ANNEX F

UTILITIES DISRUPTION AND RESTORATION

I. PURPOSE

The purpose of this Annex is to describe the organization, operational concepts and responsibilities to respond to and recover from a disruption of utility services.

II. SITUATION AND ASSUMPTIONS

A. Situation

1. During or after an emergency there may be a disruption of service in electrical power, telephone service, water and wastewater services as well as natural gas service.

2. The loss of utility services, particularly extended outages, could adversely affect the capability of local personnel to respond to and recover from the emergency that caused the disruption of utility service and create additional health and safety risks for the public.

3. Public utilities are defined as those companies and organizations that are authorized to provide utility services, including electricity, water, sewer service, natural gas, and telecommunications, to the public in a specified geographic area. Utilities may be owned and/or operated by a municipality, a municipal utility district, a regional utility authority, investors, or a by a private non-profit organization such as member of a cooperative (co-op).

4. Virtually all utilities are required by State regulators to have emergency operations plans for restoring disrupted services. Many utilities maintain emergency operations centers and those that do not, normally have procedures to establish temporary facilities when they need them.

5. Extended electrical outages can direct impact other utility systems, particularly water and wastewater systems. In areas where telephone service is proved by above ground lines that share poles with electrical distribution lines, telecommunications providers may not be able to make repairs to the telephone system until electric utilities restore power lines to a safe condition.

6. Municipal utilities and private non-profit utilities, such as electrical cooperatives, may be eligible for reimbursement of a portion of the costs for repair and restoration of damages and infrastructure in the event the emergency, which caused the damage, is approved for a Presidential disaster declaration that includes Public Assistance (PA).

7. Utility disruptions may delay return of individuals to their residences from evacuation shelters. An effect of which, the shelter (usually a public school), will not be able to re-open to students until the evacuees have departed. This will slow the return to normalcy in the post-disaster environment.

B. Assumptions

1. In the event of damage to or disruption of utility systems, utility operators will put forward their best effort to restore services as quickly as possible.

2. A major disaster or a disaster affecting a wide area may require extensive repairs and reconstruction of portions of utility systems that may take a considerable time to complete.

3. Damage to electrical distribution systems and sewer and water systems may create secondary hazards such as increased risk of fire and/or public health concerns.

4. Each utility will direct and control its own resources and plan and carry out its own response operations, coordinating as necessary with local government and other utilities.

5. Individual utility operators, particularly small companies, may not have sufficient resources to restore utility systems affected by a major disaster or one having widespread effects. Utilities typically obtain supplementary repair and restoration assistance from other utilities pursuant to mutual aid agreements, and by using contractors hired by the utility.

6. Equipment and personnel from other City departments may be employed to assist the municipal utility in repairing its systems and restoring service to the public.

III. METHOD OF OPERATIONS

A. General

The basic operational concept is that the various divisions within the City of North Port Utilities Department and private utility companies will continue their normal day to day responsibilities regardless of the emergency or disaster situation. Priority actions will be taken to restore interrupted services and provide for movement of vehicular traffic. Some specific actions to be accomplished are:

1. Make emergency repairs and restore vital utility services

2. Provide emergency power

3. Replace damaged or destroyed utilities equipment

4. Insure that adequate supplies of potable water are available and identify sources of additional supplies, if needed.

B. Organization

1. City-owned water and wastewater operations and facilities will be managed by the City of North Port Utilities Department.

2. Utilities not owned and operated by the City will be managed by those organizations based on their respective emergency operations plans.

C. Assignment of Responsibilities

1. See City's Comprehensive Emergency Management Base Plan.

a. The Director of the Utilities Department will:

In an activation of the City EOC, the Utilities Group Director will be responsible for the overall coordination of public and private utilities during a disaster. If the disaster affects only the Utilities Department, the City Manager may appoint the Director as Incident Commander.

b. The Public Information Officer will:

Coordinate with the EOC and utilities representatives to provide timely, accurate, and consistent information to the public regarding utility outages, including communicating:

i. Protective measures, such as "boil water" orders.

ii. Conservation guidance.

iii. Instructions, including where to obtain water, ice, and other essentials.

c. The EOC will monitor utility response and recovery operations regarding major utility interruptions that may affect public health and safety or threaten public or private property.

