

THE PROLIFERATION OF RESERVOIR CONSTRUCTION IN GEORGIA: A PANEL DISCUSSION EXPLORING THE ROLES OF FEDERAL & STATE AGENCIES IN THE PERMITTING PROCESS AND AN EXAMINATION OF THE NEED FOR A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

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Abstract. This panel discussion will focus on the role of federal and state agencies in the water supply reservoir permitting process. An explanation of the process from conception through construction will be provided by panelists from key agencies. In addition, an examination of the National Environmental Policy Act's requirements for Environmental Impact Statements will be discussed among the panelists. Finally, there will be an opportunity for questions from the audience.

INTRODUCTION

As Georgia enters its fourth year of drought and our population growth continues to increase at high rates with projections for continued growth well into the future, much attention has been focused on the need for expanded water supply options in government and in the media. In the state's 1998-2000 Georgia Drought Report, one of the six recommendations to deal with future drought conditions included funding the implementation of the Water Supply Act of 1989 to build regional reservoirs (Environmental Protection Division, 2001). While 13 regional reservoirs were originally proposed in the Act, the number of proposed regional reservoirs was reduced to 6 in January, 1992, and to date, only the West Georgia Regional Reservoir has received funding through the Georgia General Assembly (Environmental Protection Division, 2001). However, the late 80s and mid-90s have nonetheless been a period of high growth for reservoir construction. Since 1983, 24 new reservoirs have been permitted with all but 4 fully constructed (Environmental Protection Division, 2001). In addition, during the past 2.5 years, the U.S. Army Corps of Engineers has issued Joint Public Notices regarding application for a Clean Water Act Section 404 permit for 6 additional reservoirs north of the Fall Line (Hickory Log Creek in Cherokee County, Black Branch in Habersham County, Tussahaw

Creek in Henry/Butts Counties, Bear Creek in Newton County, Still Branch in Pike County, and Hard Labor Creek in Walton County). The U.S. Fish & Wildlife Service notes in their response to one of these Joint Public Notices that they are aware of an additional 11 reservoirs that may be proposed for construction in north Georgia in the near future (Whooping Creek in Carroll County, Sharp Mountain Creek in Cherokee County, Undesignated Site in Dade County, Dog River in Douglas County, Line Creek (Lake McIntosh) in Fayette County, Armuchee Creek in Floyd County, Tallapoosa River in Haralson County, Hillabahatchee Creek in Heard County, Yahoola Creek in Lumpkin County, Raccoon Creek in Paulding County, and Richland Creek in Paulding County) (Letter from Sandra S. Tucker, 2001).

With this proliferation of reservoir growth, many citizens, local watershed groups, and downstream users have become concerned over the direct impacts and cumulative effects of damming our rivers to impound surface waters, along with the associated destruction of wetlands. Thus, this panel serves to educate citizens about the permitting process related to reservoir construction. Specifically, the panel will examine agency roles in the reservoir planning, permitting, and construction process and opportunities for citizen involvement and input. In addition, some of the panelists will discuss the National Environmental Policy Act and its requirements for Environmental Impact Statements, as pertaining to reservoir construction projects in Georgia.

PANELISTS

Moderated by Ellen Sutherland, Executive Director of the Georgia River Network, a non-profit statewide environmental advocacy group, the panelists will include:

- Mr. Robert Lord, U.S. Environmental Protection Agency Region 4, Wetlands Section
- Dr. Robin Goodloe, Biologist, U.S. Fish & Wildlife Service
- Mr. Nolton Johnson, Chief, Georgia Department of Natural Resources Environmental Protection Division Water Resources Branch
- Ms. Kathryn J. Hatcher, Institute of Ecology, The University of Georgia
- Ms. Mary Maclean Asbill, Staff Attorney, Southern Environmental Law Center
- Mr. Mark LaRue, Consultant, Redwing Environmental
- Representative, U.S. Army Corps of Engineers (invited)

CLEAN WATER ACT SECTION 404 PROGRAM

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. The basic premise of the Section 404 Program is that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. In other words, when an applicant applies for a permit, the applicant must show that they have 1) taken steps to avoid wetland impacts where practicable, 2) minimized potential impacts to wetlands, and 3) provided compensation for any remaining, unavoidable impacts through activities to restore or create wetlands. A permit review process controls regulated activities. An *individual permit* is usually required for potentially significant impacts, such as reservoir construction (U.S. Environmental Protection Agency, 2001).

