

**METROPOLITAN WASHINGTON  
WATER SUPPLY EMERGENCY AGREEMENT**

**Prepared by:**

**Metropolitan Washington  
Council of Governments**

Metropolitan Washington Water Supply Emergency Agreement

This Agreement, made and entered into this fifth day of December, 1979, between local governments and regional and special purpose agencies within the Metropolitan Washington Area signatory hereto,

WITNESSETH:

WHEREAS, it has been determined by the concerned governments and agencies signatory hereto that interjurisdictional and assistance among the signatories to conserve water and provide for necessary curtailment of water use and improved management of the existing water supply during emergency shortages will increase their ability within their jurisdictions; and

WHEREAS, the Potomac River Low Flow Allocation Agreement is designed to equitably allocate Potomac River water for public water supply in the Metropolitan Washington Area during Potomac River low flow conditions, but does not address reduction in use of water to prolong the capability of water supplies to provide water during such conditions; and

WHEREAS, the signatories are authorized under Federal, state and local law to enter into such cooperative agreements for conservation and management of existing water supplies within the Metropolitan Washington Area, and although it is recognized that long-range water supply planning should minimize the need of invoking water supply emergency agreements,

NOW, THEREFORE THE PARTIES HERETO DO AGREE AS FOLLOWS:

SECTION 1.00           PURPOSE

The purpose of this Agreement is to provide interjurisdictional assistance and coordination to conserve water and provide for necessary curtailment of water use during a critical water supply situation within the Metropolitan Washington Area.

SECTION 2.00           DEFINITIONS

- 2.10   “WATER SHORTAGE EMERGENCY”: period during which the supply of available potable water is or may be limited such that special water conservation actions or water allocations are required to protect the health, safety, and welfare of the population.
  
- 2.20   “POTOMAC RIVER LOW FLOW ALLOCATION AGREEMENT”: an agreement among the State of Maryland, Commonwealth of Virginia, District of Columbia,

Washington Suburban Sanitary Commission, Fairfax County Water Authority, and the U.S. Army Corps of Engineers to allocate Potomac River water for public water supply in the Metropolitan Washington Area during Potomac River low flow conditions. (See Attachment A to the Agreement).

- 2.30 “METROPOLITAN WASHINGTON WATER SUPPLY EMERGENCY PLAN,” commonly called Water Supply Emergency Plan, (formerly called the “GUIDE WATER SUPPLY EMERGENCY IMPLEMENTATION PLAN): a plan issued in January 1978 for necessary curtailment of water use and other emergency actions during a water shortage or outage to water suppliers, local governments, and specified government agencies of the Metropolitan Washington Area. (See Attachment B to the Agreement.)
- 2.40 “PERTINENT PORTION OF THE POTOMAC RIVER”: the portion of the Potomac River subject of this plan is defined as the pertinent portion of the river subject of the Potomac River Low Flow Allocation Agreement.
- 2.50 “COORDINATOR”: the Executive Director of the Metropolitan Washington Council of Governments or his designee.
- 2.60 “AQUEDUCT”: Chief, Washington Aqueduct Division, Baltimore District, U.S. Army Corps of Engineers, or his designee.
- 2.70 “METROPOLITAN WASHINGTON WATER RESOURCES PLANNING BOARD”: established by some local governments of the Metropolitan Washington Council of Governments with the responsibility for developing all policies, programs, and other actions for the effective implementation of water quality management planning and other water resources planning, including planning for water supply.
- 2.80 “SIGNATORY”: parties who have executed this Agreement including water purveyors, local governments, and specified government agencies.
- 2.90 “WATER OUTAGE AGREEMENT”: a condition in which the supply is in jeopardy of cessation; or is polluted; and in which immediate action is required by governments and agencies concerned to provide minimum necessary potable water for human consumption, to inform the public and to protect the health, safety, and welfare of the population in the area of areas affected.

## SECTION 3.00 CONDITIONS FOR INITIATION

- 3.10 Potomac River Water Supply Emergencies

- 3.11 Stages of a Potomac River water supply shortage (Alert, Restriction, and Emergency stages) are defined and declared by the AQUEDUCT according to the POTOMAC RIVER LOW FLOW ALLOCATION AGREEMENT. These stages denote successively lower amounts of water supply available from the Potomac River. Parallel water shortages are contained the WATER SUPPLY EMERGENCY PLAN with emergency procedures to be taken.
  - 3.12 Potomac water supply emergencies other than water shortages, including finished water and water quality emergencies (possibly creating a water outage), that exist within that portion of the Metropolitan Washington Area under a SIGNATORY's authority shall be defined and declared by the SIGNATORY. All affected local governments will be immediately notified to coordinate emergency procedures.
  - 3.13 Only Potomac River water supply emergencies within the PERTINENT PORTION OF THE POTOMAC RIVER are subject to this Agreement.
- 3.20 Non-Potomac River Water Supply Emergencies
- 3.21 Stages of non-Potomac water supply shortages are defined and declared by the SIGNATORY who supplies water to that portion of the Metropolitan Washington Area affected.
  - 3.22 Non-Potomac water supply emergencies other than water shortages, including finished water and water quality emergencies, that exist within that portion of the Metropolitan Washington Area under a SIGNATORY's authority shall be defined and declared by the SIGNATORY.

**SECTION 4.00 RESPONSIBILITIES OF THE COORDINATOR**

Upon notification by the Aqueduct, the Coordinator will notify the District of Columbia Office of Emergency Preparedness of the necessary operations for the existing stage of water shortage emergency (same stages as defined in the Potomac River Low Flow Allocation Local Emergency Broadcasting Procedures, of general aspects and actions called for in the critical state as set forth in the Water Supply Emergency Plan; and provide informal monitoring and coordination of regional water conservation in response to a water shortage in accordance with the Plan.

**SECTION 5.00 RESPONSIBILITIES OF THE SIGNATORIES**

The SIGNATORIES have adopted or will adopt local procedures to meet water supply emergencies, and such procedures will be followed so long as they remain in effect. Nothing in this Agreement requires a local jurisdiction or agency to undertake any actions not allowed by law.

SECTION 6.00 WATER SUPPLY EMERGENCY AGREEMENTS

Any proposed amendment is not effective until approved by the majority of SIGNATORIES to this Agreement and any SIGNATORY who does not approve the amendments is not obligated under this Agreement to take any action or render any assistance required thereby.

SECTION 7.00 DURATION

This agreement shall remain in effect until terminated by all SIGNATORIES hereto upon written notice setting forth the date of such termination. Withdrawal from this Agreement by one party hereto shall be made by thirty days written notice to all other parties but shall not terminate the Agreement among the remaining parties.

IN WITNESS THEREOF the parties hereto have executed this Agreement as of the date first above written.

City of Alexandria, Virginia by \_\_\_\_\_  
Mayor

Arlington County, Virginia by \_\_\_\_\_  
County Board Chairman

City of Bowie, Maryland by \_\_\_\_\_  
Mayor

City of College Park, Maryland by \_\_\_\_\_  
Mayor

District of Columbia by \_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Council Chairman

City of Fairfax, Virginia by \_\_\_\_\_  
Mayor

Fairfax County, Virginia	by	_____
		Board of Supervisors Chairman
City of Falls Church, Virginia	by	_____
		Mayor
City of Gaithersburg, Maryland	by	_____
		Mayor and President of Council
City of Greenbelt, Maryland	by	_____
		City Councilman
Loudon County, Virginia	by	_____
		Board of Supervisors Chairman
City of Manassas, Virginia	by	_____
		City Councilman
Montgomery County, Maryland	by	_____
		Intergovernmental Programs Coordinator
		_____
		County Council President
Prince George's County, Maryland	by	_____
		County Executive
		_____
		County Council Chairman
Prince William County, Virginia	by	_____
		Board of Supervisors Chairman
City of Rockville, Maryland	by	_____
		Mayor
City of Takoma Park, Maryland	by	_____
		Mayor
Town of Vienna, Virginia	by	_____
		Vice-Mayor

Fairfax County Water Authority      by      \_\_\_\_\_  
Chairman

Loudon County Sanitation Authority      by      \_\_\_\_\_  
Chairman

Washington Suburban Sanitary Commission      by      \_\_\_\_\_  
Commissioner

Metropolitan Washington Council of Governments      by      \_\_\_\_\_  
President

\_\_\_\_\_  
Board of Directors Chairman

OUTLINE OF CONTENTS

WATER SUPPLY EMERGENCY PLAN

**METROPOLITAN WASHINGTON AREA**

	<u>Page</u>
I. INTRODUCTION .....	
A. Purpose .....	
B. Local Government Authority .....	
C. Public Education .....	
D. Definitions .....	
II. INITIATION AND TERMINATION OF WATER SUPPLY CRITICAL CONDITIONS .....	
A. General .....	
B. Initiation of Critical Stages .....	
1. Potomac River Water Supply Emergencies .....	
a. Inadequate Raw Water Supply .....	
b. Other Water Supply Emergencies .....	
2. Non-Potomac River Water Supply Emergencies .....	
a. Inadequate Raw Water Supply .....	
b. Other Water Supply Emergencies .....	
C. Termination of Critical Stages .....	
1. Potomac River Water Supply Emergencies .....	
2. Non-Potomac River Water Supply Emergencies .....	
III. WATER SHORTAGE EMERGENCY PROCEDURES .....	
A. General .....	



