MITIGATION FOR RESERVOIR PROJECTS PART II:
CURRENT ENVIRONMENTAL LEGISLATION CONSIDERATIONS

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INTRODUCTION

Within the state of Georgia, the construction of a number of drinking-water supply reservoirs, including regional reservoirs has been proposed. The development of these reservoirs is regulated by numerous federal and state laws. These laws serve to regulate environmental impacts to natural habitats and unique cultural and natural resources.

Current environmental legislation that has the most significant economic and political impact on reservoir development includes: Federal Water Pollution Control Act (Clean Water Act), National Environmental Policy Act of 1970, Fish and Wildlife Coordination Act, Endangered Species Act of 1973 and the Natural Historic Preservation Act of 1966 as amended. The Georgia Water Quality Control Act also provides for mitigation through the implementation of water quality standards.

CLEAN WATER ACT

The Clean Water Act imparts a number of criteria that must be addressed when an application is made to place dredged or fill material in wetlands. As interpreted by the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (COE), reservoir dam construction and the resulting impacts of a reservoir project must meet guidelines for the deposition of dredged or fill material in waters of the United States. These guidelines are set forth in Section 404(b) (1) of the Clean Water Act. The guidelines require that a permit may be granted:

1) If no practicable alternatives are available, including other sources of water (groundwater, existing supply with conservation, projects with less significant impacts).

2) If the project adheres to state administered Section 401 or other water quality standards, or jeopardizes a protected species or its habitat.

3) If the project does not cause significant degradation of waters of the United States either individually or in cumulative effect with other activities. Significant adverse impacts on human health and welfare, recreational, aesthetic and economic values, life stages of aquatic life and other wildlife, and aquatic ecosystem diversity, productivity and stability are considered.

4) If appropriate and practicable steps have been taken to minimize adverse impacts.

Following the sequential applications of these guidelines, the EPA and COE require the adoption of mitigation measure which should be administered in order of avoidance, minimization and then compensation. Mitigation through compensation of impacts if only acceptable when impacts are considered unavoidable.

For the mitigation of the impacts of drinking water supply reservoirs to natural and cultural resources, the Natural Environmental Policy Act (NEPA) sets forth specific requirements for environmental assessments and environmental impact statements. Assessment of the natural and cultural resources that would be lost through construction of a water supply reservoir is essential to formula alternative choices and types of mitigation. The NEPA also provides for alternatives for a proposed action, the identification of irreversible commitments of resources and the relationship between local short-term uses of the environment and enhancement of long-term
productivity. As limited federal funding is involved with Georgia's current reservoir building program, the NEPA process will probably be deferred to the need for alternative analysis as described in the Section 404(b) (1) guidelines. The 404 (b) (1) guidelines provide the most significant legal basis to require water development authorities, including the DNR, to study all alternatives.

The Fish and Wildlife Coordination Act (FWCA) provides for the mitigation of impacts involving water and other development projects on fish and wildlife and their habitats. The act authorizes the U.S. Department of Interior to provide assistance to, and cooperate with, federal, state, and public and private organizations to insure that significant impacts to fish and wildlife habitat are considered in environmental development projects. The act also provides for measure for mitigation or compensation of wildlife losses to maximize overall project benefits. The costs of planning for, and the construction and operation of conservations means and measures are made integral parts of the total costs of the project by FWCA.

ENDANGERED SPECIES ACT

The Department of the Interior also enforces the Endangered Species Act, which protects endangered and threatened animal and plant species and their habitats. Individual water supply development projects are examined in relation to their impact on these protected species, and their habitats. Mitigation of these impacts also include avoidance, minimization, relocation; and compensation. Due to specific habitat requirements of the individual protected species mitigation through compensation or relocation is frequently difficult to accomplish. A case study of conflicts between water supply reservoir development in Georgia and protected species is detailed.

CONCLUSIONS

The complex regulatory aspects of water supply development are used to insure the proper choice of alternatives which minimize environmental impacts. The protection of unique cultural resources and natural resources that may be encountered in water supply development accrues long-term benefits to environmental stability. Mitigation of