



GUIDELINES FOR THE DEVELOPMENT OF A LOCAL WATER RATIONING PLAN

INTRODUCTION

The Local Water Rationing Plan which is provided is a model or sample plan prepared by the Commonwealth of Pennsylvania, Department of Environmental Protection. It is a basic document for public water supply agencies and municipalities to use in preparing a system/municipality specific Local Water Rationing Plan needed to deal with local water shortages caused by drought conditions. It is provided as a form which can be completed by providing needed information in the blank spaces where indicated. This model has been prepared recognizing the following factors:

- (1) The Emergency Management Services Code (35 Pa. C.S. §7101 et seq.) does not allow local governments to take actions, such as water rationing, to deal with natural resource shortages on their own. The Code provides for the Governor to declare such an emergency.
- (2) Water rationing is a severe action dictated at the local level due to seriously depleted water supplies that threaten public health and safety and the general welfare of the impacted community.
- (3) A public water supply agency or municipality, because of local conditions, may desire to deviate from certain provisions of the model plan and should have the capability and authority to do so.
- (4) A Local Water Rationing Plan should to the maximum extent possible be a stand-alone document, that for convenience of water users and other persons impacted by a plan, should not require cross-referencing or research of Commonwealth laws or regulations.
- (5) A political subdivision may enforce the provisions of its local water rationing plan by adopting an ordinance in accordance with the procedures specified in 4 Pa. Code Section 120.11.

MODIFICATION BY LOCAL ORGANIZATION

The Local Water Rationing Plan which follows can be modified by a public water supply agency or municipality without diverting from or conflicting with Commonwealth direction and the provisions of 4 Pa. Code Chapter 120 in the following areas:

- (1) The establishment of an initial water reduction goal. An amount of 25 percent is suggested because of the severity of conditions required to implement rationing.
- (2) Modifications to listed non-essential use restrictions, provided that such modifications are no less stringent than municipal, county, regional, river

basin or Commonwealth-wide restrictions that may be in effect.

- (3) Daily per capita water allotments may be changed based upon a system analysis to be consistent with the targeted reduction percentage. Suggested daily allotments are 40 gallons per capita and for multi person households/customers. 55 gallons for a residence with one occupant.
- (4) The base period used to establish a reduction percentage may be a billing period for a specific month, quarter or the most recent year.
- (5) Excess water use charges may be determined that are greater than the amount currently charged. The maximum excess water use charge permitted will be as follows:
 - (a) First 2,000 gallons or portion thereof-5 times the actual rate charged for water.
 - (b) Each 1,000 gallons or portion thereof thereafter-10 times the actual rate charged for water.

The multiplier for the excess usage charge can be in the range of 1 to the maximum. Multipliers of 1 or near 1 are discouraged since the water supplier should be attempting to reduce excess usage throughout the water supply system to the rationed quantity.

SUGGESTED CONSERVATION MEASURES

Suggested water conservation measures for customers should be provided by the water purveyor or municipality by such methods as news releases, bulk mailings, billing inserts, etc. Suggested measures should include but not be limited to the following:

(1) Residential Water Customers

The purveyor will provide residential water customers with suggested means for reducing water consumption in order to achieve the established allotment. These suggestions may include:

- (a) Locate and repair all leaks in faucets, toilets and water-using appliances.
- (b) Adjust all water-using appliances to use the minimum amount of water in order to achieve the appliance's purpose.
- (c) Use automatic washing machines and dishwashers only with full loads, and use water-saving settings where present. Turn off faucet while washing dishes by hand.
- (d) Take shorter showers and shallower baths.

- (e) Turn off shower while soaping; turn off faucet while brushing teeth, shaving, etc.
- (f) Install flow restrictors in showerheads and faucets.
- (g) Reduce the number of toilet flushes per day. Each flush uses about 5 gallons. Reduce water used per flush by installing toilet tank displacement inserts.
- (h) Use sink and tub stoppers to avoid wasting water.
- (i) Keep bottle of chilled drinking water in refrigerator.
- (j) Read the meter to determine the household's daily water use.

(2) Non-residential Water Customers

The water purveyor will provide each non-residential customer with suggested means to reduce usage levels. These suggestions may include:

- (a) Identify and repair all leaky fixtures and water-using equipment. Special attention is to be given to equipment connected directly to the water line, such as processing machines, steam-using machines, washing machines, water-cooled air conditioners and furnaces.
- (b) Assure that the valves and solenoids, which control water flows, are shut off completely when the water-using cycle is not engaged.
- (c) Adjust water-using equipment to use the minimum amount of water required to achieve its stated purpose.
- (d) Shorten rinse cycles for laundry machines as much as possible; lower water levels should be implemented wherever possible.
- (e) Temperature settings of hot water for showers should be set down at least 10 degrees to discourage lengthy shower taking.
- (f) Where plumbing fixtures can accommodate them, flow-restricting or other water-saving devices should be installed.
- (g) Review usage patterns to see where other savings can be made.
- (h) For processing and cooling and other uses where possible, either reuse water or use from sources that would not adversely affect public water supplies.
- (i) Advise employees, students, patients, customers and other users, not to flush toilets after every use. Install toilet tank displacement inserts; place flow restrictors in

shower heads and faucets; close down automatic flushes overnight.

- (j) Adjust flushometers and automatic flushing valves to use as little water as possible or to cycle at greater intervals.
- (k) Encourage water-consciousness by placing water-saving posters and literature where employees, students, patients and customers, etc. will have access to them.
- (l) Customers should read water meters on a frequent basis to determine consumption patterns.
- (m) Reduce laundry usage or services by changing bed linen, etc., only where necessary to preserve the health of patients or residents.
- (n) Use disposable food service items.

(3) Hospitals and Health Care Facilities

The water purveyor will provide each hospital and health care facility with suggested means to reduce usage levels. These suggestions may include:

- (a) Reduce laundry usage or services by changing bed linen, etc., only where necessary to preserve the health of patients or residents.
- (b) Use disposable food service items.
- (c) Eliminate, postpone or reduce, as may be appropriate, elective surgical procedures during the period of the emergency.

SUBMITTING A LOCAL WATER RATIONING PLAN

The following must be completed and submitted when requesting approval of a Local Water Rationing Plan by the Commonwealth Drought Coordinator:

1. Letter requesting approval of the Plan, which explains the need for rationing.
2. Completed Model Local Water Rationing Plan Form or Completed Local Water Rationing Plan.
3. Completed Local Water Rationing Plan Checklist.

All three documents are available as fill-in forms in hardcopy or at the following website link:

http://www.dep.state.pa.us/dep/subject/hotopics/drought/drought_regs.htm