OUTLINE OF CONTENTS (continued)

- B. Control and Coordination .....
- 1. Notification .....
- a. Potomac River Raw Water Shortage .....
- b. Other Water Supply Emergencies .....
- 2. Operating Centers .....
- a. Emergency Operating Centers .....
- b. Emergency Notification Lists .....
- C. Implementation and Operations .....
- 1. General .....
- 2. Water Shortage Alert Stage (Plan A) .....
- 3. Water Shortage Restriction State (Plan B: 15% Demand Reduction) .....
- 4. Water Shortage Emergency State (Plan C-1, C-2, C-3) .....
- IV WATER OUTAGE EMERGENCY PLAN .....
- A. Introduction .....
- B. Purpose .....
- C. Definitions .....
- D. General .....
- E. Emergency Procedures .....
- F. Termination of a Water Outage Emergency .....
- G. Control and Coordination .....
- H. Resources .....

I. Public Education .....

OUTLINE OF CONTENTS (continued)

ANNEXES

- A. PARTICIPATING AGENCIES
- B. EMERGENCY NOTIFICATION CONTACTS
  - APPENDIX 1: EMERGENCY NOTIFICATION LIST
  - APPENDIX 2: SPECIAL EMERGENCY OPERATING CENTER PHONE NUMBERS
- C. ESSENTIAL INFORMATION FOR DISSEMINATION
  - APPENDIX 1: EMERGENCY OPERATING CENTER INFORMATION
  - APPENDIX 2: PUBLIC/MEDIA INFORMATION
- D. WATER SUPPLY EMERGENCY ORDINANCE(S)
- E. WATER SUPPLY SERVICE AREAS AND PRESSURE ZONES:  
METROPOLITAN WASHINGTON
- F. FAIRFAX COUNTY: PROPOSED RESTRICTIONS ON WATER USE

# I. INTRODUCTION

## A. PURPOSE

1. To provide a comprehensive guide plan for necessary curtailment of water use and other emergency actions during a water shortage or outage to Water Suppliers, Local Governments, and specified government agencies of the metropolitan Washington area.

Formulation of this plan occurred under the direction of the metropolitan Washington Water Supply Emergency Task Force (co-chaired by the Washington Suburban Sanitary Commission and the Council of Governments), and aided by the Public Safety Policy and Public Information Committees of the Council of Governments (COG). The Task Force/Committees were composed of representatives from local and state governments, water supply agencies, and regional agencies of the metropolitan Washington area. Significant contributions to various portions of the plan were provided by the Washington Suburban Sanitary Commission, the Metropolitan Washington Board of Trade, and the National Capital Planning Commission.

2. To identify the water conservation, health and protective measures to be applied by residents, businesses and private organizations in the area affected by a water outage emergency.
3. To provide for coordination, mutual support and assistance among the governments and agencies concerned with water emergencies.
4. This plan, in fulfilling its purpose, addresses:
  - a. Initiation and Termination of Water Supply Critical Conditions - Section II
  - b. Water Shortage Emergency Procedures - Section III
  - c. Water Outage Emergency Planning - Section IV

The water outage emergency plan addresses that extreme emergency situation in which there is an actual or imminent cessation of water supply. Because of the severity of such a condition, it is considered essential that the plan retain complete identification as an entity so that a reader, to gain full comprehension of it, will not be required to cross reference while reading it. Therefore, certain definitions, statements of purpose and procedures may be repetitive to other portions of the overall plan.

B. Local Government Authority

In a water supply emergency, the executives of affected and supporting jurisdictions and of the water suppliers have or will obtain the necessary legal authority to implement and enforce the emergency measures contained in this plan.

C. Public Education

1. Although not specifically a part of this plan, but essential to its successful implementation in time of water supply emergency, is the education of the public to prepare for and understand the emergency measures required.
2. Upon approval of this plan, Local Governments and Water Suppliers will initiate and continue a public education campaign to convince the public in their area of responsibility that:
  - a. Water supply emergencies are possible.
  - b. It is to the best interest of individuals, families and private organizations to prepare for such emergencies and to obtain in advance and maintain emergency supplies to assist themselves.
  - c. Utmost care during water emergencies to prevent fires is essential.
  - d. Plans and supplies for individual, family and organizational emergency hygienic measures are needed to protect health and well-being.
3. Local Governments and Water Suppliers will coordinate public education campaigns.

D. Definitions

1. Metropolitan Washington Water Supply Emergency Agreement: This proposed regional agreement provides interjurisdictional assistance and coordination to conserve water and provide for necessary curtailment of water use during a critical water supply situation within the Metropolitan Washington Area.
2. Coordinator: The Executive Director of the Metropolitan Washington Council of Governments or his designee acting to coordinate a regional response to water supply emergencies as provided in the Metropolitan Washington Water Shortage Emergency Plan.

3. Water Shortage Emergency: A condition in which the normal supply of potable water from one or more water suppliers is or may be limited to the extent that special water conservation actions or water allocations from available sources are required to protect the health, safety and welfare of the population in the area affected.
4. Alert Stage: A stage of preparedness for a water supply shortage requiring increased surveillance of a potential critical condition and warnings given of the possible shortage (see Section II.B.1.a.(1)).
5. Restriction Stage: A stage of preparedness for an existing water supply shortage requiring voluntary curtailment of nonessential water use (see Section II.B.1.a.(1)).
6. Emergency Stage: A stage of preparedness for an existing critical water supply shortage (possibly leading up to a water outage emergency) requiring mandatory curtailment of non-essential water use (see Section II.B.1.a.(1)).
7. Water Outage Emergency: A condition in which the supply of water from one or more water suppliers has ceased, or is in jeopardy of cessation; or is polluted; and in which immediate action is required by governments and agencies concerned to provide minimum necessary potable water for human consumption, to inform the public and to protect the health, safety and welfare of the population in the area or areas affected.
8. Water Suppliers/Distributors: Those special purpose agencies and facilities responsible for providing treated water to jurisdictions within the metropolitan Washington area.

Washington Aqueduct Division, Baltimore District  
U.S. Army Corps of Engineers (Supplier)  
District of Columbia (Distributor)  
Arlington County, Virginia (Distributor)  
Washington Suburban Sanitary Commission (Supplier/Distributor)  
City of Falls Church, Virginia (Distributor)  
Fairfax County Water Authority (Supplier/Distributor)  
Virginia American Water Company (Alexandria and portions of  
Prince William County) (Distributor)  
City of Bowie, Maryland (Supplier/Distributor)  
City of Rockville, Maryland (Supplier/Distributor)  
City of Fairfax, Virginia (Supplier/Distributor)

Loudon County, Virginia (Distributor)

City of Manassas, Virginia (Supplier/Distributor)

9. Aqueduct: Chief, Washington Aqueduct Division, Baltimore District, U.S. Army Corps of Engineers, or his designee acting to declare water shortage stages of the Potomac River as provided in the Potomac River Low Flow Allocation Agreement.
10. Major Water User: Any user consuming more than 1,000 gallons per day.
11. River District Hydrologist: Hydrologist or his designee within the River District Office of the National Weather Service of the National Oceanic and Atmospheric Administration responsible for short- and long-range Potomac River Flow and weather forecasts.
12. Metropolitan Washington Board of Trade: Metropolitan Washington business development and coordinating body to notify and coordinated local business water conservation measures possibly required during a water supply emergency.
13. U.S. General Services Administration: Agency responsible for operations and maintenance of many Federal facilities. The General Service Administration will act upon notification during a water supply critical condition to implement its own detailed emergency plan and will notify other Federal installations to implement their own emergency plans.
14. U.S. Civil Service Commission: Responsible for coordinating certain activities of many Federal installations. The Commission will act upon notification by the U.S. General Services Administration (GSA) during a water supply critical condition to implement its own detailed emergency plan and will notify other Federal installations within its responsibility (all of those not notified directly by GSA) to implement their own emergency plans.
15. Emergency Operating Centers (EOC): Facilities established and activated by Local Governments, Water Suppliers, and State civil defense/emergency services agencies, acting to facilitate communication (notification) and coordination during various emergencies including water supply emergencies.
16. District of Columbia Office of Emergency Preparedness: The Emergency Operating Center (EOC) of the District of Columbia. This DC/EOC has extensive resources of emergency preparedness equipment and personnel. The DC/EOP and the District of Columbia Department of Environmental Services would be contacted by the Coordinator (as provided in the Metropolitan Washington Water

Supply Emergency Plan) to notify affected Local Governments and Water Suppliers of a Potomac River water supply Emergency.

