ACTIVITIES OF THE U.S. FISH AND WILDLIFE SERVICE IN PROTECTING GEORGIA'S WETLANDS

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INTRODUCTION

From the 1780's to the 1980's, Georgia lost slightly over 1.5 million acres of wetlands, which represents a loss of about 23 percent of the State's original wetlands. Georgia's percent wetlands loss during this period was the smallest of any southeastern state, and about 5.3 million acres still remained circa 1980's (Dahl, T. E., 1990). On the other hand, Georgia's wetlands continue to be lost to various development activities and land uses.

Many persons now recognize that wetlands are not worthless wastelands, but exhibit numerous functions and values important to society (e.g., flood control, water quality, soil stabilization and erosion protection, fish and wildlife habitat, recreation). In recent years, mitigation of wetland losses has become an accepted regulatory requirement, and restrictions on wetland losses have become increasingly more stringent with better public recognition of wetland values and their declining status.

In 1989, President Bush pledged a national goal of "no net loss" of wetlands, which means wetland losses must be offset by wetland gains in terms of actual acreage and, to the extent possible, functions and values. The U.S. Fish and Wildlife Service (Service) has begun to implement a new wetlands action plan to meet the President's challenge (U.S. Fish and Wildlife Service, 1990a). This plan identifies and defines Service responsibilities and initiatives under the various Federal acts and regulations that pertain to the protection of wetlands and associated fish and wildlife resources.

The major activities of the Service that contribute to the protection of Georgia's remaining wetlands include: (1) review of Federal permits for private development activities, (2) review of Federal projects and programs, (3) Service acquisition and management of refuge lands, (4) inventorying wetland resources, and (5) monitoring trends in wetlands losses and gains. This paper is intended to provide a brief overview of the first three activities listed above.

REVIEW OF PERMITS AND FEDERAL PROJECTS

In Georgia, the Service has reviewed an average of about 220 permit applications under the Clean Water Act over the past 3 years involving about 3,000 acres of wetlands (about 53 percent coastal wetlands). These wetlands ranged in size from less than an acre to several hundred acres. Over the past 3 years, about 2,000 acres of wetlands are believed to have been protected through the Federal permit-review process (Personal Communication, 1990. Field Supervisor, U.S. fish and Wildlife Service, Brunswick, GA).

On February 7, 1990, the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers entered into a Memorandum of Agreement concerning the determination of mitigation requirements under Section 404 of the Clean Water Act. The Service provides technical assistance to these agencies to implement the mitigation requirements of the Agreement, which are consistent with the Service's well established mitigation policy (U.S. Fish and Wildlife Service, 1981, 1990a).

Federal Project Reviews

The Service reviews Federal or Federally-backed projects under a variety of Federal Acts and regulations, including the Fish and Wildlife Coordination Act of 1934 and amendments, Migratory Bird Treaty Acts, The Endangered Species Act of 1973, The Coastal Barrier Resources Act of 1982, The Coastal Barrier Improvement Act of 1990, and The National Environmental Policy Act of 1969, to name a few. Service reviews and recommendations for Federal projects in Georgia over the past few years have focused primarily on U.S. Army Corps of Engineers projects such as Savannah Harbor studies, Brunswick Harbor deepening, Richard B. Russell Reservoir, Glynn County Beach re-nourishment, Lake Lanier Re-regulation Dam, and Lake Alma. Considerable effort has also been devoted to oil spills such as the one in the Savannah River in 1986, proposed hydropower projects such as the one on the Savannah River near

Augusta, the Kings Bay/Cumberland Island Naval Submarine Base, and a number of water-supply reservoirs planned by the State (Personal Communication, 1990. Field Supervisor, U.S. Fish and Wildlife Service, Brunswick, Georgia).

Service Mitigation Policy

Service recommendations to other agencies regarding mitigation requirements are consistent with the fundamental principles of the Service's Mitigation Policy. In summary, these principles are: (1) that avoidance or compensation for losses be recommended for the highest valued resources, and (2) that the amount of mitigation requested correspond to both the perceived fish and wildlife resource value and the scarcity of the habitat type (U.S. Fish and Wildlife Service, 1981) (Table 1).

Table 1. Resource Categories and Mitigation Planning Goals (U.S. Fish and Wildlife Service, 1981).

Resource Category	Designation Criteria	Mitigation Planning Goal
1	High value for evaluation species and unique and unreplaceable.	No loss of existing habitat value
2	High value for evaluation species and scarce or becoming scarce	No net loss of in-kind habitat value
3	High to medium value for evaluation species and abundant	No net loss of habitat value while minimizing loss of in-kind habitat value
4	Medium to low value for evaluation species	Minimize loss of habitat value

Follow-up Evaluations of Service Recommendations

Overall, the Service cannot provide detailed information regarding the acceptance, implementation, and effectiveness of its recommendations, because the Service does not routinely carry out follow-up evaluations or maintain comprehensive data bases for this information. Over the past several years, the Service has carried out limited follow-up evaluations and some general information has been summarized below:

- Acceptance of Service recommendations by the U.S. Army Corps of Engineers has been variable (ranging from good to poor), depending on the Crops District involved. Acceptance of Service recommendations dealing with activities under Nationwide Permit 26 (includes activities in wetlands from 1 acre to 10 acres in size) has typically been poor.

