

WATER SUPPLY  
COORDINATION AGREEMENT  
1982

WATER SUPPLY COORDINATION AGREEMENT

THIS AGREEMENT, dated for convenience of reference as the 22 day of July, 1982, made and entered into by and among the UNITED STATES OF AMERICA acting through the Baltimore District, Corps of Engineers, U.S. Army, functioning through the Washington Aqueduct Division (hereinafter called the "Aqueduct"); the FAIRFAX COUNTY WATER AUTHORITY (hereinafter called the "Authority"); the WASHINGTON SUBURBAN SANITARY COMMISSION (hereinafter called the "Commission"); the DISTRICT OF COLUMBIA (hereinafter called the "District"); and the INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN SECTION FOR COOPERATIVE WATER SUPPLY OPERATIONS ON THE POTOMAC (hereinafter called the "CO-OP").

WITNESSETH

WHEREAS, the Chief of Engineers is charged with the operation and maintenance of the Washington Aqueduct for the purpose of providing an adequate supply of potable water for distribution to and consumption by the agencies and instrumentalities of the Federal Government situated in the District and its environs, and of providing a public water supply for the inhabitants of the District, and certain communities in northern Virginia; and

WHEREAS, the Authority is an authority established pursuant to the laws of the Commonwealth of Virginia charged with responsibility for providing a safe and adequate public water supply within certain geographic areas of northern Virginia, and is also authorized to enter into agreements to purchase and provide water, and for that purpose is operating and maintaining water treatment facilities and a water distribution system; and

WHEREAS, the Commission is a public authority established pursuant to the laws of Maryland, is charged with the responsibility of providing a safe and adequate water supply within the Counties of Montgomery and Prince George's, Maryland and is also authorized to enter into agreements to purchase and provide water, and for that purpose is operating and maintaining water treatment facilities and a water distribution system; and

WHEREAS, the District is authorized and empowered to contract to provide a safe and adequate water supply to the inhabitants and entities within its jurisdiction and accomplishes this purpose through cooperation with the Washington Aqueduct Division, Corps of Engineers, United States Army, and is also authorized to contract for the purposes described herein; and

WHEREAS, the Interstate Commission on the Potomac River Basin (ICPRB) has created CO-OP devoted to forecasting demand and supply in the Washington Metropolitan Area; and

WHEREAS, CO-OP has developed a program for optimal utilization of all available water supply facilities in the Washington Metropolitan Area, particularly during drought periods; and

WHEREAS, the Aqueduct, the Authority, and the Commission (hereinafter called the "suppliers") now have in place, on the Potomac River, water intakes installed in accordance with appropriate Federal and state laws; and

WHEREAS, the suppliers are governed by the provisions of the Potomac River Low Flow Allocation Agreement, dated January 11, 1978, which is hereby incorporated by reference into this agreement and made part thereof; and

WHEREAS, it is in the mutual benefit of the suppliers to manage Potomac River flows, reservoir releases, and water supply withdrawals so as to reduce or eliminate the possibility that the Emergency Stage of the Low Flow Allocation Agreement will ever be reached or that the allocation formula set forth therein becomes operative.

NOW, THEREFORE, in consideration of the mutual covenants herein contained the parties hereto do hereby agree as follows:

ARTICLE 1. - The suppliers agree to operate their respective water supply systems in a coordinated manner so as to provide the optimal utilization of all available water supply facilities for the benefit of the inhabitants of the Washington Metropolitan Area.

ARTICLE 2. - The Authority and the Commission agree to operate their non-Potomac water supplies (Occoquan River and Patuxent River) so as to maximize the availability of reservoir storage associated therewith for use during periods of low flows in the Potomac River.

ARTICLE 3. - The District, the Authority, and the Commission agree that, notwithstanding the extent to which they each may participate in the cost of construction, operation and maintenance of Bloomington Lake, and the proposed Little Seneca Lake and in the operation and maintenance costs of the Savage Reservoir, releases of water from Bloomington Lake water supply storage and Little Seneca Lake shall be made as provided by this agreement.

ARTICLE 4. - The suppliers agree that all available water supply facilities shall be managed and operated as provided in the attached Drought-Related Operations Manual for the Washington Metropolitan Area Water Suppliers (hereinafter called the "Operations Manual"), which manual is hereby made part of this agreement.