17. Water Emergency Supply Point: A local water distribution facility comprising one or more water transport vehicles (tank trucks or tank trailers) situated at a location convenient to residents affected by a Water Outage Emergency and from which local residents can obtain potable water in their own hand-carried containers sufficient to meet minimum essential quantities of ½ gallon of water per day per individual for drinking and cooking.

Under conditions visualized by this plan, Water Emergency Supply Points will be established by Local Governments in coordination with Water Suppliers throughout the area affected by a Water Outage Emergency at such places as public schools, fire stations or other suitable locations, utilizing suitable equipment available from local government sources, commercial sources, adjacent jurisdictions and State and Federal resources made available to assist in the emergency.

18. Washington Area Warning Alert System (WAWAS): That element of the National Warning System established by the Defense Civil Preparedness Agency to serve the Washington metropolitan area. The WAWAS comprises a network of civil defense warning sirens and a communications network which links the emergency preparedness and public safety elements of local governments and certain State and Federal agencies for transmission of warning messages and emergency information and for interjurisdictional coordination of emergency operations. The WAWAS communications network consists of:

- a. The Area Communications Circuit (GP 2200): a “hot loop” of dedicated telephone circuits linking State emergency operating centers (i.e., District of Columbia, Maryland, Virginia), local emergency operating centers civil defense agencies and public safety elements (i.e., Police and Fire/Rescue headquarters), and certain Federal agencies and installations (e.g., General Services Administration, National Weather Service Washington Forecast Office, Military District of Washington, Fort Meade, Fort Belvoir, and Andrews Air Force Base).
- b. The Channel G Radio, a system which serves as a backup to the Area Communication Circuit.

The Net Control for both the Area Communications Circuit and Channel G Radio is maintained by the Defense Civil Preparedness Agency/U.S. Army Communications Command Region Two Warning Center located at the Federal

Regional Center, Olney, Maryland.

19. Local Emergency Broadcast Procedure (LEBP): The procedure established by local governments in the Washington metropolitan area and the local broadcast industry to provide for the transmission by local radio and TV stations of emergency information and instructions to alert residents of the area of peacetime natural or man-made disasters. The LEBP locally institutes the operational provisions of the national Emergency Broadcast System.
20. Potomac River Low Flow Allocation Agreement: An agreement between the State of Maryland, Commonwealth of Virginia, District of Columbia, Washington Suburban Sanitary Commission, Fairfax County Water Authority, and the United State Government to allocate Potomac River water for public water supply in the Metropolitan Washington Area during Potomac River low flow conditions.

## II INITIATION AND TERMINATION OF WATER SUPPLY CRITICAL CONDITIONS

### A. General

1. The emergency planning delineated by this plan addresses a distinction in water supply emergencies that is important from a preparedness standpoint. The gradual decline in water availability, characteristics of a raw water supply shortage can be handled with increasing stringent water conservation and provision measures. In contrast, the imminent or actual cessation of water supply, i.e., water outage, by such causes as an extreme raw water shortage, major equipment or system failure, sabotage, pollution of the water supply, or electrical power outage call for extreme measures to conserve and make best use of available water.
2. Separate planning and preparedness are devoted to water shortage emergencies to water outage emergencies. Water conservation measures identified in water shortage emergency planning are applicable first steps which must be instituted in a water outage emergency in order to conserve and make best use of water remaining in the water supply system and in order to obtain time to initiate other water outage emergency measures identified in this plan.
3. A water outage emergency, characterized by the imminent or actual cessation of water supply may generally be caused by failure of the raw water source through inadequate water quantity or quality, and treatment/distribution system disruption or failure. The result is that the availability of water for human consumption, for fire suppression and for operation of the sanitary sewer system is halted, and emergency measures to furnish water for human consumption and fire fighting and



to provide for disposal of human waste are essential.

4. A water shortage emergency is characterized by reduced supply vs. demand through such causes as reduced availability of the raw water source in period of drought, increased demand by water users in hot, dry weather, partial equipment or system failure which reduces treated water production or delivery through the system, or combinations of these. The result is that demand approaches or exceeds the supply of treated water, and measures for reducing the demand by voluntary or mandatory conservation by water users are necessary. Because of the progressive nature of a water shortage, a shortage is defined by stages that require increasingly stringent conservation measures: Alert Stage: Restriction Stage: and Emergency State. A water supply outage is viewed as an extreme Emergency Stage to the final point of having to deal with the cessation of water availability. As the severity of a critical water supply situation diminishes, the severity of water conservation measures required also diminishes. Thus, less restrictive stages are subsequently called during the termination of a water supply emergency.

## B. Initiation of Critical Stages

### 1. Potomac River Water Supply Emergencies

#### a. Inadequate Raw Water Supply

- (1) Criteria specifying the water demand/supply relationship defining initiation of water supply critical stages:
  - (a) Alert Stage - declare when the total daily withdrawal from the Potomac River is equal to or greater than fifty percent (50%) of the total daily flow,
  - (b) Restriction Stage - declared when the total daily withdrawal from the Potomac River is equal to or greater than eighty percent (80%) of the total daily flow.
  - (c) Emergency Stage - declared when the estimated total daily withdrawal for any day within the ensuing five (5) days from the Potomac River is expected to exceed the daily river flow anticipated.
  - (d) Water Outage Emergency - declared upon recognition that a condition exists of imminent or actual cessation of

water supply.

- (2) The Aqueduct will declare the Alert, Restriction, and Emergency Stages; while local jurisdictions or water supplier whose water supply and/or system is affected by a Water Outage Emergency will declare such an outage emergency. The Alert, Restriction, and Emergency Stages of paragraphs II.B.1.a.(1), (b), and (c) are defined by the Potomac River Low Flow Allocation Agreement (dated January 11, 1978) and will be modified in accordance with revisions to this Agreement if they should occur.
- (3) Before declaring a stage, the Aqueduct would check with the “U.S. Geological Survey,” “Maryland Water Resources Administration” (WRA), and “National Weather Service River District Office” to assure that no immediate change in river flow can be anticipated.
- (4) Decision Information Base
  - (a) Potomac River flow information will be provided by the Army Corps of Engineers, Washington Aqueduct Division. River flow will be measured at the Little Falls gauging station which is maintained by the U.S. Geological Survey. For purposes of gauge measurement interpretation, the U.S. Geological Survey should continue to provide gauge height measurements (through such means as the present, publicly assessable telemark (telephone system) and continually updating rating information which translate river water height to river flow. Potomac River flows provided by the Army Corps will include metropolitan Washington water withdrawals which occurred during the previous 24-hour period upstream of Little Falls. The National Weather Service will provide, to as accurate a degree as possible, short-range Potomac River flow forecasts (3-day projection) as well as long-range flow forecasts. These flow forecasts plus associated short- and long-range weather forecasts would be used by the Army Corps of Engineers, the Council of Governments and Water Suppliers as a means of anticipating the immediacy of particular emergency stages.

- (b) While long- and short-range river flow forecasts are tentative, such forecasts, along with associated weather forecasts, do have value and should be used to indicate the immediacy and possible duration of water shortages. A long-range forecast initiated in the Spring and revised monthly indicating the chance of low flows, would inform local officials and the public of the possibility of water restrictions. A short-range forecast procedure would estimate the potential length of the Alert Stage, Restriction Stage, Emergency Stage, or Water Supply Outage (if caused by a raw water shortage) if low flows did not occur.
- (c) The National Weather Service (River District Office Hydrologist) would provide forecasts of both short- and long-range Potomac River flows to the Washington Aqueduct Division and Council of Governments. Short- and long-range weather forecasts would also be provided by the National Weather Service.

The U.S. Geological Survey would also provide supplementary information such as Potomac River Basin ground water levels if requested.

- (d) Information delineating Potomac River Water Supply demand is required for initiating particular water supply critical stages.

Each Major Water User would provide withdrawal flows over the preceding 24 hours and a forecast of anticipated short-range changes in demand to the Aqueduct during the Alert Stage, Restriction Stage, Emergency Stage, or Water Supply Outage (if caused by a raw water shortage), or during a generally low flow condition of the Potomac River upon request by the Aqueduct. The Aqueduct would then collect that information daily and use it to determine whether a specific low flow condition exists or can be anticipated.

Water demand forecasts should be used as supplementary information to help indicate the immediacy

of a water shortage emergency based on the relationship of water supply demand.

b. Other Water Supply Emergencies

The following potential emergencies other than those due to low Potomac River flows exist and are defined as:

- (1) Treatment and/or distribution system disruption or failure due to malfunction of equipment, electrical power failure, etc., may cause a water supply emergency. Local jurisdictions or operating agencies should, according to their detailed implementation plan, declare the emergency and define its extent.
- (2) Water quality problems owing to toxic spills, sabotage, etc., may cause a water supply emergency. Public health officials, local jurisdictions or operating agencies should, according to their detailed implementation plan, declare the emergency and define its extent.