- Once Service recommendations are accepted by the regulatory authority, implementation and compliance has also been variable, but non-compliance has occurred frequently enough to cause concern. Poor implementation of mitigation recommendations appears to be closely related to a lack of compliance monitoring and enforcement by the regulatory authority.

- Effectiveness of Service recommendations in achieving stated habitat and species resource goals has proven to be difficult to determine because of many factors, including: (1) relatively few evaluation studies have been conducted and these are often poorly designed, addressing only a few wetland types and functions and values, and are of such short duration that reasonable predictions about long-term success or failure are not possible; (2) interpretation of existing information is not consistent; and, (3) record keeping by involved agencies is often sparse or incomplete.

- Although overall results are variable, there is a high rate of reported failures or partial failures regarding attempted wetlands restoration projects.

- Regulatory agencies are continuing to issue permits for projects that result in significant impacts to wetlands, often using subjective speculation that mitigation will result in a minimal effects situation. Available technical information suggests that in many situations there is a high risk of failure and irretrievable loss of wetland resources, and that the information needed to predict long-term success is scarce, non-existent, or inconclusive (Baker 1984, Haynes 1984, Horak 1985b, Mager and Thayer 1986).

SERVICE ACQUISITION OF WETLANDS

Service acquisition of fee title or other interest in wetlands under the authority of the National Wildlife Refuge Administration Act of 1966 is another important aspect of wetlands protection in Georgia. Over the years, the Service has acquired about 473,000 acres (about 80 percent wetlands) within 11 National Wildlife Refuges in Georgia (Personal Communication, 1990, Mr. Charles R. Danner, Chief Project Development Branch, Refuges and Wildlife, U.S. Fish and Wildlife Service, Atlanta, GA). In addition, the Service has identified another 650,000 to 700,000 acres of Georgia wetland ecosystems as potential candidates for acquisition, based on use of a set of

evaluation criteria, including the declining status of the wetland type, the recognized functions and values, and a subjective review of threat to the habitat from various conflicting land uses (U.S. Fish and Wildlife Service, 1990b, 1989; U.S. Congress, 1986).

Service involvement in the review of Federal inventory lands (as authorized by the Food Security Act of 1985 and the Agricultural Credit Act of 1987) held by the U.S. Farmers Home Administration (Farmers Home) has provided new opportunities for Service acquisition of wetlands in the Southeast Region. Since 1987, the Service has reviewed about 34,300 acres of Federal inventory lands in Georgia, and has recommended conservation easements (i.e., deed restrictions and reservation of land-use rights) to be managed by the Service as part of the National Wildlife Refuge System on about 6,300 acres of Georgia's wetlands and associated resources. As of December 31, 1990, Farmers Home had transferred conservation easement deeds to the Service for about 2,000 acres of the 6,300 acres requested (Haynes, R. J., 1990).

The Farmers Home inventory lands review efforts are expected to continue under the provisions of the 1990 Farm Bill signed by President Bush late in 1990. This law also includes several other important conservation provisions (e.g., swampbuster provisions, agricultural wetlands reserve program) designed to protect and restore wetlands on private lands (Wildlife Management Institute, 1991). The Service will be an active player in the development and implementation of these provisions.

CONCLUSIONS

It is not economically feasible to protect all of Georgia's important wetlands through Federal and State acquisition efforts. Currently, losses or degradation of some of the important functions and values of wetlands in Georgia and other southeastern states is continuing without successfully achieving the President's goal of "no net loss." These losses are occurring primarily as a result of agricultural activities, including forestry practices, that are typically excluded from the regulatory controls necessary to achieve adequate mitigation. Further, when mitigation measures are approved, there are too many cases of failure to achieve the stated mitigation goals.

The Service strongly believes that all agencies involved with permit issues should work toward use of follow-up evaluations of approved mitigation measures as a routine part of their operational activities (Roelle and Hamilton 1985, Roelle 1988). The information gained should be used to revise policy and operational procedures as needed. Further, there should be a renewed commitment by regulatory agencies to monitor compliance and to effectively enforce violations of permit requirements. Applicants should be required to assume a long-term responsibility for the success and maintenance of required mitigation. Positive incentives to encourage private landowners to voluntarily protect wetlands are also needed.

Finally, all agencies should work together in developing and implementing a national "no net loss" of wetlands policy as supported by President Bush and the President's Domestic Policy Council, Wetlands Task Force (The Conservation Foundation, 1989). To help achieve the President's goal, the Service is currently implementing a three-pronged wetlands action plan that focuses on: (1) wetlands protection; (2) wetlands restoration, enhancement, and management; and, (3) wetlands research, information, and education (U.S. Fish and Wildlife Service, 1990a).

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