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WATER RESOURCES

Corps Lacks Authority for Water Supply Contracts



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**Resources, Community, and
Economic Development Division**

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August 20, 1991

The Honorable Quentin N. Burdick
Chairman, Committee on Environment
and Public Works
United States Senate

The Honorable Daniel Patrick Moynihan
Chairman, Subcommittee on Water Resources,
Transportation and Infrastructure
Committee on Environment and Public Works
United States Senate

The Honorable Robert A. Roe
Chairman, Committee on Public Works
and Transportation
House of Representatives

The Honorable Henry J. Nowak
Chairman, Subcommittee on Water Resources
Committee on Public Works and Transportation
House of Representatives

Through various acts, the Congress has authorized the U.S. Army Corps of Engineers to build and operate 497 reservoirs nationwide for multiple purposes, including flood control, navigation, hydroelectric power generation (hydropower), irrigation, municipal and industrial (M&I) water supply, recreation, and fish and wildlife conservation. This is the second in a series of reports addressing the mandate in section 44 of the Water Resources Development Act of 1988 that GAO review the management and administration of the Corps' civil works program.¹

As agreed with your offices, this report examines whether the Corps has the legislative authority to operate nine water reservoirs for the purposes for which they are currently being managed. Of the nine reservoirs, two are located in Alabama, three in Georgia, two on the Alabama/Georgia border, one in North Dakota, and one on the Oklahoma/Texas border.

¹See Water Resources: The Corps of Engineers' Revised Review Process for Proposed Civil Works Projects (GAO/RCED-90-188, Sept. 13, 1990).

Results in Brief

With one exception, the Corps has the legislative authority to operate the nine reservoirs for the multiple purposes for which they are currently being managed. The exception is that at two of the reservoirs the Corps has inappropriately used the Water Supply Act of 1958, as amended, to permanently reallocate existing storage capacity to M&I water supply and to enter into long-term contracts to supply water to M&I users.

The Corps' incorrect use of the Water Supply Act to reallocate existing storage capacity extends beyond the two reservoirs included in our review. The Corps has used the act to enter into 38 water supply contracts nationwide, and it is planning to enter into similar contracts in the future.

Background

Some of a reservoir's authorized purposes, such as flood control, hydro-power, and navigation, are identified in the legislation to construct or expand the project or in subsequent legislation relating to that specific reservoir. Other purposes, such as recreation and water supply, are authorized under generic legislation applicable to all Corps' reservoirs. For example, section 4 of the Flood Control Act of 1944, as amended, authorizes the Corps to build and maintain recreational facilities at Corps' reservoirs.

Some generic acts require that certain conditions be met before the Corps can operate a reservoir for a particular purpose. For example, the Water Supply Act of 1958, as amended, authorizes the Corps to include storage capacity for present M&I water supply purposes when it builds or expands a reservoir, provided a state or locality (1) contracts with the Corps to use the water before construction or expansion begins and (2) agrees to share construction, operation, and maintenance expenses. Contracts entered into under the Water Supply Act provide a guaranteed water supply for a long term, usually 50 years or the life of the project. When M&I water supply is not an authorized reservoir purpose, the Corps may provide surplus water for M&I purposes under section 6 of the Flood Control Act of 1944. However, if this surplus water is needed at a later time for authorized reservoir purposes, it is no longer available for M&I water supply purposes.

Each of the nine reservoirs included in our review was operated for multiple purposes. Table 1 shows the purposes for which the Corps was operating the nine reservoirs as of November 1990.

Table 1: Purposes for Which Nine Corps' Reservoirs Were Being Operated (As of November 1990)

Reservoir location	Purpose						
	Flood control	Navigation	Hydropower	Irrigation	Water supply	Fish and wildlife	Recreation
Lanier (Georgia)	X	X	X		X	X	X
West Point (Ga./Ala.)	X	X	X			X	X
W.F. George (Ga./Ala.)		X	X			X	X
Carters (Georgia)	X		X			X	X
Allatoona (Georgia)	X	X	X		X	X	X
R.F. Henry (Alabama)		X	X			X	X
Millers Ferry (Alabama)		X	X			X	X
Garrison (North Dakota)	X	X	X	X	X	X	X
Texoma (Okla./Tex.)	X	X	X		X	X	X