2. Non-City owned and operated utilities will be responsible for the maintenance, repair and restoration of their respective utilities.

   a. Each utility organization, both City and privately-owned and -operated, will direct its response and recovery activities.

   b. Utility crews responding from other geographical areas pursuant to a utility mutual aid agreement and contractors hired by utilities to make repairs will normally receive their assignments from the utility that summoned or hired them.

D. Restoration Priorities

Priorities for utility restoration will depend on the nature, location, and extent of the incident. Vulnerable populations and facilities essential for public safety and health will be considered first. These facilities may include medical facilities, nursing homes, water and wastewater treatment facilities, schools, grocery stores, government buildings, telecommunications and power facilities. Other facilities may be determined as dependent by the nature of the disaster and location of the event. The Base Plan of the Comprehensive Emergency Management Plan (CEMP) identifies locations designated as "Critical Infrastructure," which would receive priority restoration.

IV. RESPONSE OPERATIONS

A. City Response

1. It is essential to obtain an initial estimate of the likely duration of a major utility outage from the utility as soon as possible after it occurs. Once the estimate is obtained, a determination of the anticipated impact and actions required to protect public health and safety, and public and private property can be made.

2. Extended utility outages may require the City to act to protect public health and safety and public and private property. Such actions may include:

   a. Water or Wastewater Outage

      i. Curtail general water service to residents to retain water for firefighting and for controlled distribution to residents in containers.

ii. Arrange for supplies of emergency potable drinking water for the public and for bulk water for those critical facilities that require it to continue operations.

- Open Neighborhood Points of Distribution (NPOD) in areas where access to open retail outlets is limited.

iii. If wastewater service is disrupted, arrange for portable toilets and hand washing facilities to meet sanitary needs.

b. Electrical or Natural Gas Outage

i. Operate emergency generators to power water pumping stations, water treatment facilities, wastewater lift stations, wastewater treatment facilities, fueling facilities, and other critical sites.

ii. During periods of extreme cold weather, coordinate the establishment of shelters for residents who lack heat in their homes.

iii. During periods of extreme heat, coordinate the establishment of "cooling sites" for residents who do not have air conditioning in their homes.

iv. Request appropriate volunteer groups to set up mass feeding facilities, as necessary, for those who do not have electrical or gas service and cannot prepare meals.

v. Arrange for fuel deliveries to keep emergency generators running at critical City facilities.

c. Telecommunications Outage

i. Request telecommunications providers to implement priority service restoration plans to include establishment of cellular on wheels units (COW).

ii. Activate amateur radio support, as needed.

iii. Request external assistance (e.g., telecommunication providers, Sarasota County, State Division of Emergency

Management, etc.) in obtaining additional radios and repeaters or satellite telephones.

d. General

i. Isolate damaged portions of utility systems so as to restore service quickly to those areas where systems are substantially undamaged.

ii. In cooperation with utilities, institute conservation measures. See Appendix 4 to this Annex.

iii. Disseminate public information requesting conservation of utilities and water advisories (e.g., health issues such as a "boil water" advisory for emergency water purification.)

iv. Coordinate with medical facilities that must relocate patients, residential schools and similar institutions that cannot maintain the required level of service for their clients.

v. Assign law enforcement personnel at key intersections if traffic control devices are inoperative.

vi. Consider increased security patrols and staging fire equipment in areas without electrical or water service.

vii. Provide inspection services prior to restoration of service at building.

B. Facilitating Utility Response

1. The City may facilitate utility response by:

a. Coordinating with utility companies on utility outage areas that have been reported to the City.

b. Requesting citizens to initiate conservation measures. See Appendix 4.

c. Coordinating with the utility on priorities for clearing debris from roads which also provides access to damaged utility equipment.

d. Providing access and traffic control in utility repair areas where appropriate.

2. Large-scale Emergency Situations/Disasters

In large-scale emergency situations which produce catastrophic damage in a limited area (such as a tornado) or severe damage over a wide area (such as a hurricane), utilities are typically faced with a massive repair and rebuilding effort that cannot be completed in a reasonable time without external support. In such circumstances, utilities typically bring in equipment and crews from other utilities pursuant to mutual aid agreements and from specialized contractors.

C. Protecting Resources and Preserving Capabilities

In the event of a slowly developing emergency, it is possible that utilities may be able to mitigate some of the effects of a major emergency or disaster by protecting key facilities and equipment.

