of projects for the protection and development of the Colorado River Basin.</td>
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<tr>
<td><strong>Colorado River Storage Project Act</strong></td>
<td>Authorizes the Secretary of the Interior to construct, operate, and maintain the Colorado River storage project and participating projects. Directs the Secretary of the Interior, in connection with the Colorado River Storage Project and participating projects, to construct, operate, and maintain public recreational facilities and facilities to mitigate the losses of and improve conditions for fish and wildlife. All costs incurred for these recreational and fish and wildlife facilities shall be nonreimbursable and nonreturnable.</td>
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<tr>
<td><strong>Columbia Basin Project Act</strong></td>
<td>Governs the repayment of expenditures for the construction, operation, and maintenance of projects constructed in the Columbia Basin.</td>
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<tr>
<td><strong>Endangered Species Act of 1973</strong></td>
<td>Provides for the conservation of threatened and endangered species.</td>
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<tr>
<td><strong>Fish and Wildlife Act of 1956</strong></td>
<td>Establishes the U.S. Fish and Wildlife Service and establishes a comprehensive policy with respect to the proper development of fish and wildlife resources. According to the policy, the act will be administered with due regard to the rights of individuals to engage in fishing for pleasure, and with the intent of maintaining and increasing public opportunities for recreational use of fish and wildlife resources and stimulating the development of a strong fishing industry.</td>
</tr>
<tr>
<td><strong>Fish and Wildlife Coordination Act</strong></td>
<td>Authorizes the Secretary of the Interior to assist federal, state, and other agencies in developing, protecting, rearing, stocking, and controlling fish and wildlife resources.</td>
</tr>
<tr>
<td><strong>Grand Coulee Dam Project Act</strong></td>
<td>Authorizes construction of the Grand Coulee Dam on the Columbia River in Washington State for the purpose of navigation, controlling floods, reclaiming lands, and generating electric energy. The act also authorizes the President to construct, operate, and maintain dams, structures, canals, and incidental projects.</td>
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<tr>
<td><strong>Great Lakes Fish &amp; Wildlife Restoration Act of 1998</strong></td>
<td>Provides for the implementation of recommendations of the Fish and Wildlife Service contained in the Great Lakes Fishery Resources Study (a joint study by the Great Lakes Fisheries Commission, states, Indian tribes, and other interested entities to encourage cooperative conservation, restoration, and management of the fish and wildlife resources and their habitat of the Great Lakes Basin).</td>
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<tr>
<td><strong>Mitchell Act</strong></td>
<td>Authorizes and directs the establishment of hatcheries in the Columbia River Basin, within the states of Washington, Oregon, and Idaho. Directs the Secretary of Commerce to conduct investigations, engineering and biological surveys, and experiments as necessary for the conservation of Columbia River fishery resources.</td>
</tr>
<tr>
<td><strong>National Environmental Protection Act</strong></td>
<td>Requires that every major federal action that may significantly affect the quality of the human environment include a detailed statement of the environmental impact of the proposed action.</td>
</tr>
</tbody>
</table>
## Law

<table>
<thead>
<tr>
<th>Law</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palisades Dam &amp; Reservoir Project Act</td>
<td>Authorizes facilities for the improvement of fish and wildlife resources along the headwaters of the Snake River in connection with the construction and operation of the Palisades Dam and Reservoir Project in Idaho.</td>
</tr>
<tr>
<td>Sikes Act</td>
<td>Authorizes the Departments of the Interior and Defense to carry out a program in accordance with a cooperative plan with state agencies in planning, developing, and maintaining fish and wildlife resources on military reservations. The plan may provide that nominal fees collected by the states for hunting and fishing permits shall be used to protect, conserve, and manage the fish and wildlife resources.</td>
</tr>
<tr>
<td>Water Resources Development Act of 1976</td>
<td>Authorizes implementation of the Lower Snake River Compensation Plan to mitigate for fish and wildlife losses in the states of Washington and Idaho resulting from four Corps of Engineers dams constructed on the lower Snake River.</td>
</tr>
<tr>
<td>White Act</td>
<td>Authorizes the establishment and maintenance of fish hatcheries, substations, experimental stations, and laboratories in various locations throughout the United States.</td>
</tr>
</tbody>
</table>
Federal Facilities That GAO Visited

**Headquarters**

Division of Hatcheries, Arlington, Virginia

**Region 1**

Regional Office, Portland, Oregon  
Leavenworth National Fish Hatchery, Leavenworth, Washington  
Warm Springs National Fish Hatchery, Warm Springs, Oregon

**Region 2**

Regional Office, Albuquerque, New Mexico  
Uvalde National Fish Hatchery, Uvalde, Texas  
Willow Beach National Fish Hatchery, Boulder City, Nevada

**Region 3**

Regional Office, Fort Snelling, Minnesota  
Genoa National Fish Hatchery, Genoa, Wisconsin  
Iron River National Fish Hatchery, Iron River, Wisconsin

**Region 4**

Regional Office, Atlanta, Georgia  
Dale Hollow National Fish Hatchery, Celina, Tennessee  
Natchitoches National Fish Hatchery, Natchitoches, Louisiana

**Region 5**

Regional Office, Hadley, Massachusetts  
Craig Brook National Fish Hatchery, East Orland, Maine  
Green Lake National Fish Hatchery, Ellsworth, Maine

**Region 6**

Regional Office, Lakewood, Colorado  
Jackson National Fish Hatchery, Jackson, Wyoming  
Jones Hole National Fish Hatchery, Vernal, Utah
Appendix III

Comments From the Department of the Interior

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, D.C. 20240

MAY 24, 2000

Mr. Jim Wells
Director
Energy, Resources, and Science Issues
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Wells:

The Department of the Interior has reviewed the General Accounting Office's (GAO) draft report entitled, "NATIONAL FISH HATCHERIES: Authority Needed to Better Align Operations with Priorities" (GAO/RCED-00-151).

In general, we agree with your findings and your recommendations that the Congress provide: 1) direction as to which programs it wants Fish and Wildlife Service (Service) hatcheries to emphasize, along with authority for the Service to close, change, move, and consolidate hatcheries; and 2) clear authority for the Service to seek reimbursement for all hatchery operations and maintenance expenses associated with Federal water projects. However, we suggest that the first recommendation be expanded to clearly provide the Service with authority to establish hatcheries as well as to close, change, move, and consolidate them. The Service is currently developing a strategic plan for its National Fish Hatchery System in conjunction with a diverse group of fishery stakeholders. It is important that the Service have the authority to implement the full range of agreed upon actions necessary for helping conserve, restore, and manage our Nation's fishery resources.

In response to Phase I of GAO's audit of the National Fish Hatchery System, the Service is on schedule in revising its classification system for distribution of fish and fish eggs. The new classification system is expected to be similar to the one used by GAO and will be helpful in developing the strategic plan for the National Fish Hatchery System.

Our specific comments are enclosed. We appreciate the opportunity to review and comment on the draft report, and hope our comments will assist you in preparing the final report.

Sincerely,

[Signature]

Assistant Secretary for Fish and Wildlife and Parks

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