Over the past several years, we have identified problems the Corps has had in managing reservoirs for their legislatively authorized purposes, especially during periods of significant flooding or prolonged drought. For example, slowing the rate of water flow from reservoirs after flood events to enable navigation to resume earlier may be detrimental to their flood control function because less storage space is available in the event of future flooding. Similarly, gradually decreasing releases from reservoirs to meet downstream needs for water supply and water quality during deteriorating rainfall conditions can sharply reduce hydropower generation and seriously decrease recreational opportunities.²

The Corps Does Not Have a Proper Legal Basis to Reallocate Existing Storage Capacity to M&I Users

Six acts authorizing construction and operation of the nine reservoirs included in our review, together with additional reservoir-specific and generic legislation, give the Corps the authority to operate the reservoirs for virtually all of the multiple purposes for which they are currently being managed. (See apps. I and II.) However, at two of the nine reservoirs—Allatoona and Texoma—where M&I water supply is not an authorized project purpose, the Corps has inappropriately cited the Water Supply Act of 1958, as amended. It has, without making any physical expansion to the reservoirs, reallocated existing storage capacity and entered into six long-term contracts to supply water to M&I users. The Corps has also cited the Water Supply Act as its authority to

²See Water Resources: Issues Concerning the Arkansas River Basin Operation Plan (GAO/RCED-88-166, June 23, 1988) and Water Resources: Corps of Engineers' Drought Management of Savannah River Projects (GAO/RCED-89-169, June 12, 1989).

reallocate existing storage capacity for 38 other water supply contracts nationwide. It plans to use the act as the basis to reallocate existing storage capacity and to enter into additional contracts to supply water to M&I users at reservoirs where M&I water supply is not an authorized project purpose. We believe that the Corps does not have a proper legal basis for any of these existing or planned contracts.

At Allatoona, the Corps entered into long-term contracts with two municipalities to reallocate 15,136 acre feet³ of existing storage capacity from hydropower to M&I water supply. While the Water Supply Act contemplates that contracts for present water supply be entered into before construction begins, the Corps contracted to supply water to the two M&I users in 1963 and 1966, or about 14 and 17 years after construction of the Allatoona reservoir was completed in 1949. Similarly, at Texoma the Corps entered into four long-term contracts to reallocate 93,656 acre feet of existing storage capacity from hydropower to three M&I users about 16, 26, 39, and 42 years after construction of the Texoma reservoir was completed in 1944. The Corps has not expanded the water capacity of either reservoir since they were constructed. Table 2 shows the details of the six contracts.

Table 2: Water Supply Contracts at Two Corps' Reservoirs as of November 1, 1990

Reservoir	M&I user	Contract date/term	Acre feet of water
Allatoona	Cartersville, Ga.	7/12/66/project life	1,996
	Cobb Co., Ga.	10/10/63/50 years or project life	13,140
Texoma	N. Texas Municipal Water District	12/17/85/project life	75,000
	Red River Authority of Texas	8/15/69/project life	450
		1/10/83/project life	1,806
	Texas Power and Light Company	12/1/60/50 years	16,400

According to Corps officials, the Corps plans to rely on the Water Supply Act as the basis for entering into additional contracts to reallocate existing water storage capacity at the Allatoona, Carters, and Lanier reservoirs from hydropower to M&I water supply. At Allatoona, the two current M&I users have requested increased water storage capacity. In response, the Corps has proposed additional contracts to reallocate another 34,864 acre feet of storage currently allocated to

³An acre water foot is about 326,000 gallons—the volume of water necessary to cover 1 acre to a depth of 1 foot.

hydropower. The proposed contract for the Carters reservoir would reallocate 985 acre feet of water storage from hydropower to M&I water supply. At Lanier, the Corps is proposing to reallocate about 207,000 acre feet of reservoir storage from hydropower to meet the M&I needs of the Atlanta metropolitan area until the year 2010.

For the reasons set forth in a Comptroller General's opinion (B-234347, Aug. 6, 1990), we believe that none of the existing or planned contracts have a proper legal basis. In that opinion, we concluded that the authority of the Water Supply Act to supply water for M&I needs is limited to what may be accomplished through the construction or expansion of reservoirs. This act contemplates the physical construction of storage capacity for M&I water supply, either by inclusion of storage capacity for this purpose in a reservoir to be constructed or by modifications to an existing reservoir through construction of additional storage capacity by, for example, increasing its height. The opinion also states that the act does not provide authority to reallocate existing water storage capacity for M&I purposes at reservoirs previously constructed or modified.

