

**BUTLER COUNTY WATER SYSTEM, INC.
WATER SHORTAGE RESPONSE PLAN**

(Based on the Kentucky Water Shortage Response Plan - Revised 6/7/88)

The KY Natural Resources and Environmental Protection Cabinet has established a Drought Notification System based on weather monitoring data, water resource scientists, and federal, state, and local agencies. Two levels of water shortage conditions have been identified.

1. Water Shortage Watch

The Cabinet will announce a Water Shortage Watch when water supply data indicate the potential for water shortages. Local governments and water utility managers are responsible for determining the need for local response and for making preparations for water shortages. The Cabinet must be kept informed of all shortages and actions taken in response to the shortage so the lifting of such measures can be accomplished.

Specific measures BCWS shall take when the Kentucky Division of Water issues a Water Shortage Watch are:

- a) Monitor water supplies daily. Refer to Section 2 "Evaluating Vulnerability to Water Shortages" to determine how much water the community has available and how much will be needed.
- b) Notify the Judge Executive if conditions indicate an inability of the treatment plant to supply the needs of the customers so the appropriate water shortage phase can be activated according to the severity of the conditions.
- c) Keep the Cabinet informed of all actions taken.

2. Water Shortage Warning

The Cabinet will announce a Water Shortage Warning when one or more water supply systems in an area have entered the emergency phase of a water shortage. Local governments and water utility managers should have already adopted water shortage response plans in their areas, and most systems should be in some phase of response to the shortage.

Specific measures BCWS shall take when the Kentucky Division of Water issues a Water Shortage Warning are:


- a) Continue to monitor raw water supplies and system demand and daily
- b) Notify the Judge Executive if conditions indicate an inability of the treatment plant to supply the needs of the customers so an appropriate water shortage phase can be activated according to the severity of the conditions.
- c) Keep the Cabinet informed of all actions taken

PUBLIC SERVICE COMMISSION
OF KENTUCKY

11/19/997

PURSUANT TO 807 KAR 5-011

SECTION 9.(1)

By 
Executive Director

Should water supply data and/or system demand data indicate an inability to supply customers at current operational levels, BCWS shall notify the Judge Executive who shall issue a water shortage notification to the public based on the severity of the situation. Notifications in order of severity are:

1. Advisory Phase
 - Issue water shortage advisory
 - Set conservation goals and prepare for decreasing supply
 - Inform the public about the potential problem
 - Request voluntary conservation (Expect only 5-15% reduction in demand)
2. Alert Phase
 - Issue water shortage alert
 - Set more stringent conservation goals
 - Restrict Class 3, non-essential, water uses to odd/even schedule
 - Request voluntary conservation for all water use
 - Inform the public about the problem
 - Monitor compliance with the restrictions on Class 3 use and enforce when necessary
3. Emergency Phase
 - Issue water shortage emergency declaration
 - Set more stringent conservation goals
 - Ban all Class 3 and restrict all Class 2 water uses
 - Inform the public
 - Enact conservation pricing
 - Monitor all drought-related activities, especially compliance with the bans. Enforce as necessary
4. Rationing Phase
 - Begin mandatory allocations of water
 - Immediately reduce usage by 25 percent
 - Ban Class 3 uses, restrict Class 2 and Class 1 water uses
 - Inform the public
 - Enact Conservation pricing
 - Set new conservation goals and monitor all shortage-related activities, especially compliance with the allocations. Enforce as necessary


Evaluating Vulnerability to Water Shortages

Two conditions exist which can create water shortage:

1. **Inadequate raw water supply**

- Green River is controlled by the flood con and Green

**PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)**

By  Executive Director

River Lakes and operated by the Army Corps of Engineers.

- Estimate the current available water supply.
 - 1) Record the flow from the telemark river station by calling 842-8789
 - 2) Determine the percentage of BCWS withdrawal compared with total flow. Consult the following chart to determine which phase should be declared.
 - 3)


% of Withdrawal	Phase
20 - 40%	Advisory
40 - 65%	Alert
65 - 75%	Emergency
> 75%	Rationing

- 4) Arrangements for the purchase of water at Barren and/or Green River Lake can be made using a temporary contract with the Army Corps of Engineers (see attachment A). If the Governor of Kentucky issues a Water Shortage State of Emergency for our area or BCWS has placed its customers under water restrictions and monitoring indicates that river conditions may not improve, a contract can be arranged for the purchase of water from the A.C.E. upon approval from the Division Commander. Contact the Water Resources Department of the KY Division of Water and Bill Byron from the A.C.E. at (502) 582-5646, where a written request (see Attachment B) to increase the outflow at the Barren River and/or Green River Dam may be submitted.

