DROUGHT CONTINGENCY PLAN

REVISED – 2019

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INTRODUCTION

Drought response and contingency plans shall contain, at a minimum, the following three graduated stages of responses to the onset of drought conditions:

- a. <u>Drought Watch</u> stage initiatives are generally responses that are intended to increase awareness in the public and private sector to climatic conditions that are likely to precede the occurrence of a significant drought event. Public outreach activities shall be identified to inform the population served by a community water system of the potential for drought conditions to intensify and potential water conservation activities that may be utilized.
- b. <u>Drought Warning</u> stage are implemented when the onset of a significant drought event is imminent. Voluntary water conservation activities shall be identified with the goal of reducing water use by 5-10%.
- c. <u>Drought Emergency</u> stage responses are required during the height of a significant drought event. Mandatory water conservation activities shall be identified with the goal of reducing water use by 10-15%.

<u>ADDENDUM A</u> – To this document is obtained from Title 150 of the Legislative Rules for the WV Government of Water Utilities. Section 4.14 <u>Local Water</u> <u>Rationing Plans</u> is referenced as a guide and requirements as applicable to drought conditions and responses.

DROUGHT STAGES

There are three drought stages that are governed by precipitation levels, groundwater levels and system operations. These drought stages include drought watch, drought warning, and drought emergency. If the existing conditions meet the criteria for a drought stage to be declared, the Board of Directors in concert with District personnel will consult and will consider taking the appropriate actions on behalf of The District.

DROUGHT WATCH

The drought watch stage is intended to increase public awareness of climatic conditions that are likely to precede the occurrence of a significant drought event. When a drought watch is warranted, the District will consider the declaration of such. The District will call upon the District's water customers to employ prudent restraint in water usage, and to conserve water voluntarily. A list of suggested voluntary conservation efforts is included below and in Addendum A.

It is unlikely that significant water use reductions will occur at this stage although it is possible that the increased public awareness of water conservation activities may reduce water use up to 5%.

DROUGHT WARNING

When a drought warning is warranted in accordance with this Plan, the District will request the public to curtail non-essential usages of water. See below for a list of nonessential uses that would be requested to discontinue in a Drought Warning.

Water conservation activities at this stage would be voluntary. Voluntary water conservation activities generally result in reductions in water use of 5-10%.

Additionally, in this stage, all water users would be encouraged to spread out water use throughout the day and across days of the week.

DROUGHT EMERGENCY

The District shall consider declaration of a drought emergency in the event conditions suggest circumstances will continue to deteriorate and extreme conservation is appropriate.

When a drought emergency is warranted, in accordance with the Drought Response and Contingency Plan, water use shall be restricted to purposes which are absolutely essential to life, health, and safety.

All nonessential uses of water should be eliminated.

Mandatory water conservation activities usually result in water use reductions of 10-15%.

<u>Berkeley County Public Service Water District uses the following criteria when evaluating drought conditions:</u>

- 1. USGS Drought Monitoring reports and historical rainfall totals
- 2. The level in LeFevre Spring
- 3. Water levels in the wells
- 4. Water levels in the District quarries
- 5. Flows in the Potomac River.

NORMAL CONDITIONS

<u>None</u> of the indicators are outside of the normal range.

- Precipitation exceeds the percent of normal precipitation for the time period in precipitation table.
- Groundwater levels are above the 25th percentile for all historic levels.
- There are no general operational or system failures.

NORMAL CONDITIONS – NO ACTION NEEDED

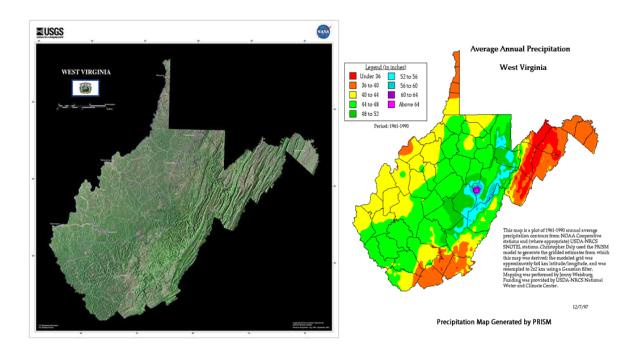
DROUGHT WATCH

At least <u>one</u> of the indicators meets the following conditions:

- Precipitation levels are at or below the historical normal precipitation for the time period in the precipitation table.
- Groundwater levels fall between the 10th and 24th percentile for all historic levels.
- Staff recommends that voluntary conservation measures be implemented.