In a February 5, 1991, letter to the Comptroller General, the Army General Counsel disagreed with our August 6, 1990, opinion. The General Counsel focused on our view that the act's term "modification" means a physical alteration (expansion) of a reservoir. He said that modification encompasses more than physical improvements to reservoirs and that the plain language of the statute makes clear that the term modification may include operational changes.

In our view, the statute does not define the term modification to include operational changes without associated physical expansion. Neither the language of the act nor its legislative history supports the Army's contention that the statute contemplates reallocation of water storage space as a result of nonstructural, operational modifications. Accordingly, we continue to believe that the Water Supply Act does not provide the Corps with a proper legal basis to enter into M&I water supply contracts and to reallocate existing water storage capacity at reservoirs under its control.

Conclusions

Storage capacity in any existing Corps' reservoir is limited, presenting the Corps with difficult choices among competing legislatively authorized purposes during periods of significant flooding or prolonged drought. Reallocating a portion of this existing capacity to M&I water

supply under long-term contracts, some extending over the life of the project, only serves to make this management task more difficult.

We believe that all of the water supply contracts the Corps has entered into nationwide, on the basis of the Water Supply Act, lack a proper legal basis, since the reservoirs were not specifically constructed or expanded for water supply purposes. The Corps has taken a contrary view, asserting that it has authority under the act to reallocate existing storage capacity and enter into water supply contracts and that such reallocation need not be associated with the construction or expansion of reservoir storage capacity. Given the sharp difference of opinion between us and the Corps regarding the Corps' authority to enter into contracts under the Water Supply Act of 1958, as amended, and the potential impact of these contracts on reservoirs' legislatively authorized purposes, we believe this matter needs congressional resolution.

Recommendation to the Congress

We recommend that the Congress remove any supposed lack of clarity by amending the Water Supply Act to expressly prohibit the reallocation of existing water storage capacity under the act unless accompanied by the construction or expansion of reservoir storage capacity. Alternatively, if the Congress wants to allow the Corps to reallocate existing storage capacity, the Congress should (1) amend the Water Supply Act to provide the Corps with this authority or (2) add M&I water supply as a project purpose or approve specific M&I water supply contracts on a case-by-case basis at individual reservoirs.

Scope and Methodology

We performed our work at the Corps' headquarters in Washington, D.C.; South Atlantic division in Atlanta, Georgia, Southwestern division in Dallas, Texas, and Missouri River division in Omaha, Nebraska; and the district offices in Tulsa, Oklahoma, and Mobile, Alabama. Appendix III shows the nine reservoirs selected by the requesters for review and the Corps' division and district responsible for their management.

To determine whether the Corps managed the nine reservoirs for the multiple purposes authorized by legislation, we assessed the specific legislation for each reservoir and the generic legislation that expanded originally authorized purposes. We also analyzed the Corps' policy and plans, water supply contracts and cost-sharing agreements for recreation at each reservoir, and agreements for fish and wildlife enhancement programs. Finally, we discussed authorized purposes with management officials at the Corps' headquarters, division, and district levels.

We reviewed the following opinions dealing with the Corps' legal basis for reallocating existing storage capacity at Corps' reservoirs and for entering into contracts to supply water to M&I users—opinions of the Corps' Chief Counsel (September 20, 1989); the Comptroller General (August 6, 1990); and the Army General Counsel (February 5, 1991).

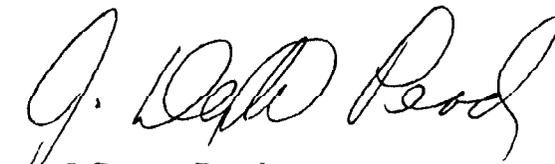
Our review was conducted from January 1990 to May 1991 in accordance with generally accepted government auditing standards.

Agency Comments

As requested, we did not obtain official agency comments on a draft of this report. However, we did receive written opinions from the General Counsel of the Department of the Army and the Chief Counsel of the Corps on the report's legal issues. We have reflected these views in this report.