ARTICLE 5a. - CO-OP agrees to provide the administrative, technical, supervisory and managerial services set forth in the attached Operations Manual and the District, the Authority, and the Commission agree to pay the costs thereof in the following proportions: District-30%, Authority-20% and Commission-50%.

ARTICLE 5b. - The District shall take all necessary actions to procure the required appropriations to meet its cost sharing obligations hereunder; provided, however, that no payments shall be made by the District until appropriations for such purposes have been made pursuant to the requirements of the Budget and Accounting (Anti-Deficiency) Act of 1921 (31 U.S.C. 665) as amended.

ARTICLE 6. - The parties agree that the services to be provided by CO-OP may be terminated at any time either by the unanimous agreement of the District, the Authority and the Commission or by CO-OP, in which event CO-OP shall deliver to the suppliers all computer hardware and software, equipment, supplies, records, etc., which may have been acquired or developed at the expense of the District, the Authority, and the Commission and thereupon the suppliers shall make appropriate arrangements for continuing the functions, duties and responsibilities theretofore performed by CO-OP. The District, the Authority, and the Commission agree to pay necessary termination expenses incurred by CO-OP.

ARTICLE 7. - The suppliers do hereby establish an Operations Committee which shall comprise a representative of each supplier. The Committee shall be responsible for overseeing implementation of this agreement and the Operations Manual and shall be empowered, upon unanimous agreement, to revise the Operations Manual as circumstances may require. The Operations Committee shall:

- (a) as necessary, review decisions of the Director of CO-OP and by unanimous agreement, change such decisions and so inform the Director of CO-OP,
- (b) monitor compliance with the terms of this agreement and the Operations Manual,
- (c) provide executive support to the Director of CO-OP within their agencies,
- (d) approve expenditures of CO-OP relevant to the terms of this agreement,
- (e) establish joint and coordinated operating procedures for use by the suppliers to monitor supply (including rainfall forecasts) and demand during emergencies and droughts, and
- (f) establish CO-OP as the agency responsible for executing the procedures in 7(e) above and for the establishment and maintenance of a system for monitoring supply and demand and performing drought management analysis.

ARTICLE 8. - The consideration for this agreement is the promises herein exchanged based upon the premises above mentioned and the public and governmental interests deemed necessary and desirable by the parties to this agreement.

ARTICLE 9. - It is agreed that the waters released from Bloomington Lake water supply storage and Little Seneca Lake are to be utilized to achieve the objectives of this agreement without regard to any cost-sharing by the District, the Authority, and the Commission in Bloomington Reservoir and Little Seneca Lake.

ARTICLE 10. - In April 1990 and in April of each fifth year thereafter during such time as this agreement is in effect and the proposed Little Seneca Lake has been constructed and is operational, the Aqueduct, the Authority, the Commission and the District shall review and evaluate the adequacy of the then available water supplies to meet the water demands in the Washington Metropolitan Area which may then be expected to occur during the succeeding twenty year period. If as a result of any such review and evaluation it is determined that additional water supplies will be required to meet the expected demands, the Aqueduct, the Authority, the Commission and the District shall undertake negotiations to provide the required additional water supplies and, when provided, water from such additional water supplies shall be included as water subject to the allocation formula under the terms of the Potomac River Low Flow Allocation Agreement. Such facilities shall be operated under the terms of this agreement. The District, the Authority, and the Commission agree that the costs of construction, operation and maintenance of such additional water supplies shall be shared among these parties in accordance with the following formulae:

$$\text{District's Share} \quad -\% = \frac{(A-B)}{(A-B) + (C-D) + (E-F)} \times 100$$

$$\text{Authority's Share} \quad -\% = \frac{(C-D)}{(A-B) + (C-D) + (E-F)} \times 100$$

$$\text{Commission's Share} \quad -\% = \frac{(E-F)}{(A-B) + (C-D) + (E-F)} \times 100$$

Where:

A = The average number of gallons of processed water pumped daily by the Aqueduct to all its customers from all sources (expressed in million gallons per day) during the month of July in each of the five (5) years immediately preceding the award of a contract(s) for the construction of the additional water supply facilities.