1. In the face of a threat of flooding, facilities may be protected by constructing dikes, sand-bagging, or using pumps to prevent water from entering the facility. To preserve pumps, electrical control panels, and other vital equipment, it may also be prudent in some cases to remove the equipment from facilities to prevent damage due to rising water.

2. Loss of power could severely affect critical functions such as communications, water pumping, purification and distribution, wastewater disposal, traffic control and operation of critical medical equipment. Critical facilities that require back-up electrical power should have appropriate generation equipment on site. If this is not feasible, emergency generator requirements should be pre-determined to facilitate timely arrangements for such equipment during emergency situations. Appendix 3 provides forms to record information on existing backup generators and to identify requirements for additional emergency generators.

D. Utility Support for Emergency Response Operations

The assistance of utility providers may be needed to support other emergency response and recovery operations. Such assistance may include:

1. Rendering downed or damaged electric lines safe to facilitate debris removal from roadways.

2. Cutting off utilities to facilitate the emergency response to fires, explosions, building collapses, and other emergency situations.

3. Facilitating search and rescue operations by cutting off electrical power, gas, and water to areas to be searched.

4. Establishing temporary utility hookups to facilitate response activities.

E. Utility Support for Disaster Recovery Operations

Utilities play a primary role in the recovery process relating to:

1. Rendering electrical lines and gas distribution lines safe before local officials authorize re-entry of property owners into affected areas to salvage belongings and/or repair damage to their homes and businesses.

2. Participating in inspections of affected structures to identify hazards created by damaged utilities and eliminating those hazards.

3. Restoring utility systems to their pre-disaster condition.

F. Public Information

1. It is essential to provide the public information on utility status, the anticipated time it will take to restore service, recommendations on dealing with the consequences of a utility outage, conservation measures, and information on sources of essential life support items. Public information relating to utility outages should be developed by the utility/utilities affected to ensure that messages are accurate and consistent.

2. In some emergency situations, many of the normal means of disseminating public information may be unavailable and alternative methods of getting information out to the public will be necessary.

3. Utilities are complex systems and service may be restored on a patchwork basis as damaged components are repaired or replaced. Some neighborhoods may have utility service restored while adjacent neighborhoods may not.

G. Phases of Management

1. Mitigation

a. Review proposed utility construction or renovation activities to determine if existing hazards will be increased by such activities.

b. Utilities should assess the vulnerability of their systems to known hazards and act to lessen such vulnerability.

c. Maintain portable generators and pumps to meet unexpected needs and/or identify sources for such equipment that can be accessed during an emergency.

2. Preparedness

a. Work with utilities to identify damage assessment information they can normally provide in an emergency.

b. Ensure the EOC has emergency contact numbers for the utilities providers.

c. Request that utilities brief the EOC staff on their emergency service restoration plans periodically.

d. Encourage the utilities to participate in drills and exercises conducted by the City.

e. Utilities should ensure emergency plans are up-to-date and equipment is in good repair and secure.

3. Response

a. Coordinate with utility companies to obtain regular reports on their operational status, number of customers affected by service outages and areas affected. Representatives from the City Utilities Department, Verizon, and Florida Power and Light may be present in the EOC.

b. Provide expedient substitutes for inoperable utilities at critical facilities to the extent possible or relocate those facilities if necessary. Update utility restoration priorities for critical facilities as necessary.

c. If an extended utility outage is anticipated, take those actions necessary to protect public health and safety, private and public property and implement utility conservation measures.

d. Facilitate utility emergency response to the extent possible.

e. Include utility status information in the Situation Reports produced during major emergencies and disasters.

4. Recovery

a. Request regular reports concerning the operational status, the number of customers affected by service outages and areas affected for utilities with system damage.

b. Obtain estimates of damages for inclusion in the City's requests for disaster assistance.

c. Update utility restoration priorities for critical facilities as appropriate.

d. Request utilities that participate in major emergency operations to participate in any post-incident review of such operations.

V. ADMINISTRATION AND TRAINING

A. Administration

1. A record of costs and expenses incurred in direct support of an emergency or disaster situation will be maintained to support subsequent reimbursement claims to state and federal government. Examples of fiscal expenditures which should be recorded, fully detailed, and maintained are:

a. Personnel costs which exceed "normal" costs, i.e., overtime.

b. Equipment rental or lease.

2. The persons responsible for the implementation of this Annex will annually review the Annex to insure currency.

B. Training

The individuals responsible for the Utilities function will participate in planning and training exercises conducted for the Emergency Operations Center Staff.