ROLES OF AGENCIES

The U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) jointly administer the program, which covers all waters of the United States, including wetlands, rivers, streams and estuaries. In addition, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and

State resource agencies have important advisory roles. Under Section 401 of the Clean Water Act, the Georgia Environmental Protection Division must certify that projects permitted under Section 404 will comply with State water quality standards (U.S. Environmental Protection Agency, 2001).

The Corps administers the day-to-day permitting program, including individual permit decisions and jurisdictional determinations, develops policy and guidance, and enforces Section 404 provisions (U.S. Environmental Protection Agency, 2001).

EPA develops and interprets environmental criteria used in evaluating permit applications, determines the scope of the geographic jurisdiction, approves and oversees State assumption, identifies activities that are exempt, and reviews and comments on individual permit applications. The EPA also has the authority under Section 404c to veto the Corps' permit decisions, can elevate specific cases through the Section 404q process, and enforces Section 404 provisions (U.S. Environmental Protection Agency, 2001).

The U.S. Fish & Wildlife Service reviews reservoir construction in Georgia under provisions of the Fish and Wildlife Coordination Act (44 Stat. 401, as amended, 16 U.S.C. 661 et seq.) and the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). The Fish and Wildlife Coordination Act was amended in 1958 to provide a legal and procedural framework for reconciling the inherent conflicts between the development of water resources and the maintenance and/or restoration of fish and wildlife resources, both of which were perceived by Congress to be essential to human well-being. The purpose of the FWCA is two-fold: 1) to recognize "the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors" and 2) "to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation." In essence, the FWCA establishes fish and wildlife conservation as a coequal purpose or objective of Federally funded or permitted water resource development proposals or projects (U.S. Fish & Wildlife Service, 1987.)

The Georgia Department of Natural Resources Environmental Protection Division plays two distinct roles in the reservoir construction process. The EPD Water Protection Branch, as noted earlier, must provide Section 401 water quality certification to each project.

In addition, the EPD Water Resources Branch plays a role by providing letters of support to certify the need for a project and the state's support of a proposed reservoir project.

ENVIRONMENTAL IMPACT STATEMENTS

The National Environmental Policy Act (NEPA) requires a federal agency to prepare an environmental impact statement (EIS) for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). The construction of a proposed reservoir by the Army Corps of Engineers and the State constitutes a major Federal action, and thus requires an EIS.

An EIS must be sufficiently detailed to serve two functions. 42 U.S.C. §§ 4231 *et seq.* First, the EIS should demonstrate that the agencies took a hard look at the environmental effects of a proposed project, and second, it should ensure that relevant information regarding the proposed project is available to members of the public so that they may play a role in the decision making process. See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989). An agency, in assessing the project's environmental effects, is required to take a "hard look" rather than merely relying on the unsupported (and contradicted) conclusions of staff. See Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 445 (4th Cir. 1996) ("HWRC I") (finding Corps failed to take hard look at zebra mussel infestation where record provided no basis for evaluating the opinions or qualifications of staff). Beyond straight environmental analysis, NEPA requires agencies to balance a project's adverse environmental consequences against its economic benefits. See Calvert Cliffs' Coordinating Comm. v. United States Atomic Energy Comm'n, 449 F.2d 1109, 1113 (D.C. Cir. 1971); see also HWRC I, 81 F.3d at 446.

The EIS must include a detailed statement on the "environmental impact of the proposed action" as well as "any adverse environmental effects which cannot be avoided should the proposal be implemented." *Id.* at §§ 4332(C)(i),(ii). The discussion must address all significant impacts, whether direct, indirect, or cumulative. 40 C.F.R. § 1508.8. "Cumulative impact" is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . undertakes such other actions." 40 CFR § 1508.7. The document must analyze the environmental impacts of both the

proposed action and alternatives to the proposed action, in comparative form to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14.