- B = The average number of gallons of processed water pumped daily by the Aqueduct to all its customers from all sources (expressed in million gallons per day) during the month of July in each of the years 1981 through 1985.
- C = Same as A, except substitute the number of gallons of processed water pumped daily by the Authority.
- D = Same as B, except substitute the number of gallons of processed water pumped daily by the Authority.
- E = Same as A, except substitute the number of gallons of processed water pumped daily by the Commission.
- F = Same as B, except substitute the number of gallons of processed water pumped daily by the Commission.

Whenever application of the above formulae results in a negative amount for any one of these parties, such party's share of the costs shall be zero. Thereupon, the formulae applicable to the other two parties shall be revised by eliminating therefrom the term which relates to the party with zero cost share (e.g., if the District's share is zero, the term (A-B) shall be eliminated; if the Authority's share is zero, the term (C-D) shall be eliminated; and if the Commission's share is zero, the term (E-F) shall be eliminated) and the revised formulae shall be applied to determine the respective shares of costs to be borne by the other two parties. Whenever application of the above formulae results in negative amounts for any two of these parties, their respective shares of the costs shall be zero and the entire costs shall be borne by the third party.

ARTICLE 11. - The suppliers, the District and CO-OP agree to utilize their best efforts to resolve any disputes which arise under this agreement or the Operations Manual by informal negotiation, the resolution of which shall require unanimous agreement of the suppliers, and the District. However, any party may initiate litigation, the purpose of which is to construe a provision of or resolve a dispute that arises under this agreement or the Operations Manual. The parties to this agreement hereby agree the issues to be litigated may be litigated in any court of competent jurisdiction sitting in Maryland, Virginia, or the District of Columbia and consent to venue in any such court and to the service of all papers and pleadings related thereto. Pending final resolution of any dispute, the provisions of this agreement and the Operations Manual shall continue in effect.

ARTICLE 12. - The effective date of this agreement shall be the date on which the last party executes the same.

ARTICLE 13. - Unless sooner terminated by unanimous agreement of the suppliers, and the District, this agreement shall continue in effect for as long as the water systems of the suppliers remain in existence and operation.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date which appears with their respective signatures.

Approved in form and in legal sufficiency:

UNITED STATES OF AMERICA

Audrey B. Urling  
District Counsel

By: Gerald C. Brown Col. U.S.A.  
District Engineer,  
Baltimore District, Corps  
of Engineers, U.S. Army

Date: July 22, 1982

Date: July 22, 1982

FAIRFAX COUNTY WATER AUTHORITY

Randolf Church  
Attorney

By: Fred C. Morin  
Chairman

Date: July 22, 1982

Date: July 22, 1982

WASHINGTON SUBURBAN SANITARY COMMISSON

William S. Lindung  
Secretary- WSSC

By: Robert McGarry  
General Manager

Date: July 22, 1982

Date: July 22, 1982

THE DISTRICT OF COLUMBIA

Edward Currey  
Asst. Corporation Counsel

By: Marion Barry  
Mayor

Date: July 22, 1982

Date: July 22, 1982

INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN SECTION FOR COOPERATIVE WATER SUPPLY OPERATIONS ON THE POTOMAC

Henry P. Stetina  
General Counsel

By: Rockwood Foster  
Chairman

Date: July 22, 1982

Date: July 22, 1982

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date which appears with their respective signatures.

Approved in form and in legal sufficiency:

Andrew B. Volney

Date: 22 July 1982

Randolph W. Smith

Date: July 22, 1982

William J. Lending

Date: July 22, 1982

Stacy

Date: July 22, 1982

Henry P. Stetson

Date: July 22, 1982

UNITED STATES OF AMERICA

By: Reid C. Bunn  
District Engineer,  
Baltimore District, Corps  
of Engineers, U.S. Army