APPENDIX 1 TO ANNEX F

LOCAL UTILITY INFORMATION

1. Electric

   Florida Power and Electric, its mutual aid electric companies and private contractors, would be responsible for repair, restoration and maintenance of its infrastructure should an emergency or disaster damage it.

2. Telecommunications

   Frontier, its mutual aid telephone companies and private contractors would be responsible for repair, restoration and maintenance of its infrastructure should an emergency or disaster damage it.

   Verizon is the City's providers of cellular service and would be responsible for repair, restoration and maintenance of its infrastructure.

3. Natural Gas

   Peoples Gas System, its mutual aid natural gas companies and private contractors would be responsible for repair, restoration and maintenance of its infrastructure should an emergency or disaster damage it.

4. Propane

   AmeriGas, its mutual aid propane gas companies and private contractors would be responsible for repair, restoration and maintenance of its infrastructure should an emergency or disaster damage it.

5. Water

   Owned by the City of North Port and operated by the Utilities Department, Water Treatment Plant.

6. Wastewater

   Owned by the City of North Port and operated by the Utilities Department, Wastewater Treatment Plant.

7. Cable Television

Comcast and Frontier, their mutual aid natural cable television companies and private contractors would be responsible for repair, restoration and maintenance of their infrastructure should an emergency or disaster damage it.

APPENDIX 2 TO ANNEX F

UTILITY RESTORATION PRIORITIES FOR CRITICAL FACILITIES

Florida Power and Light maintains a listing of utility restoration priorities for critical facilities, emergency notification procedures, emergency telephone numbers and designated emergency points of contact.

This list is updated on an annual basis, prior to the beginning of hurricane season.

APPENDIX 3 TO ANNEX F

EMERGENCY GENERATOR FORMS

1. The emergency generator forms which follow are provided to facilitate pre-planning for emergency generator requirements, either to obtain a generator which does not have one or replace an existing generator which has failed.

    a. The Emergency Generator Information – Existing Installation form should be used to record information on existing emergency generators in case they must be replaced.

    b. The Emergency Generator Information – Additional Equipment form should be used to identify requirements for additional emergency generators for critical facilities that do not currently have such generators.

2. Forms should be completed by the owner or operator of the facility that has or may need a generator and provided to the local EMC. A separate form should be completed for each existing generator or additional generator that is required. The EMC will maintain completed forms for use during emergencies. It is suggested that individuals completing these forms retain a copy for their own records.

3. In completing these forms, keep the following in mind:

    a. If in doubt about what type of capability is needed, consult a qualified electrician.

    b. Generators are often quite heavy and should be placed on a firm, level site, and preferably a paved area.

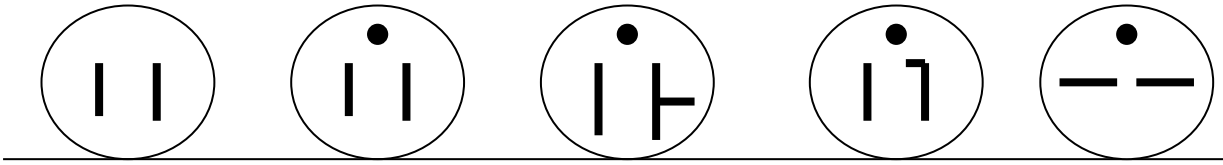
    c. A forklift is normally used to place a skid-mounted generator. The forklift operator must have adequate room to maneuver.

    d. In considering emergency generator siting, remember that generators are often noisy and produce exhaust fumes that may be sucked into nearby ventilation intakes. Vehicle access will be needed to refuel.

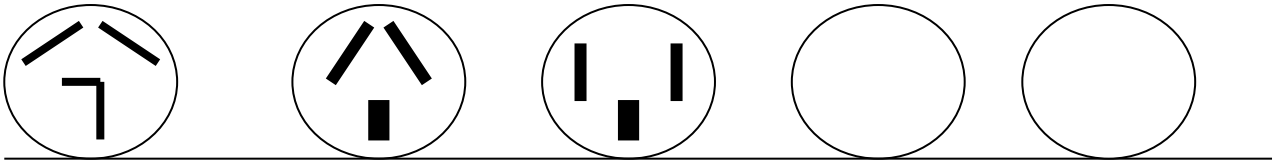
APPENDIX 3 TO ANNEX F

EMERGENCY GENERATOR INFORMATION
(Existing Installation)