2. Non-Potomac River Water Supply Emergencies

a. Inadequate Raw Water Supply

- (1) Non-Potomac River Water Supply critical stages are defined and declared by the local governments or water suppliers that are concerned with that portion of the metropolitan Washington area affected.
- (2) The affected water supplier will collect, receive, record and accumulate daily reports regarding the available water of the water supply source and the quantities of water being withdrawn from the water source.
- (3) The current and projected adequacy of non-Potomac water supplies should be provided by:
  - (a) Patuxent River - Washington Suburban Sanitary Commission
  - (b) Occoquan Creek - Fairfax County Water Authority

- (c) Goose Creek - City of Fairfax
- (d) Broad Run - City of Manassas
- (e) Other water suppliers as appropriate

b. Other Water Supply Emergencies

Potential emergencies other than those due to low Potomac River flows exist and are classified in the same categories as are “Other Water Supply Emergencies” (II.B.1.b.) for the Potomac River; i.e., treatment and/or distribution system disruption or failure, or water quality problems.

C. Termination of Critical States

1. Potomac River Water Supply Emergencies

a. Inadequate Raw Water Supply - criteria specifying the water demand/supply relationship defining termination of water supply critical stages:

(1) The Aqueduct will terminate the Emergency, Restriction, and Alert Stages to the next less critical staged as criteria (II.B.1.2(1), (a), (b) and (c) defining that stage are met (reverse order). This will continue until no critical stage exists.

(2) Water Outage Emergency - The local jurisdiction or water supplier whose water supply and/or system has been affected by a Water Outage Emergency, will anticipate and will determine when causes of the Water Outage Emergency have been overcome, removed, repaired or ameliorated to the extent that the Water Outage Emergency can be terminated.

b. Before terminating a stage, the Aqueduct would check with the “U.S. Geological Survey”, “Maryland Water Resources Administration” (WRA), and the “National Weather Service” to assure that no immediate change in river flow can be anticipated.

c. Other Water Supply Emergencies

- (1) Water supply emergencies caused by treatment and/or distribution system disruption or failure: Local jurisdictions or operating agencies should, according to their detailed implementation plan, terminate the emergency.
- (2) Water supply emergencies caused by water quality problems caused by toxic spills, sabotage, etc.: Public health officials, local jurisdictions or operating agencies should, according to their detailed implementation plan, terminate the emergency.

## 2. Non-Potomac River Water Supply Emergencies

- a. Inadequate Raw Water Supply - The local jurisdiction or water supplier whose raw water supply has been affected by water inadequacies will anticipate and will determine when causes of the critical condition have been overcome, removed, repaired, or ameliorated to the extent that the declared water supply critical stage can be terminated.
- b. Other Water Supply Emergencies
  - (1) Water Supply emergencies caused by treatment and/or distribution system disruption or failure: Local jurisdictions or operating agencies should, according to their detailed implementation plan, terminate the emergency.
  - (2) Water supply emergencies caused by water quality problems caused by toxic spills, sabotages, etc.: Public health officials, local jurisdictions or operating agencies should, according to their detailed implementation plan, terminate the emergency.

## III. WATER SHORTAGE EMERGENCY PROCEDURES

### A. General

1. Based on the distinction between water supply shortage and water outage emergency preparedness planning (see Section II.A), this section addresses notification and operations procedures to respond to a water shortage. The water conservation measures contained herein are necessary to conserve and make best use of water available to water supply systems and to the extent possible, will limit the more severe Water Outage Emergency measures contained in Section IV.

2. Definition of water supply critical stages of a water supply shortage are contained in Section II.B.
3. Water shortage emergencies addressed herein are of two types: Potomac River Raw Water Supply Shortage; and other water supply emergencies.
  - a. Potomac River Raw Water Supply Shortages - primarily concern those local jurisdictions and water suppliers dependent upon the Potomac River for water supply. Critical conditions affecting the Potomac River as a raw water source such as inadequate flow or pollution of the water, may cause a raw water shortage affecting consumers throughout the metropolitan Washington area. A response to such regional water shortages is coordinated on a regional basis by the Metropolitan Washington Council of Governments using the "Metropolitan Washington Water Supply Emergency Agreement (WSEA)". Emergency procedures contained herein reflect this regional agreement.
  - b. Other Water Supply Emergencies include:
    - (1) Potomac River  

Critical conditions affecting Potomac River water supply after it has been withdrawn for treatment and distribution such as system breakdowns, contaminated finished water, etc., which are handled on a local basis with regional assistance if requested (as provided by the WSEA).
    - (2) Non-Potomac River  

Critical conditions affecting non-Potomac River water supplies which are independent of the Potomac River for water supply. These critical conditions include raw water inadequacy and pollution of raw water, as well as treatment/distribution system breakdowns, contaminated finished water, etc. These conditions are handled on a local basis with regional assistance if requested (as provided by the WSEA).
4. The emergency operating procedures implemented during a water supply critical stage are the same whether the stage is declared during initiation or termination.

B. Control and Coordination

1. Notification

a. Potomac River Raw Water Shortage

- (1) Stages of a water shortage (Section II.B.1.a.(1)) due to Potomac River low flows are declared by the Washington Aqueduct Division.
- (2) The Aqueduct will inform the coordinator of the Metropolitan Washington Council of Governments as to the water shortage stage (Section II.B.1.a.(1)) declared plus the flow in the Potomac River and all information used as the basis for declaring the stage.
- (3) As specified in Section II.B.1.a.(3), the River District Office Hydrologist will inform the Aqueduct and the Coordinator of long- and short-range weather and Potomac River flow forecasts.
- (4) As specified in Section II.B.1.a.(3), the U.S. Geological Survey will provide hydrologic information to the Aqueduct and the Coordinator upon request.
- (5) The Coordinator using the Washington Area Warning Alert System (WAWAS) will:
  - (a) Notify the District of Columbia Office of Emergency Preparedness, D.C. Department of Environmental Services, of the water supply critical stage, necessary operations, and other appropriate action (see Annex C, Appendix 1).
  - (b) Notify the public through local news media using the Local Emergency Broadcasting Procedures (LEBP) if extreme conditions exist. Information provided includes:
    1. Water supply critical stage declared
    2. Definition of the stage
    3. Expected duration of stage
    4. Areas affected
    5. General type of actions called for now
    6. Actions being taken by officials from Local Governments and states, regional, and special



purpose agencies in response to this stage after checking with them.

7. General types of actions to be called for in the next stage
8. Request public to anticipate detailed information from Local Government or Water Suppliers as appropriate.

(6) The D.C. Office of Emergency Preparedness using public phone and WAWAS communication will inform the U.S. General Services Administration (GSA), Local Government Emergency Operating Centers (EOCs) and local Water Suppliers of the information provided by the Coordinator, listed in Annex C, Appendix 1. If a local government would like its water distribution management notified separately from the local government EOC notification then the local government should arrange such notification with its water supplier. Local jurisdictions in such a situation should designate their police or fire department as the contact or make arrangements with the water supplier for notification. Enforcement arrangements should be made with neighboring jurisdictions and the water supplier.

(a) GSA will notify the U.S. Civil Service Commission (CSC) and all affected Federal agencies within GSA's responsibilities of the information in Annex C, Appendix 1. GSA will request CSC to notify Federal agencies within its responsibilities with the same information, and will directly and through CSC request affected agencies to activate their own water shortage emergency plans and take appropriate action.

(b) Each EOC will notify appropriate government persons of the water shortage. Each Local Government or Water Supplier (as appropriate) affected, will:

1. Notify Local Government agencies required for emergency operations and personnel required to activate the local Emergency Operating Center (EOC).
2. Notify the appropriate State civil defense agency.
3. Notify the Metropolitan Washington Board of

Trade and local Chambers of Commerce to request such agencies to notify their member organizations and solicit cooperation in accomplishing emergency measures to be announced.

4. Notify residents of the local jurisdiction by means of the Local Emergency Broadcast Procedures, if necessary.
5. Release information for the public only through designated public information personnel acting in coordination with the public information representative of the Water Supplier (Annex C, Appendix 2).
6. Establish and identify to the public a telephone number or numbers to which individual residents may call for information as to the water shortage and emergency measures placed in effect. The information released through such "Accurate Information - Rumor Control" elements established will be limited to information furnished by the local government public information office as coordinated with the public information office of the Water Supplier.