Date: 22 July 1982

FAIRFAX COUNTY WATER AUTHORITY

By: James C. McConni  
Chairman

Date: July 22 '82

WASHINGTON SUBURBAN SANITARY COMMISSION

By: Robert B. Garry  
General Manager

Date: 22 Jul 82

THE DISTRICT OF COLUMBIA

By: M. Bunn  
Mayor

Date: 7-22-82

INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN SECTION FOR COOPERATIVE WATER SUPPLY OPERATIONS ON THE POTOMAC

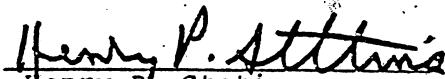
By: Robert H. Justice


Date: July 22, 1982





I, Henry P. Stetina, of Bethesda, Maryland, General Counsel to the Interstate Commission on the Potomac River Basin make oath and say that I, in the presence of the Executive Director, affixed the Common Seal of the Commission to the annexed Water Supply Coordination Agreement dated July 22, 1982, A.D., 1982, and that I saw the Chairman of CO-OP sign, execute and deliver said Contract as and for the act and deed of the CO-OP Section of the Commission and that I countersigned the said Contract to complete the due execution thereof. And further that the seal affixed and impressed at the foot or end of the said Contract is the Common Seal of the Commission and was affixed and impressed thereto by myself by a resolution adopted on the 29th day, of June A.D., 1982 and with the authority of the Commissioners of CO-OP and in conformity with procedures required for the authentication of the Contract.

  
Henry P. Stetina  
General Counsel

  
Paul W. Eastman  
Executive Director  
(Witness)



Drought-Related Operations Manual  
for the Washington Metropolitan Area Water Suppliers

(Attachment to Water Supply Coordination Agreement,  
dated July 27, 1982) *K/S/L*

I. Introduction

This manual details operations rules and procedures for reducing the impacts of severe droughts in the Potomac River Basin. Although the primary emphasis is on water supply for the Washington Metropolitan Area, the rules and procedures are consistent with maintaining instream flow and water quality in both upstream and downstream portions of the basin.

II. Objectives

- A. Make the most efficient use of all water supply facilities, including but not limited to the Potomac River, Bloomington Lake, Occoquan Reservoir, Triadelphia Reservoir, Duckett Reservoir, and the proposed Little Seneca Lake to meet all water supply needs for the Washington Metropolitan Area.
- B. Maintain the probability of invoking the Restriction Stage of the Potomac River Low Flow Allocation Agreement at less than 5 percent during a repeat of the historical streamflow record.

- C. Maintain the probability of entering the Emergency Stage of the Potomac River Low Flow Allocation Agreement at less than 2 percent with full reservoirs on June 1 of any year.
- D. Maintain the probability of not refilling any reservoir used for Washington Metropolitan Area water supply to 90 percent of useable capacity by the following June 1 at less 5 percent during a repeat of the historical streamflow record.
- E. Maintain flows in the Potomac River below Seneca Pool as agreed to by the signatories to the Potomac River Low Flow Allocation Agreement.
- F. Minimize conflict between normal utility operations and drought operations.
- G. Provide consistency with the requirements of the Potomac River Low Flow Allocation Agreement.

III. Facilities and Operations Directly Affected.

- A. Potomac River facilities of the Washington Aqueduct Division, U.S. Army Corps of Engineers, Washington Suburban Sanitary Commission, and the Fairfax County Water Authority.
- B. Washington Suburban Sanitary Commission water supply facilities on the Patuxent River.

- C. Fairfax County Water Authority water supply and power generating facilities on the Occoquan River.
- D. Finished water interconnections between the Fairfax County Water Authority and the Washington Aqueduct Division, U.S. Army Corps of Engineers supplied water utilities in Virginia, subject to the approval of Arlington County and/or the City of Falls Church.
- E. Water supply releases from the proposed Little Seneca Lake.
- F. Water supply releases from water supply storage in Bloomington Lake.

#### IV. Implementation

- A. Whenever gauged flows at Point of Rocks are below 1292 MGD 2000 cfs, CO-OP will compute flows in the Potomac River at Little Falls Dam, including all prior water supply withdrawals for the Washington Metropolitan Area on a daily basis.
- B. CO-OP will issue long-range water supply outlooks on a monthly basis from May through October. Additional outlooks will be issued as needed. These outlooks will contain estimates of the probability of meeting long-range unrestricted demands from current storage, and then refilling

every reservoir to at least 90 percent of useable capacity by the following June 1.

When computing probabilities, CO-OP shall consider gross storage in all local reservoirs, less the following allowances for unuseable storage:

- a) Occoquan - 1 billion gallons; b) Patuxent (Triadelphia plus Duckett) - 2 billion gallons; and c) Little Seneca Lake - .5 billion gallons.

C. The rules set forth in Section V. shall take effect when one or both of the following conditions exist.

(1) The probability of meeting all unrestricted demands and refilling all reservoirs to 90 percent of useable capacity by the following June 1 is less than 98 percent.