We are sending copies of this report to the appropriate Senate and House Committees, interested Members of Congress, the Secretaries of Defense and the Army; the Director of the Office of Management and Budget; and the Chief, U.S. Army Corps of Engineers. We will make copies available to others upon request.

This work was performed under the direction of James Duffus III, Director, Natural Resources Management Issues, who may be reached at (202) 275-7756. Other major contributors to this report are listed in appendix IV.



J. Dexter Peach
Assistant Comptroller General

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Abbreviations

GAO	General Accounting Office
M&I	municipal and industrial
RCED	Resources, Community, and Economic Development Division

Specific Legislation for Nine Selected Reservoirs

- The Flood Control Act of 1938 authorized the Texoma reservoir on the Red River for flood control and hydropower. Subsequent project-specific legislation in 1940 and 1986 added navigation and recreation, respectively, as authorized purposes.
- The Flood Control Act of 1941 authorized the Allatoona reservoir on the Etowah River for flood control, hydropower, and navigation.
- The Flood Control Act of 1944 authorized the Garrison reservoir on the Missouri River for flood control, irrigation, navigation, and hydropower.
- The River and Harbor Act of 1945 authorized the construction of reservoirs on the Alabama and Coosa rivers and tributaries for navigation, flood control, hydropower, and other purposes in accordance with Corps of Engineers' plans. The Corps cites this act as authority for flood control and hydropower generation at the Carters reservoir and for navigation and hydropower generation at the R.F. Henry and Millers Ferry reservoirs. The 1945 act also authorized the development of the Apalachicola, Chattahoochee, and Flint rivers for navigation and hydropower. The Corps cites the 1945 act as initial authority for constructing the W.F. George reservoir for navigation and hydropower generation.
- The River and Harbor Act of 1946 authorized the Lanier reservoir on the Chattahoochee River for flood control, hydropower, and navigation.
- The Flood Control Act of 1962 authorized the West Point reservoir on the Chattahoochee River for hydropower, flood control, fish and wildlife, recreation, and navigation.

Generic Legislation for Corps Multipurpose Reservoirs

- Section 4 of the Flood Control Act of 1944, as amended, authorizes the Corps to build and maintain facilities for recreational activities.
- Section 6 of the Flood Control Act of 1944, as amended, authorizes the Corps to supply reservoir water for M&I purposes. However, the Corps can do so only when water in a reservoir is considered surplus to amounts needed for authorized purposes, provided that no contracts for M&I water shall adversely affect existing lawful uses of such water.
- The Water Supply Act of 1958, as amended, authorizes the Corps to include storage capacity for M&I water supply purposes when it either builds or enlarges reservoirs under its jurisdiction. Under the act, when present M&I water supplies are needed, states or local interests desiring the water must contract with the Corps before initial construction or expansion of a reservoir and must share construction or pay expansion costs. If this is done, a part of the capacity of the reservoir can be dedicated for M&I water supply purposes.
- The Fish and Wildlife Coordination Act of 1958, as amended, authorizes the Corps to manage for fish and wildlife conservation.
- The Corps may enter into cost-sharing agreements with nonfederal entities for building and maintaining recreational facilities and for fish and wildlife enhancement, under the Federal Water Project Recreation Act of 1965, as amended.

Reservoirs Selected for Review

Reservoir	Location	River System	Corps management responsibility	
			Division	District
Lanier	Georgia	Apalachicola-Chattahoochee-Flint	South Atlantic	Mobile
West Point	Georgia/Alabama	Apalachicola-Chattahoochee-Flint	South Atlantic	Mobile
W.F. George	Georgia/Alabama	Apalachicola-Chattahoochee-Flint	South Atlantic	Mobile
Carters	Georgia	Alabama-Coosa	South Atlantic	Mobile
Allatoona	Georgia	Alabama-Coosa	South Atlantic	Mobile
R.F. Henry	Alabama	Alabama-Coosa	South Atlantic	Mobile
Millers Ferry	Alabama	Alabama-Coosa	South Atlantic	Mobile
Garrison	N. Dakota	Missouri	Missouri River	Omaha
Texoma	Oklahoma/Texas	Red	Southwestern	Tulsa

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