1	Facility Name:
2	Facility Address:
3	Facility Type: ☐ EOC ☐ Communications Ctr ☐ Medical Facility ☐ Fuel Facility ☐ Law Enforcement ☐ Fire/Rescue Facility ☐ EMS Facility ☐ Water Pumping /Treatment ☐ Wastewater Pumping/Treatment ☐ Other (specify)
4	Facility Point of Contact: Phone:
5	If more than one generator exists, provide generator number or location within facility:
6	Electrical Requirements: Kilowatts: Volts: Amperes: Phase: ☐ Single ☐ 3-Phase Wye ☐ 3-Phase Delta ☐ Other:
7	Fuel: ☐ Gas ☐ Diesel ☐ Propane ☐ Other:
8	Fuel Tank Size: Gallons: Pounds:
9	Fuel Tank Type: ☐ Attached to generator ☐ Separate tank
10	Generator Weight: ☐ Pounds: ☐ Tons:
11	Starting: ☐ Automatic ☐ Manual/Recoil ☐ Other:
12	Generator Support: ☐ Pad/Permanent Installation ☐ Skid ☐ Trailer
13	Generator in Weather Housing: ☐ Yes ☐ No
14	Electrician On-site or Available: ☐ Yes ☐ No
15	Is Generator Hard Wired to Electrical System? ☐ Yes ☐ No
16	Generator Receptacles Required (indicate numbers and types; see illustrations below):
17	Other Pertinent Information:



15A-125V NEMA 1-15R | 15A-125V NEMA 5-15R | 20A-125V NEMA 5-20R | 30A-125V NEMA 5-30R | 30A-250V NEMA 6-30R



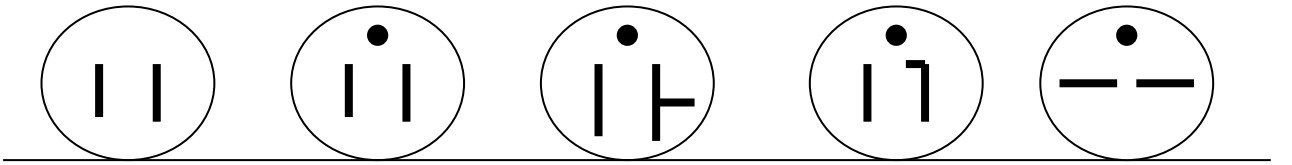
30A-125/250V NEMA 5-30R | 50A-125/250V NEMA 10-50R | 50A-250V NEMA 6-50R

If illustrations don't match what you have, draw your receptacles

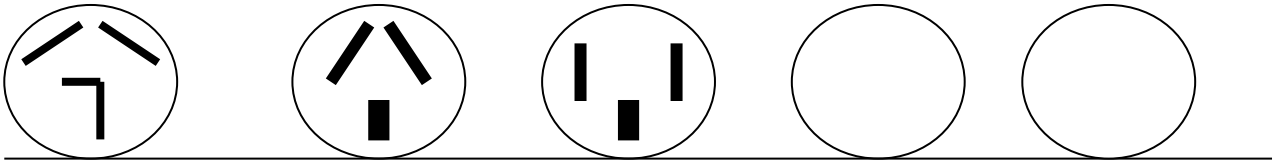
APPENDIX 3 TO ANNEX F

EMERGENCY GENERATOR INFORMATION
(Additional Equipment)

1	Facility Name:
2	Facility Address:
3	Facility Type: ☐ EOC ☐ Communications Ctr. ☐ Medical Facility ☐ Fuel Facility ☐ Law Enforcement ☐ Fire/Rescue Facility ☐ EMS Facility ☐ Water Pumping /Treatment ☐ Wastewater Pumping/Treatment ☐ Other (specify)
4	Facility Point of Contact: Phone:
5	Electrical Requirements: Kilowatts: _____ Volts: _____ Amperes: _____ . Phase: ☐ Single ☐ 3-Phase Wye ☐ 3-Phase Delta ☐ Other:
6	Fuel Available: ☐ Gas ☐ Diesel ☐ Propane ☐ Other:
7	Site Access: Site accessible for emplacing trailer-mounted unit? ☐ Yes ☐ No Site accessible for unloading/positioning skid-mounted unit? ☐ Yes ☐ No
14	Electrician On-site or Available: ☐ Yes ☐ No
16	Generator Receptacles Needed (indicate numbers and types; see illustrations below):