(2) Flow in the Potomac as computed in IV-A above, less the amount required for flow-by over Little Falls Dam is projected to be less than twice the projected withdrawals for any of the next five days.

#### V. Operating Rules

- A. During such time as the rules are in effect (per IV-C above) each supplier shall report daily to CO-OP, no later than 8:30 A.M., its 24 hour demand ending at 6:00 A.M. on that day.

- B. During such times as these rules are in effect, the Director of CO-OP shall, following the objectives outlined in II above, and using techniques approved by the Operations Committee:
- (1) Consult with the suppliers and the U.S. Army Corps of Engineers as required and direct the appropriate releases from water supply storage in Bloomington Lake and Little Seneca Lake.
  - (2) Prior to 10:00 A.M. daily set withdrawal rates from the Potomac for the Authority and the Commission for the 24 hour period beginning at 6:00 A.M. on that day.
- C. As early as practicable during each day, the Director of CO-OP shall revise the Authority's and the Commission's Potomac withdrawal rates in light of actual river flow and water demands.
- D. Whenever the Aqueduct declares the Restriction or Emergency Stage of the Potomac River Low Flow Allocation Agreement to be in effect, the allocation provisions of the Potomac River Low Flow Allocation Agreement shall determine Potomac withdrawals.

- E. During such times as these rules are in effect power generation at the Occoquan River shall cease.
- F. Should the probability of meeting unrestricted demand with existing storage fall below 95 percent, each supplier agrees to so advise the governing bodies of the jurisdictions which they serve and to recommend restrictions on water use.
- G. Raw water released from Lake Manassas and reimponded in the Occoquan Reservoir shall be treated as Occoquan storage under these rules.

VI. Review by Operations Committee

- A. The Operations Committee shall be responsible for overseeing the administration and implementation of this manual and, by unanimous agreement, shall be empowered to overrule or modify any action taken, or proposed to be taken, hereunder by the Director of CO-OP.

## Water Supply Coordination Agreement (WSCA)

- Effective** 22 July 1982
- Signatories** United States (Baltimore District Engineer)  
Fairfax Water (Chairman)  
District of Columbia (Mayor)  
Washington Suburban Sanitary Commission (General Manager)  
Interstate Commission on the Potomac River Basin (Chairman)
- Background** The urban populations in Maryland, Virginia, and the District of Columbia share the Potomac River as their primary source for municipal supply. The Washington Suburban Sanitary Commission, Fairfax Water and the Washington Aqueduct Division of the U.S Army Corps of Engineers (collectively, WMA water suppliers) jointly own water storage in upstream Jennings Randolph and Little Seneca reservoirs in the Potomac basin that they have agreed to operate for their common benefit during droughts. The institutional framework for the collaboration is developed through the WSCA. The Section for Cooperative Water Supply Operations on the Potomac (CO-OP) of ICPRB is designated in the WSCA to develop, implement, and maintain cooperative operating plans. The main goal of the agreement is to coordinate cooperative operations in order to minimize the chances that the allocation provision of the LFAA will need to be implemented.
- Provisions** All suppliers agree to coordinate operation of all facilities.
- Reservoir releases shall be scheduled to meet all regional demands irrespective of any utility's participation in its cost – equal access to a reliable supply.
- Suppliers establish an Operations Committee that has met regularly since 1982 to oversee the implementation of the agreements and operational or planning needs.
- Every 5 years the adequacy of regional supply to meet projected demands is reviewed for a twenty-year planning horizon.
- CO-OP Activity** 1999 and 2002 drought operations ensured an adequate and reliable supply of water while meeting the Little Falls environmental flow recommendation.
- CO-OP conducts an annual drought exercise to maintain regional preparedness and assure that the operational agreements will be current in time of need.
- A 2005 review of demand projections shows a reliable system through 2025.
- Settlement agreements with upstream power companies ensure that the interests of the water suppliers and river are protected from new consumptive use.
- CO-OP deploys and maintains wireless, real-time, Potomac water-level monitors that are used during droughts to improve real time drought operations.
- Through CO-OP, the WMA water suppliers partially support USGS flow gages on Little Seneca Creek, the Potomac River at Point of Rocks, and the Potomac River at Hancock.
- CO-OP provides monthly water supply outlooks from April through October.
- CO-OP provides technical support and responds to requests for information from the utilities.