(c) Each Water Supplier or Local Government (as appropriated) affected will:

1. After coordination at the executive level with the local governments concerned, release information to the public by means of the local news media, by means of the AP and UPI Wire Services and directly to news media representatives.
2. Establish and announce to the public a telephone number or numbers to which Major Water Users and those water customers with special cases of believed hardship may call for clarification of conservation procedures. Local Government "Accurate Information" Centers will refer calls received on these matters to the Water Supplier special telephone numbers.
3. All information released to the public will include

precautionary statements urging extreme care to prevent fires.

4. Respond to requests for exceptions announced emergency conservation and restriction measures.

b. Other Water Supply Emergencies

- (1) Definition of Other Water Supply Emergencies is contained in Sections II.B.1.b. and II.B.2.
- (2) Initial notification is by Water Suppliers. The Water Supplier whose system is affected will contact (using the WAWAS if available) the following, stating the cause of the emergency, estimated duration, and measures underway to correct the emergency.
  - (a) Other Water Suppliers in the metropolitan area
  - (b) Local Governments in the area affected
- (3) Local Governments will declare an emergency if necessary
- (4) The affected Local Government(s) or Water Supplier (as appropriate) will continue to notify and communicate with the U.S. General Services Administration, Local Governments, and Other Water Suppliers.

Notification procedures are the same as those contained in Section III.B.1.a.(6)(a) - III.B.1.a.(6)(c).

2. Operating Centers

- a. Control and coordination of notification and operations will be accomplished to the maximum extent possible through Emergency Operating Centers (EOC) established and activated by Local Governments, Water Suppliers and state civil defense/emergency services agencies to include:
  - (1) Issuance of emergency notifications.
  - (2) Supporting the exchange of information and coordination among

local executives.

- (3) Coordination of public information in:
    - (a) Providing official information to the news media
    - (b) Notification to the public through the Local Emergency Broadcast Procedure if the water supply emergency is extreme
    - (c) Responding to individual resident requests for information if requested to provide such information
    - (d) Furnishing information to the business community through the Metropolitan Washington Board of Trade and local Chambers of Commerce
  - (4) Coordination of preparedness and conduct of fire operations.
  - (5) Defining, announcing, and supporting health and hygiene measures by the public.
  - (6) Responding to requests for special assistance from individuals or organizations through the office of an individual designated by the County Executive, or appropriate responsible body.
  - (7) Generating sources and obtaining support non-affected jurisdictions, commercial sources, and state and Federal resources to meet the needs of emergency operations.
- b. To facilitate coordination among all agencies, Emergency Operating Centers will establish and maintain emergency notification lists and listings of phone numbers and communication means.
- (1) Emergency notification lists of key personnel and organizations will include principals and alternates with both office and home phone numbers for each.
  - (2) Special phone numbers of EOCs not to be released to the public, for direct coordination among EOCs.
  - (3) WAWAS communications circuits.
  - (4) Annex B, Appendix 2: Emergency Operating Center Phone

Numbers.

(5) Annex B, Appendix 1: Emergency Notification Phone Numbers

- c. Once activated for the emergency, Emergency Operating Centers should plan to operate on a 24-hour per day basis until the emergency is terminated.

C. Implementation and Operations

1. General

- a. Once a water supply critical situation occurs, the appropriate stage of emergency declared, and appropriate notification made, specific actions must be implemented to overcome, remove, or ameliorate the situation. In responding to a water shortage, necessary resources must be available for immediate use and conservation measures ready for reducing water demand. Most of this Section, III.C., specifies required water conservation measures necessary to use available water most effectively.

- b. Neighboring unaffected local jurisdictions of an area experiencing a water shortage should consider requests for aid such as providing emergency equipment, e.g., portable pumps, temporary piping, and tank trucks. A call for water conservation within the unaffected jurisdiction should only be made if such conservation would provide more water to the affected area.

- c. Resources

(1) Local Governments and Water Suppliers will establish and maintain listing of equipment and supplies applicable to the conduct and support of water shortage operations:

(a) Local Government and Water Supplier equipment

(b) Commercially-owned equipment.

(2) Identified equipment available from state and Federal sources.

Attention will be given by Local Governments and Water Suppliers to the acquisition of needed equipment to support water

shortage operations through:

- (a) “Federal Surplus” and “Excess Property Program” available through civil defense channels.

A local government or vested water supply agency has the authority to institute mandatory restrictions on water use.

2. Water Shortage Alert State (Plan A: Alert)

a. Condition of Water Supply

- (1) Potomac River Raw Water Supply Shortage: Alert Stage declared based on indication of potential inadequacy of Potomac River Water, i.e., low flow (see Section II.B.1.a.(1)(a)).
- (2) Other Water Supply Emergencies: Indication that a potential shortage of water other than a shortage caused by Potomac River low flows may occur (see Section II.B.1.b. and Section II.B.2)).

b. Operations

- (1) For Potomac River Raw Water Supply Shortages, the coordinator of the Metropolitan Washington Water Supply Emergency Agreement will notify Local Governments, Water Suppliers, General Services Administration, and the Public of the Alert Stage and possible forthcoming emergency measures (see Section III.B.1.a.(5)(a) and (b)).
- (2) For Other Water Supply Emergencies, the Local Government of Water Supplier, as appropriate, will notify other Local Governments, Water Suppliers, U.S. General Services Administration, and the Public of the Alert condition and possible forthcoming emergency measures (see Section III.B.1.b.(4)).
  - (a) Check intake structures, raw water pumping stations and other facilities, as appropriate, to ensure minimal water losses in operation.
  - (b) Increase monitoring of finished water demand.

- (c) Increase use of weather forecast data and development and use of soil moisture deficit data, including possible employment of weather specialists.
  - (d) Publicize limitations of physical water system if the limitations affect the water supply situation.
- (3) The U.S. General Services Administration, Local Governments, and the Metropolitan Washington Board of Trade (and supporting Chambers of Commerce) shall maintain master contact lists and request governmental, commercial, and industrial water users, as appropriate, to:
- (a) Check for system leakage by shutting off automatic water make-up on chilled water and heating hot water boiler systems.
  - (b) Assure that automatic bleed controls are in proper calibration for cooling towers.
  - (c) Establish daily water meter reading program prior to anyone's entering facility to ascertain leakage.
  - (d) Maintain correct water levels in cooling towers to prevent overflow on shutdown.
  - (e) Inspect total plumbing system to assure water-tight conditions of faucets, valves, unions, etc.

3. Water Shortage Restriction Stage (Plan B: Voluntary Compliance)

a. Condition of Water Supply

- (1) Potomac River Raw Water Supply Shortage: Restriction Stage declaration based on Potomac River low flow (see Section II.B.1.a(1)(a)).
- (2) Other Water Supply Emergencies: Inadequate water or other problem makes demand reduction of up to 15 percent desirable.

- b. Operations (Implement all operations of Plan A with the following modifications and additions).
- (1) For Potomac River Raw Water Supply Shortages, the coordinator of the Metropolitan Washington Water Supply Emergency Agreement will notify Local Governments, Water Suppliers, and the Public of the Restriction Stage and possible forthcoming emergency measures (see Section III.B.1.a.(5) and (6)).
  - (2) For Other Water Supply Emergencies, the Local Government or Water Supplier, as appropriate, will notify other Local Governments, Water Supplier, U.S. General Services Administration, and the Public of the Restriction condition and possible forthcoming emergency measures (see Section III.B.1.b.(4), and Sections III.B.1.a.(6)(a) - III.B.1.a.(6)(c)).
  - (3) As a goal, residents should (voluntarily) limit water consumption to 75 gallons per person per day (one bath, one flush per person per day, one laundry per family every other day).
  - (4) Through the U.S. General Services Administration, Local Government, and Metropolitan Board of Trade (and supporting Chambers of Commerce) request the following actions be taken by governmental, commercial, and industrial water users, as appropriate (Stages I - IIB of Annex F).
    - (a) Restrict the use of hoses, sprinklers, or other means for sprinkling or watering of shrubbery, trees, lawns, grass, plants, vines, gardens, vegetables, flowers, or any other vegetation. The use of buckets of water for such vegetation is permitted.
    - (b) Discontinue operation of all water demanding amenities such as ornamental fountains, waterfalls, and reflecting ponds.
    - (c) Request general conservation of inside water use, such as:
      - (1) Eating facility dishwashers to be loaded to capacity when used.



- (2) Food and eating facilities to use minimum amount of water for washing vegetables, fruits and other produce.
  - (3) In tank type toilets, insert plastic bottle filled with gravel or bend the float rod down to reduce fill level by one-fourth.
  - (4) Reduce water pressure to all sinks.
  - (5) Reduce the flow of water on all stop valve urinals and commodes.
  - (6) Eating facility customers to be served water on request only.
- (d) All watering hoses to be provided with self closing nozzle valves where outside faucets are equipped with back flow prevention valves.
  - (e) Restrict the washing of streets, driveways, parking lots, service station aprons, apartments, sidewalks, exterior of homes, office buildings or other outdoor surfaces. The use of buckets of water for such purposes is permitted.
  - (f) Except for make-up, no swimming or wading pools are to be filled or refilled (e.g., compensation for evaporation and/or spillage).
  - (g) Washing machines to be loaded to full capacity when used. Businesses such as, but not limited to, Beauty Salons, Barber Shops, and Car Washes that wash linens in on-premise washing machines are to load to full capacity and at minimum wash cycle.
  - (h) The use of water from fire hydrants is prohibited for any purpose other than fire extinguishing or water interconnection, except for essential static or residual fire plan tests.