Moreover, in determining whether to prepare an EIS, regulations issued by the Council on Environmental Quality (CEQ) require the Corps to determine whether the project is one which "normally requires an [EIS]." 40 C.F.R. § 1501.4(a). In many instances across the nation, construction of a dam and reservoir is an action which necessitates the preparation of an EIS and, accordingly, the Corps has been required to perform an EIS for such projects. *E.g.*, Warm Springs Dam Task Force v. Gribble, 439 U.S. 1292 (1978) (EIS filed prior to award of contract for major segment of dam); Environmental Defense Fund v. Tennessee Valley Auth., 468 F.2d 1164 (6th Cir. 1972) (requiring agency to file EIS for dam and reservoir project); Johnston v. Davis, 500 F. Supp 1323 (D. Wyo. 1980) (EIS prepared and filed for construction of Toltec Reservoir). Clearly, an EIS must be prepared for the currently proposed reservoirs. These proposed reservoirs would significantly affect the quality of the human environment and would have large impacts in their river basins, and must not be permitted or constructed until sufficient studies have been completed.

Regulations issued by CEQ define the effects which must be considered in an EIS to include ecological, aesthetic, historic, cultural, economic, social, or health effects. 40 C.F.R. § 1508.8(b). The definition is broad, encompassing "effects on natural resources and on the components, structures and functioning of affected ecosystems." *Id.* Clearly, construction of the proposed reservoirs necessitates an EIS. Reservoirs alter the natural hydrologic regime of streams and rivers and change the timing, amounts and duration of upstream and downstream flows. Streamflow is critical to the viability of many native species inhabiting these rivers, such as the Federally endangered Cherokee Darter population in the proposed area for the Hickory Log Creek reservoir. Additionally, the public and the environment will suffer a net loss of water as a result of increased evaporation and water diversions from these impoundments. Further, the direct impact to wetlands are significant, with a total of 489 acres of wetlands inundated and 62.3 miles of stream inundated in only the current six proposals. A full EIS should be performed before the proposed permit is granted.

In addition to the direct impacts mentioned, indirect and cumulative impacts must be considered by the Corps and the State in a complete EIS. Hydrologic impacts in the area immediately affected as well as

throughout the basin and the state must be assessed. Unplanned growth resulting from reservoirs and impoundments must be analyzed. Indirect impacts are defined by CEQ regulations to include "growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." 40 C.F.R. § 1508.8(b). The indirect impacts of increased urbanization may include additional impacts to water quality, additional loss of wetland habitat, additional loss of terrestrial habitat, additional loss of biological diversity, an increase in urban stormwater runoff and other non-point source pollution, and an increase in wastewater discharges. These indirect impacts can only be addressed fully in an EIS.

PROGRAMMATIC EIS

NEPA requires that "where several foreseeable similar projects in a geographical region have a cumulative impact, they should be evaluated in a single" programmatic environmental impact statement ("PEIS"). *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1312 (9th Cir. 1990); see *Kleppe v. Sierra Club*, 427 U.S. 390, 408-415 (1976) (programmatic EIS required where sufficiently "related" actions will have "cumulative or synergistic" environmental impacts); 40 C.F.R. § 1508.18(b)(3), (4) ("federal action" includes "[a]doption of programs, such as a group of concerted actions to implement a specific policy or plan," "systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive," and "[a]pproval of specific projects, such as construction or management activities located in a defined geographic area"); *id.* § 1508.25(a)(1)(iii) (connected actions should be treated in same statement if they are "interdependent parts of a larger action and depend on the larger action for their justification").

The Supreme Court has stated that there are instances in which an agency must evaluate the effects of several related actions. *Kleppe v. Sierra Club*, 427 U.S. 390, 409-10 (1976). After this decision, CEQ issued regulations that dictate when multiple actions must be considered within a single EIS. According to the regulations, there are three types of activities that must be considered within one EIS: connected, cumulative, and similar activities. 40 C.F.R. § 1508.25(a). Connected actions are those that are "closely related," such as actions that are "interdependent parts of a larger action and depend on the larger action for their

justification." 40 C.F.R. § 1508.25(a)(1). Cumulative actions are those that "have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id.* at § 1508.25(a)(3). Finally, similar activities are those that have "common timing or geography." *Id.* at § 1508.25(a)(3).

CONCLUSIONS

Each agency involved in the reservoir permitting process plays a distinct and important role, as does the public, in ensuring that the least environmentally damaging practicable alternative is selected. Programmatic Environmental Impact Statements are a key tool for both decision makers and the public.

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