DROUGHT WATCH – ACTIONS TO BE TAKEN

- The District is advised to declare a Drought Watch.
- The District will issue a press release indicating the reasons for the declaration and will make periodic reports of drought conditions available to media outlets.
- All District water users will be asked to begin voluntary water conservation.
- PSC "Local Water Rationing Plans" will be consulted for recommended actions.
- The District will continue to monitor regional moisture conditions and provide periodic reports of drought conditions.



Voluntary Water Conservation Measures during a Drought Watch

During a drought watch stage, responses to drought are voluntary. Upon the declaration of voluntary water conservation measures, the Districts water users are requested to voluntarily limit their use of water as noted under "Voluntary Water Conservation Measures During a Drought" at the end of this report.

DROUGHT WARNING

<u>Two</u> or more of the indicators meet the following conditions:

- Precipitation levels are at or below the percent of normal precipitation for the time period in precipitation table.
- Measured groundwater levels fall below the 25th percentile for all historic levels.
- The District recommends that voluntary conservation measures be implemented.

DROUGHT WARNING – <u>ACTIONS TO BE TAKEN</u>

- The District will discuss and move forward with a declaration of a Drought Warning.
- The District will issue a press release indicating the reasons for the declaration and will make reports of drought conditions available to media outlets in concert with PSC "Local Water Rationing Plans".
- Staff will continue to monitor regional moisture conditions and provide periodic reports of drought conditions.

DROUGHT EMERGENCY

All three indicators meet the following conditions:

- Precipitation levels are at or below the percent of normal precipitation for the time period in the precipitation table.
- Measured groundwater levels fall to or below the 5th percentile for all historic levels.
- Staff recommends that mandatory conservation measures be implemented.

DROUGHT EMERGENCY – <u>ACTIONS TO BE TAKEN</u>

- The District will issue a press release indicating the reasons for the declaration and will make reports of drought conditions available to media outlets.
- Mandatory restriction will be put in place in accordance with PSC "Local Water Rationing Plans." Enforcement of penalties for failure to comply with water use restrictions will be available.
- Staff will continue to monitor regional moisture conditions and groundwater levels and will provide periodic frequent reports of drought conditions.

Mandatory Water Conservation Measures

Bunker Hill: Production at LeFevre Springs continues decrease and pumping water from the quarries has resulted in a lowering of the water level to 25' below normal.

Glenwood Forest: Water level in Well No. 6 falls to 15' above the airline.

Potomac River: level falls below 3 feet and 0.7 (kcfs) flow

The State of West Virginia declares a Drought Emergency

The Woods System: level of the wells drop below 25% of normal low periods during a 12 month period.

The State of Maryland declares a Drought Emergency for Central Maryland Region.

RESPONSE TO DROUGHT - AGRICULTURAL

During a Drought Emergency, water use restrictions shall not apply to the agricultural production of food, the maintenance of livestock including poultry, nor the commercial production of plant materials so long as best management practices are applied to assure the minimum amount of water is utilized.

VOLUNTARY WATER CONSERVATION MEASURES DURING A DROUGHT

During a drought warning stage, responses to drought are voluntary. Upon the declaration of voluntary water conservation measures, the public is requested to voluntarily limit their use of water as follows:

- 1. Minimize all non-essential water use such as lawn watering and filling swimming pools.
- 2. Washing vehicles
- 3. Consider reducing the length of showers and the amount of water used when taking a bath.
- 4. Be extra vigilant with respect to looking for leaks in toilets and other outlet in the home.
- 5. Report any possible water leaks to the Water District office.
- 6. Refer to Addendum A, PSC "Local Water Rationing Plans" for recommended actions to conserve water.

WV PUBLIC SERVICE COMMISSION - REGULATIONS GOVERNING WATER RATIONING DUE TO DROUGHT CONDITIONS

"ADDENDUM A"

4.14. Local Water Rationing Plans.

4.14. a. Authority -- Upon giving notice to the Commission and the general public, any water utility declaring a temporary shortage of water, and that it is necessary for the health and welfare of the utility's customers to restrict the consumption and use of the existing water supply, shall be authorized to enforce the following Local Water Rationing Plan ("Plan") to restrict use of water to human consumption and for sanitary purposes. If a utility wishes to adopt a water rationing plan different from the following Local Water Rationing Plan, it may petition the Commission for permission to do so.