- (i) Restrict the use of water for washing automobiles, trucks, trailers, trailer-houses, or any other type of mobile equipment, except where automatic car washing equipment is employed and a recirculating system is used, which reuses at least 50 percent of the water.
- 4. Water Shortage Emergency Stage (Plan C-1, C-2, C-3: Mandatory Compliance)
  - a. Condition of Water Supply
    - (1) Potomac River Raw Water Supply Shortage: Emergency Stage declaration based on Potomac River low flow (see Section II.B.1.a.(1)(c)).
    - (2) Other Water Supply Emergencies: Inadequate water or other problem creates a desire for reduced demand of:
      - (a) 15 - 40 percent under Plan C-1
      - (b) 40 - 60 percent under Plan C-2
      - (c) over 60 percent under Plan C-3
  - b. Plan C-1: Operation (Implement Operations of Plan B with the following modifications and additions):
    - (1) For Potomac River Raw Water Supply Shortages, the Coordinator of the “Metropolitan Washington Water Supply Emergency Agreement” will notify Local Governments, Water Suppliers, and the Public of the Restriction Stage and possible forthcoming emergency measures (see Section III.B.1.a.(5) and (6)).
    - (2) For Other Water Supply Emergencies, the Local Government or Water Supplier, as appropriate, will notify other Local Governments, Water Suppliers, U.S. General Services Administration, and the Public of the Restriction condition and possible forthcoming emergency measures (see Section III.B.1.b.(4)).
    - (3) As a goal, residents should limit water consumption to 75 gallons

per person per day (one bath, one flush per person per day, one laundry per family every other day).

(4) The following restrictions apply to all commercial, industrial, and governmental operations. Water Supply Agency and City/County inspectors with proper identification will be used to enforce restrictions. City/County police will be used to supplement and/or enforce restrictions as necessary (Stages I - IIC of Annex F).

(a) Governmental, Industrial, Commercial, Retail, and Office Building:

Do not cool building interiors until inside temperature reaches or exceeds 25<sup>N</sup>C (78<sup>N</sup>F); and shut down system one half hour before closing. Food facilities that require cooling for food storage and preservation are excepted.

(b) Restaurants, Drive-In, Fast Food, and miscellaneous Eating Facilities:

1. Use paper service in lieu of china and glassware.
2. No water to be served except on request.
3. Turn off all water not required for food or drink preparation.
4. Discontinue use of garbage disposal.
5. Reduce floor washing in customer area. Sweep only and damp mop.

(c) Restrooms:

1. Reduce hot and cold water pressure to employee restrooms to amounts only sufficient for sanitary purposes.
2. Stores to close all restrooms except for the minimum number of men's and women's rooms according to public health regulations.

3. Water Shortage - Conservation signs to be installed.
- (d) Department and Retail Stores:
1. In addition to Plan B and Plan C-1, Sections (4)(a), (b) and (c), securely turn off all water valves located on exterior of building by closing stop valves located inside building or replacing exterior valve with pipe plug.
  2. Disconnect all customer drinking fountains.
- (e) Hotels, Motels, Inns and Boarding Houses:
1. Implement Plan B and Plan C-1, Sections (4)(a), (b) and (c).
  2. Change bed linen every other day except when there is a change of occupant.
  3. Shut off water supply to all public convenience ice cube making machines.
  4. Instruct maids to use buckets for bathroom cleaning.
  5. Post water conservation signs at each point of water usage in individual rooms as well as public areas.
  6. When possible, lower pressure in the water distribution system.
- (f) Health Care Facilities including Hospitals, Clinics, Sanitariums, Nursing Homes, Pharmacies, Laboratories, Ambulance Services and Rescue Squads:
1. Implement only those procedures of Plan B and Plan C-1, Sections (4)(a), (b) and (c) which do not inconvenience or endanger intended services.

(g) Dentists and Doctors:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b) and (c), as applicable.
2. Turn off all continuous water running devices.

(h) Universities and Colleges - Public, Private:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b) and (c), as applicable.
2. Laundry rooms are to be closed during the hours of 11:00am to 7:00pm.

(i) Private Clubs, Public Parks, Golf Courses, Country Clubs and other recreational facilities:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b) and (c), as applicable.

(j) Landscape and Lawn Watering:

1. Prohibit the use of hoses, sprinklers, or other means for sprinkling or watering of shrubbery, trees, lawns, grass, plants, vines, gardens, vegetables, flowers, or any other vegetation. The use of buckets of water for such vegetation is permitted.

c. Plan C-2: Operations (Implement Operations of Plan C-1 with the following modifications and additions):

- (1) As a goal, residents should limit consumption to less than 40 gallons per person per day (one bath, one flush per person per day).
- (2) The following restrictions apply to all commercial, industrial, and governmental operations. Water Supply Agency and City/County inspectors with proper identification will be used to enforce

restrictions. City/County police will be used to supplement and/or enforce restrictions as necessary (Stages I - IID of Annex F).

(a) Governmental, Industrial, Commercial, Retail and Office Buildings:

Do not cool building interiors until inside temperature reaches or exceeds 27<sup>0</sup>C (80<sup>0</sup>F); plus close all cooling system bleed-off valves. Where multi-units are used, cut off one air-conditioner unit. Food facilities that require cooling for food storage and preservation are excepted.

(b) Restaurants, Drive-In and Fast Food and miscellaneous Eating Facilities:

1. No water to be served to customers except on request.
2. Evaluate for implementing any additional conservation measures.
3. Close ice cream dipper fountains.
4. Discontinue use of ice cubes.

(c) Restrooms:

1. Restrict urinals and toilets to minimal water flow.

(d) Department and Retail Stores:

1. Implement Plan C-1, and Plan C-2, Section (3)(a), (b), and (c).
2. Securely turn off steam boiler used only for alterations. Use steam irons as alternative.
3. Beauty and Barber Shops to do single rinse shampoo only; when doing hair cuts, spray bottles to be used to wet hair instead of sink; disposable paper towels to be used, or linens and towels washed by commercial laundry located in

non-impacted area, when possible.

(g) Dentists and Doctors:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b), and (c).
2. Turn off all continuous water running devices.

(h) Universities and Colleges - Public, Private:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b), and (c), as applicable.
2. Laundry Rooms are to be closed during the hours of 11:00am and 7:00pm.

(i) Private Clubs, Public Parks, Golf Courses, Country Clubs and other recreational facilities:

1. Implement Plan B and Plan C-1, Sections (4)(a), (b), and (c).

(j) Landscape and Lawn Watering:

Prohibit the use of hoses, sprinklers, or other means for sprinkling or watering of shrubbery, trees, lawns, grass, plants, vines, gardens, vegetables, flowers, or any other vegetation. The use of buckets of water for such vegetation is permitted.

c. Plan C-2: Operations (Implement Operations of Plan C-1 with the following modifications and additions):

- (1) As a goal, residents should limit consumption to less than 40 gallons per person per day (one bath, one flush per person per day).
- (2) The following restrictions apply to all commercial, industrial, and governmental operations. Water Supply Agency and City/County inspectors with proper identification will be used to enforce

restrictions. City/County police will be used to supplement and/or enforce restrictions as necessary (Stages I - IID of Annex F).

(a) Governmental, Industrial, Commercial, Retail and Office Buildings:

Do not cool building interiors until inside temperature reaches or exceeds 27<sup>0</sup> C (80<sup>0</sup>F); plus close all cooling system bleed-off valves. Where multi-units are used, cut off one air conditioner unit. Food facilities that require cooling for food storage and preservation are excepted.

Manufactured products, computer rooms, laboratory and research equipment that are similarly heat-sensitive are excepted.

(b) Restaurants, Drive-In and Fast Food and miscellaneous Eating facilities:

1. No water to be served to customers except on request.
2. Evaluate for implementing any additional conservation measures.
3. Close ice cream dipper fountains.
4. Discontinue use of ice cubes.

(c) Restrooms:

1. Restrict urinals and toilets to minimal water flow.

(d) Department and Retail Stores

1. Implement Plan C-1, and Plan C-2, Section (3)(a), (b) and (c).
2. Securely turn off steam boiler used only for alterations. Use steam irons as alternative.