15A-125V NEMA 1-15R | 15A-125V NEMA 5-15R | 20A-125V NEMA 5-20R | 30A-125V NEMA 5-30R | 30A-250V NEMA 6-30R



50A-125/250V NEMA 10-50R | 50A-250V NEMA 6-50R

If illustrations don't match what you have, draw your receptacles

APPENDIX 3 TO ANNEX F

EMERGENCY GENERATOR INFORMATION
(Facility Assessment Worksheet)

Facility Name: _____ Remarks: _____
Location: _____
City: _____ State: _____
County/Municipality: _____
Building Use: _____ Alt POC: _____
AGENCY CONTACT INFORMATION:
Power(kW) Voltage Point of Contact: _____
Agency: _____
Pre-Assessment Phone: _____
(User) site data Amperage Phase (1/3) FAX: _____
E-mail: _____

ASSESSMENT DETAILS

Main Breaker # of Service
Current: (Amps)____ Drops_____
Service Drop type: Transformer Mount:
Site Voltage_____ Feeder Cable Size: _____ Overhead Pad
Underground Pole

Backup/Existing Generator Information (if Applicable):

Latitude (North) Longitude (West):
Power(kW): _____ Voltage (V)_____
Degrees: _____ Degrees: _____
Internal Fuel
Capacity: _____ Hours: _____ Minutes: _____ Minutes: _____
Fuel Type: _____ Phase: _____ Seconds: _____ Seconds: _____

Needed Generator Information: _____ N
Power (kW):_____ _____ W

Voltage:_____ Generator Connection Point:

Phase(s):_____ _____

Configuration:_____

Assessment Remarks: *Below, provide the materials required to mate the facility with the generator.*

BOM	Category	Description	QTY Required	Unit

APPENDIX 4 TO ANNEX F

UTILITY CONSERVATION MEASURES

The utility conservation measures outlined in this appendix are suggested measures. The specific measures to be implemented should be agreed upon by the City and the utilities concerned.

I. Conservation Measures for Natural Gas

A. Step 1. Discontinue:

1. Use of gas-fueled air conditioning systems except where necessary to maintain the operation of critical equipment.

2. All residential uses of natural gas, except refrigeration, cooking, heating, and heating water.

3. Use of gas-fueled clothes dryers.

B. Step 2. Reduce:

1. Thermostat settings for gas-heated buildings to 65 degrees during the day and 50 degrees at night.

2. Use of hot water from gas-fueled water heaters.

II. Conservation Measures for Electric Power

A. Step 1. Discontinue:

1. All advertising, decorative, or display lighting.

2. Use of electric air conditioning systems except where necessary to maintain the operation of critical equipment.

3. Use of electric ovens and electric clothes dryers.

4. Use of all residential electric appliances, except those needed to store or cook food and televisions and radios.

B. Step 2. Reduce:

1. Reduce thermostat setting for electrically heated buildings to a maximum of 65 degrees during the day and 50 degrees at night.

2. Minimize use of hot water in buildings that use electric water heaters.

3. Reduce both public and private outdoor lighting.

4. Reduce lighting by 50 percent in homes, commercial establishments, and public buildings.

C. Step 3. Cut off electricity to:

1. Non-essential public facilities.

2. Recreational facilities and places of amusement such as theaters.

D. Step 4. Cut off electricity to:

1. Retail stores, offices, businesses, and warehouses, except those that distribute food, fuel, water, ice, pharmaceuticals, and medical supplies.

2. Industrial facilities that manufacture, process, or store goods other than food, ice, fuel, pharmaceuticals, or medical supplies or are determined to be essential to the response and recovery process.

3. Office buildings except those that house agencies or organizations providing essential services.

III. Water Conservation Measures

A. Step 1.

1. Restrict or prohibit outdoor watering and washing of cars.

2. Close car washes.

B. Step 2

1. Restrict or curtail water service to large industrial users, except those that provide essential goods and services.

2. Restrict or prohibit use of public water supplies for irrigation and filling of swimming pools.

3. Place limits on residential water use.

C. Step 3

1. Restrict or cut off water service to industrial facilities not previously addressed, except those that provide essential goods and services.

2. Restrict or cut off water service to offices and commercial establishments, except those that provide essential goods and services.

D. Step 4

1. Restrict or curtail residential water use.