4.14. b. Definitions.

- 1. "Emergency service area" -- the area or areas within which the utility has declared a state of drought and water shortage emergency.
- 2. "Excess use" -- the usage of water by a water customer in excess of the water allotment provided under the Local Water Rationing Plan for that customer, over any applicable period.
- 3. "Service area" -- the territory and the customers serviced by the utility.
- 4. "Service interruption" -- the temporary suspension of water supply, or reduction of pressures below that required for adequate supply, to any customer, portion of a water supply system or an entire system.
- **4.14. c. Purpose** -- This Plan is intended to establish measures for essential conservation of water resources, and to provide for equitable distribution of limited water supplies, to balance demand and available supplies and to assure that sufficient water is available to preserve public health and safety within an emergency service area.

4.14. d. Scope -- This Plan shall apply to all water uses within a utility's emergency service area including uses by customers of wholesale customers of the utility.

4.14. e. Objective of the Plan.

- 1. It is imperative that water customers within an emergency service area reduce water use in order to extend existing water supplies, and to assure that sufficient water is available to preserve the public health and sanitation, and provide fire protection service and electric power generation.
- 2. This Plan requires equitable reductions in water usage, and for equal sacrifice on the part of each water customer, insofar as such restrictions do not interfere with the public health, adequate fire protection and the generation of electric power. The success of this Plan depends on the cooperation of all water customers in the emergency service area.
- **4.14. f. Measures to implement the water rationing plan** -- Each water supply purveyor, including resellers, within the emergency service area, will develop and adopt necessary and appropriate measures to assure compliance with requirements of this Plan.
- **4.14. g. Prohibiting non-essential water uses** -- The following water uses are non-essential and are prohibited within an emergency service area:
- 1. Watering of outside shrubbery, trees, lawns, grass, plants or any other vegetation, except from a watering can or other container not exceeding three (3) gallon capacity. This limitation shall not apply to vegetable gardens, greenhouse or nursery stocks and newly established lawns or sod less than five (5) weeks old, which may be watered in the minimum amount required to preserve plant life before 8:00 a.m. or after 6:00 p.m.
- 2. The watering of golf course fairways.
- 3. The washing of automobiles, trucks, trailers or any other type of mobile equipment except in vehicle wash facilities operating with a water recycling system with a prominently displayed sign in public viewing so stating, or from a bucket or other container not exceeding three (3) gallons.

- 4. The washing of streets, driveways, parking lots, service station aprons, office buildings, exteriors of homes or apartments or other outdoor surfaces.
- 5. The serving of water in restaurants, clubs or eating places unless specifically requested by the individual.
- 6. Ornamental water use, including but not limited to fountains, artificial waterfalls and reflecting pools.
- 7. The use of water for flushing sewers or hydrants by municipalities or any public or private individual or entity except as deemed necessary in the interest of public health or safety by the utility.
- 8. The use of fire hydrants by fire companies for testing fire apparatus and for fire department drills except as deemed necessary in the interest of public safety and specifically approved by the municipal governing body.
- 9. The use of fire hydrants by municipal road departments, contractors and all others, except as necessary for firefighting or protection purposes.
- 10. The filling of swimming or watering pools requiring more than five (5) gallons of water, or the refilling of swimming or wading pools which were drained after the effective date of the order, except that pools may be filled to a level of two (2) feet below normal, or as necessary to protect the structure from hydrostatic damage, as to pools constructed or contracted for on or after the date of the final order.
- **4.14. h. Recourse** -- Any person aggrieved by a utility's decision relating to these rules may file a complaint with the Commission.
- **4.14. i. Penalties.** -- Any person who violates the provisions of this Plan, who fails to carry out duties and responsibilities imposed by this Plan or who impedes or interferes with any action undertaken or ordered pursuant to this Plan, shall be subject to the following penalties:
- 1. For the first excess use, the utility shall issue a warning of possible discontinuation of service.
- 2. For the second or subsequent excess use, the utility may interrupt or shut off service to the customer without notice, or the utility may add a surcharge of ten percent (10%) to the end user's monthly bill for the month of the infraction.

- **4.14.j. Effective period** -- This Plan shall remain in effect until terminated by action of the utility declaring an end to the emergency condition or until terminated by order of the Commission, whichever comes first.
- **4.14. k. Effective date --** This Plan shall take effect immediately upon adoption by the utility.