3. Beauty and Barber Shops to do single rinse shampoo only; when doing hair cuts, spray bottles to be used to wet hair instead of sink; disposable paper towels to be used, or linens and towels washed by commercial laundry located in non-impacted area, when possible.
  4. In summer, reduce interior heat loads by turning off as many lighting fixtures as possible.
- (e) Hotels, Motels, Inns and Boarding Houses:
1. Implement Plan C-1, and Plan C-2, Sections (3)(a), (b), (c) and (d).
  2. Change bed linens every third day except when there is a change of occupant.
  3. All linens and towels to be washed by commercial laundry located in non-impacted area, when possible.
  4. Discontinue use of ice cubes except for food preservation.
- (f) Commercial Laundries:
- Reduce water consumption by at least 30 percent.
- (g) Bottling Plants, restrict operation by:
1. Discontinue refilling returnable bottles.
  2. Reduce water consumption by at least 40 percent.
  3. Wherever possible, use trucked-in water for all washing and bottling needs.
- (h) Landscape and Lawn Watering:

The use of water for outside watering and sprinkling is to be discontinued.

(i) General:

Washing of sidewalks and exterior paved areas, vehicles, building windows and other non-essential items is prohibited.

d. Plan C-3: Operations (Implement Operations of Plan C-2 with the following modifications and additions):

- (1) As a goal, residents to limit consumption to less than 30 gallons per day (1 flush per person per day, one bath per person every other day).
- (2) Local Governments will request owners of all lakes, wells and other private water supplies to make available these supplies if required during the Emergency.
- (3) The following restrictions apply to all commercial, industrial, and governmental operations. Water Supply Agency and City/County Inspectors with proper identification will be used to enforce restrictions. City/County police will be used to supplement and/or enforce restrictions as necessary (Stages I - III of Annex F).
  - (a) All non-excluded Plan C-2 water-cooled air conditioning units to be turned off.
  - (b) All concrete batching plants are to use only trucked-in water from resources out of the impact area.
  - (c) All manufacturing plants using water as the base of product shall use only trucked-in water from resources approved by appropriate public health officials out of the impact area.
- (4) See “Water Outage Emergency Plan” (Section IV) and take action as appropriate.

#### IV. WATER OUTAGE EMERGENCY PLAN

## A. INTRODUCTION

1. The water outage emergency plan was prepared by the Metropolitan Washington Council of Governments' Disaster and Emergency Preparedness Committee in coordination with the Police Chiefs and Fire Chiefs Committees.
2. The water outage emergency plan addresses that extreme emergency situation in which there is an actual or imminent cessation of water supply. Because of the severity of such a condition, it is considered essential that the plan retain complete identification as an entity so that a reader, to gain full comprehension of it, will not be required to cross reference while reading it. Therefore, certain definitions, statements of purpose and procedures may be repetitive to other portions of the overall plan.

## B. PURPOSE

1. To prescribe the responsibilities and tasks of governmental, regional and special purpose agencies to conserve water, provide emergency water supplies for necessary human consumption and protect the public health, safety and welfare in a water outage emergency affecting all or a portion of the metropolitan Washington area. Specifically, the responsibilities and tasks apply to:
  - a. The establishment and operation of emergency water supply points to provide minimum essential water for human consumption to sustain the life and health of residents.
  - b. Measure for fire protection and suppression.
  - c. Health measures for the sanitary disposal of human waste.
2. To identify the water conservation, health and protective measures to be applied by residents, businesses and private organizations in the area affected by a water outage emergency.

## C. DEFINITIONS

1. Water Outage Emergency: A condition in which the supply of water from one or more water suppliers has ceased, or is in jeopardy of cessation or is polluted, and immediate action is required by governments and agencies concerned to provide minimum necessary potable water for human consumption, to inform the public and to protect the health, safety and welfare of the population in the area or areas

affected.

2. Water Shortage Emergency: A condition in which the normal supply of potable water from one or more water suppliers is or may be limited to the extent that special water consideration actions or water allocations from available sources are required to protect the health, safety and welfare of the population in the area affected.

#### D. GENERAL

1. This emergency plan addresses the actions required to respond to a Water Outage Emergency. It recognizes that, although separate planning and preparedness are devoted to Water Shortage Emergencies, water conservation measures identified in water shortage emergency planning are applicable first steps which must be instituted in a water outage emergency in order to conserve and make best use of water remaining in the water supply system and in order to obtain time to initiate other water outage emergency measures identified in this plan.
2. A water outage emergency is characterized by the imminent or actual cessation of water supply by such causes as failure of the raw water source, equipment or system failure, sabotage, pollution of the water supply, or electrical power outages affecting the system. The result is that the availability of water for human consumption, for fire suppression and for operation of the sanitary sewer system is halted, and emergency measures to furnish water for human consumption and fire fighting and to provide for disposal of human waste are essential.
3. A water shortage emergency is characterized by reduced supply vs. demand through such causes as reduced flow of the raw water source (e.g., Potomac River) in period of drought, increased demand by water users in hot, dry weather, partial equipment or system failure which reduces treated water production or delivery through the system, or a combination of these. The result is that demand approaches or exceeds the supply of treated water, and measures for equitably reducing the demand by voluntary or mandatory conservation by water users are necessary.

#### E. EMERGENCY PROCEDURES

1. Emergency Notification of Water Outage Condition:

Upon determination that a Water Outage Emergency is imminent or exists, whether by extension of a Water Shortage Emergency or by reason of an occurrence leading directly to a Water Outage Emergency, the following

emergency notifications will be accomplished by the agencies indicated (Appendix 1, Annex B: Emergency Notification List):

- a. The Water Suppliers whose systems are affected will immediately notify the following, stating the cause of the outage, the expected time to a “no-water” condition, estimated duration of the outage, if available, and measures underway to correct the outage.
  1. Other Water Suppliers/Distributors in the affected area.
  2. Local Governments in the area affected.
  3. U.S. General Services Administration.
  4. The news media by means of the AP and UPI wire services.
- b. Each Local Government affected will notify:
  1. The executive and other key officials appropriate to be informed.
  2. Local government agencies required for emergency operations and personnel required to active the local Emergency Operating Center (EOC).
  3. The appropriate State civil defense agency.
  4. The Washington Board of Trade and major local Chambers of Commerce to request such agencies to notify their member organizations and solicit cooperation in accomplishing emergency measures to be announced.
  5. The residents of the local jurisdiction by means of the Local Emergency Broadcast Procedure (first notification) to provide official emergency information and instructions necessary for public response to the emergency conditions and support of emergency measures to be instituted.
- c. The U.S. General Services Administration (GSA) will notify the U.S. Civil Service Commission (CSC) and all affected Federal agencies within GSA’s responsibilities. GSA will also request CSC to notify Federal agencies within its responsibilities.

2. Emergency Public Information

After Emergency Notification are accomplished, the public will be kept informed and will be advised of conservation measures, measures for public health, and safety measures for prevention and suppression of fires, as follows:

- a. The Water Supplier or Water Distributor, after coordination at the executive level with local governments concerned, will release information to the public by means of the news media, by means of the AP and UPI wire services and directly to news media representatives.
- b. The local government will release information for the public only through designated public information personnel acting in coordination with the public information representatives of the Water Supplier
- c. The local governments concerned will establish and identify to the public a telephone number or numbers to which individual residents may call for information as to the Emergency Water Outage and emergency measures placed in effect. The information released through such "Accurate Information - Rumor Control" elements established will be limited to information furnished by the local government public information office as coordinated with the public information office of the Water Supplier.
- d. The Water Supplier or Water Distributor will establish and announce to the public a telephone number or numbers to which Major Water Users and those water customers with special cases of believed hardship may call for clarification of conservation procedures and requests for exception believed justified. Local government "Accurate Information" centers will refer calls received on these matters to the Water Supplier special telephone numbers.
- e. All information released to the public will include precautionary statements urging extreme care to prevent fires and explanatory statements of hygienic measures to care for human waste when non-potable water is not available for flushing toilets.

3. Emergency Operations:

Emergency operations will be initiated at the direction of Executives of the local governments affected and the Executive of the Water Supplier.

- a. Based upon emergency powers provided by law, an Emergency Proclamation will be issued and publicized to give force and effect to required emergency measures.
- b. If not already ordered into effect, the most stringent water conservation measures contained in approved Water Shortage Emergency plans will be ordered enforced.
  1. The Water Supplier will notify major water users of the requirement and will maintain a record of those so notified.
  2. The local governments concerned will support the inspection and enforcement effort by furnishing qualified personnel to operate under the control of inspectors of the Water Supplier. This may require close coordination and joint agreement between local governments and their water suppliers/distributors.
  3. Local governments will furnish necessary police support to enforcement efforts when requested by the Water Supplier.
- c. The Water Supplier will notify other Water Suppliers and jurisdictions not affected directly by the water emergency of the need to institute water conservation measures when such would contribute to the general conservation of the area water supply and permit transfer of water from other suppliers into the system affected by the water outage.
- d. The Water Supplier, in coordination with the local governments, will arrange for transfer of water from other Water Suppliers to the system affected by means of existing interconnects or by expedient interconnects using available pumping units, such as fire pumpers. All interconnecting pipes will be adequately disinfected.
  1. Local governments will furnish such pumpers as a matter of priority when requested.
  2. Local government fire departments will arrange for needed replacement and augmentation pumper support on preparation for possible fire operations by requesting necessary units from adjacent jurisdictions under the provisions of existing mutual aid agreements.

- e. The Local Governments and the Water Supplier, in coordination, will establish Emergency Water Supply Points (EWSP) within the area of the water outage to provide minimum essential supplies of potable water to residents for human consumption at a rate of ½ gallon of water per person per day. This water would be provided by unaffected jurisdictions (within and outside the Washington area), which would coordinate their efforts with State and civil defense authorities. Tank trucks and, if necessary, fire department pumpers would be used to transport the water in most cases. All water from Emergency Water Supply Points will be adequately disinfected.
1. Priority for location of EWSP will be given to facilities evenly distributed through the area and under local government control, such as public schools, fire stations and police stations.
  2. As EWSP equipment becomes available, second priority will be given to other EWSP locations so as to gain improved distribution using such locations as church parking lots, shopping centers and apartment building parking lots as can be arranged with facility owners and supported by available equipment.
  3. Equipment and personnel to establish EWSP will be used in the following order:
    - (a) Local Government and Water Supplier resources.
    - (b) Resources from adjacent, non-affected jurisdictions and Water Suppliers.
    - (c) Commercial resources (e.g., water transport companies, milk products).
    - (d) State resources, including National Guard when authorized by the Governor.
    - (e) Federal resources, including military forces when authorized by appropriate authority.
  4. The Water Supplier will establish water purification points on available water sources (e.g., lakes, quarries) or will arrange with non-affected Water Suppliers for the establishment of resupply



points, for refilling water transport vehicles used to provide potable water to Emergency Water Supply Points. All equipment used will be sterilized.

5. Local governments will provide necessary police support for traffic and crowd control at EWSP and for guiding those water transport vehicles which are furnished by other jurisdictions to assigned EWSP locations and refill points.
  6. Each local government will publicize the location of Emergency Water Supply Points in accordance with the provisions of Section E.2., above.
- f. Local Governments affected will prepare for and conduct fire suppression operations utilizing the following:
1. Available “tank wagons”.
  2. Tank wagons obtained under mutual aid agreements with non-affected jurisdictions.
  3. When needed, water transport vehicles from Emergency Water Supply Points.
  4. Fire department water resupply point locations identified in advance and established by local fire departments at streams, ponds or other water sources.
  5. When needed, water resupply points established to refill transport vehicles from Emergency Water Supply Points.
- g. Local governments affected will prescribe hygienic measures for human waste disposal in recognition that water outage precludes flushing of toilets. They will use local health and environmental agencies to determine specific measures for the particular situation including the following:
1. Prescribing sources of water for collection (rainwater or streams and ponds not safe for human consumption) which can be used for periodic toilet flushing.
  2. Use of expedient toilets made with trash or garbage cans or

similar containers partially filled with ½ measuring cup of household laundry bleach per gallon of water sufficient to cover waste material.

3. Use of outside “slit” trenches with available lime to cover waste material.
  4. Location of commercial chemical toilets at public locations such as near Emergency Water Supply Points.
  5. Publicizing necessary measures as provided in Section E.2., above.
- h. Local Governments will request hospitals and nursing homes to employ emergency water supplies and emergency generating equipment, if required, maintained in accordance with federal regulations.
  - i. Local Governments will supply minimum necessary potable water to detention facilities.
  - j. Local Governments will request owners of private water systems and wells to restrict the use of water, so as to make such supplies of water available to meet human needs should the emergency dictate, to protect the water table and to make water available for fire suppression as needed.
  - k. Local Governments will request assistance of suitable organizations, such as the American Red Cross, Salvation Army and Meals-On-Wheels, to deliver minimum essential supplies of potable water to the aged and infirm unable otherwise to obtain such supplies.
  - l. Should the water outage emergency be of such severity and expected duration, local governments, in conjunction with the Water Suppliers, will consider recommending to the public that individuals and family members whose immediate presence in the area is not essential be relocated to available accommodations outside the emergency area.

#### F. TERMINATION OF A WATER OUTAGE EMERGENCY

1. The Water Supplier, whose system has been affected by a Water Outage Emergency, will anticipate and will determine when causes of the Water Outage

Emergency (cf. paragraph D.2., above) have been overcome, removed, repaired or ameliorated to the extent that the Water Outage Emergency can be terminated. The Water Supplier, in coordination with the Coordinator designated in the Water Supply Emergency Agreement, will determine whether water supply conditions existing at termination of the Water Outage Emergency necessitate and justify recommendation that a Stage of Water Supply shortage be instituted.

2. The Water Supplier concerned (paragraph F.1., above) will notify those agencies identified in paragraphs E.1.a(1) - (3), above, of:
  - a. Effective time and date of Termination of the Water Outage Emergency.
  - b. Recommend Water Shortage Emergency stage, if any, determined as indicated in paragraph F.1., above.
3. If the Water Outage Emergency is terminated with no succeeding Water Shortage stage recommended, notification to the public will be made by the Water Supplier and the local governments concerned in accordance with paragraphs E.2.a and b, above.
4. If the Water Outage Emergency is terminated, but with reversion to a particular water shortage stage (cf paragraph F.1., above), notifications will be initiated by the Coordinator designated in the Water Supply Emergency Agreement in accordance with that plan. Such notifications will include information that the water outage emergency has been terminated in addition to the specific water shortage stage to be implemented.

#### G. CONTROL AND COORDINATION

1. Control and coordination of operations will be accomplished to the maximum extent possible through Emergency Operating Centers established and activated by Local Governments, Water Suppliers, and State civil defense/emergency services agencies to include:
  - a. Issuance of emergency notifications.
  - b. Supporting the exchange of information and coordination among Executives.
  - c. Coordination of public information in:

1. Providing official information to the news media.
  2. Initial notification to the public through the Local Emergency Broadcast Procedure.
  3. Responding to individual resident requests for information.
  4. Furnishing information to the business community through the Board of Trade and Chambers of Commerce.
- d. Coordination of preparedness and conduct of fire operations.
  - e. Defining, announcing and supporting health and hygiene measures by the public.
  - f. Responding to requests for exceptions to announced emergency conservation and restrictive measures.
  - g. Responding to requests for special assistance from individuals or organizations.
  - h. Generating sources of water and obtaining support from non-affected jurisdictions, commercial sources, and State and Federal sources to meet the needs of emergency operations.
  - i. Issuance of notification of termination of water outage emergency and subsequent water shortage stages as may be determined necessary.
2. To facilitate coordination among all agencies, Emergency Operating Centers will establish and maintain emergency notification lists and listing of phone numbers and communication means:
    - a. Emergency notification/lists of key personnel and organizations will include principals and alternates with both office and home phone numbers for each.
    - b. Special phone numbers at EOCs not to be released to the public, for direct coordination among EOCs.
    - c. WAWAS communications circuits.

- d. Appendix 2, Annex B: Special Emergency Operating Center Phone Numbers.
- 3. Once activated for the emergency, Emergency Operating Centers should plan to operate on a 24-hour per day basis until the emergency is terminated.

#### H. RESOURCES

- 1. Local Governments and Water Suppliers will establish and maintain listings of equipment and supplies applicable to the conduct and support of Water Outage Emergency Operations:
  - a. Local Government and Water Supplier equipment.
  - b. Commercially-owned equipment.
  - c. Identified equipment available from State and Federal sources.
- 2. Attention will be given by Local Governments and Water Suppliers to the acquisition of needed equipment to support Water Outage Emergency operations through:
  - a. Federal Surplus and Excess Property Program available through civil defense channels.
- 3. Prepared listings of available equipment will be coordinated and exchanged among Emergency Operating Centers.

#### I. PUBLIC EDUCATION

- 1. Although not specifically a part of this plan, but essential to its successful implementation in time of Water Outage Emergency, is the education of the public to prepare for and understand the emergency measures required.
- 2. Upon approval of this plan, Local Governments and Water Suppliers will initiate and continue a public education campaign to convince the public in their area of responsibility that:
  - a. Water Supply Emergencies are possible.
  - b. It is to the best interest of individuals, families and private organizations to prepare for such emergencies and to obtain in advance and maintain

emergency supplies to assist themselves, including an emergency water supply for human consumption of ½ gallon per individual per day for fourteen (14) days.

- c. Utmost care during water emergencies to prevent fires is essential.
  - d. Plans and supplies for individual, family and organizational emergency hygienic measures are needed to protect health and well-being.
3. Local Governments and Water Suppliers will coordinate public education campaigns.