2. Increasing demand exceeding treatment capacity

- If demand is normally 80% of system capacity, it is likely to reach 100% or more if there is a drought. This can be critical since breakdowns are more frequent in water systems that are operating at or near capacity.
- Complete the following worksheet for projecting demand:

**PUBLIC SERVICE COMMISSION
OF KENTUCKY**
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By 
Executive Director

For Last Month:

Average use in _____ for past 5 years _____ mgd
 Average use in _____ 2 yrs ago _____ mgd
 Average use in _____ 1 yr ago _____ mgd
 Average use in _____ this year _____ mgd

For Current Month:

Average use in _____ for past 5 years _____ mgd
 Average use in _____ 2 yrs ago _____ mgd
 Average use in _____ 1 yr ago _____ mgd
 Average use in _____ this year _____ mgd

Usage Notes:

Weather Notes:

Therefore, average projected use for _____:

Without conservation measures: _____ mgd

With voluntary conservation measures:
(goal of 10% reduction) _____ mgd

With more extensive conservation measures:
(goal of 20% reduction) _____ mgd

Measure the ability to meet demand:

$\frac{\text{Projected use (mgd)} \times 100}{\text{Stream Flow (mgd)}}$

PUBLIC SERVICE COMMISSION
 OF KENTUCKY
 EFFECTIVE
 11/19/2007
 PURSUANT TO 807 KAR 5:011
 SECTION 9 (1)

By  Executive Director

EXAMPLES OF PRESS RELEASES

Advisory Phase

Morgantown, KY - Due to the recent abnormally dry weather conditions and little indication of significant rainfall in the foreseeable future, residents of Butler County should begin conserving water. For the month(s) of _____, Butler County received only _____ percent of normal rainfall for the comparable period. The 30-day outlook from the National Weather Service calls for more abnormally dry weather.

The State of Kentucky has declared a local water shortage ADVISORY. At this time, there is an immediate need to begin voluntary conservation measures.

According to officials at the Kentucky Division of Water, consumers can cut water use by as much as 15% with very little difficulty or discomfort by using voluntary water conservation practices.

All non-essential uses of water should be minimized, such as watering lawns, washing cars, and hosing off pavement.

If everyone cooperates, the water usage in Butler County can be cut significantly. If you have questions or suggestions, please contact _____ at (270) 526-4656.

Alert Phase

Morgantown, KY - A water shortage ALERT has been declared for the Butler County Water System service area.


(Describe the supply situation, given unrestricted water demand.)

Under the ALERT, and in order to ensure adequate supplies for necessary uses, citizens are urged to practice conservation in all use of water. Non-essential water use is restricted according to the following schedule:

1. Outside use for addresses ending in an odd number shall be limited to Tuesdays, Thursdays and Saturdays.
2. Outside use for addresses ending in an even number shall be limited to Wednesdays, Fridays and Sundays.

Non-essential use includes ornamental watering, filling of swimming pools, washing of motor vehicles, driveway or pavement washing, refilling of air conditioning cooling towers, and the serving of water in restaurants except by request.

Conservation of all water uses, accompanied by these restrictions, can reduce water use by 15 - 30 percent. Butler County Water System customers can extend limited water supplies, avoiding further restrictions, by observing conserving

By 
Executive Director

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
SECTION 19.11

water at all times.

(Project results of compliance)

If everyone cooperates, the water usage in Morgantown can be cut significantly. If you have questions or suggestions, please contact _____ at (270) 526-4656.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By 
Executive Director

Definitions of Classes of Water Uses

Class 1 (Essential uses)


- Water necessary to sustain human life and pets, and to maintain minimum standards of hygiene and sanitation
- Patient care and rehabilitation
- Water hauling sales for domestic use where not reasonably available elsewhere
- Firefighting
- Health and public protection purposes as approved by health officials and municipal governing body

Class 2 (Socially or Economically Important uses of Water)

- Personal, in-house water use including kitchen, bathroom and laundry
- Water hauling sales for non-domestic use when other sources are not reasonably available elsewhere
- Commercial car and truck washes
- Laundromats
- Restaurants, clubs, and eating places
- Schools, churches, motels/hotels and similar establishments
- Minimal watering of vegetable gardens
- Minimal watering of trees where necessary for their survival
- Agricultural irrigation of the production of food and fiber or the maintenance of livestock
- Watering by public gardens of community significance where necessary to preserve specimens
- Watering by commercial nurseries where necessary to maintain stock
- Watering where necessary to establish or maintain revegetation or landscape plantings required pursuant to law or regulation
- Watering of woody plants where necessary to preserve them
- Minimal water of golf course greens
- Operation of municipal swimming pools and residential pools that serve more than 25 dwelling units
- Air conditioning refilling for startup at the beginning of the cooling season
- Makeup of water during the cooling season
- Refilling of AC's specifically approved by health officials and the municipal governing body, where the system has been drained for health protection or repair services.

Class 3 (Non-essential Uses)


- Use of fire hydrants other than Class 1 & 2 uses, including use of sprinkler caps, testing fire apparatus, and fire department drills
- Flushing of sewers and hydrants except as needed to ensure public health and safety as approved by health officials and the municipal governing body
- Serving water in restaurants, clubs, or eating places except by customer request
- Failure to repair a controllable leak
- Increasing water levels in scenic and recreational areas except as

By 
Executive Director

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 907 KAR 9.01
SECTION 9 (1)

- necessary to support fish and wildlife
- Filling fountains, reflecting pools and artificial and artificial waterfalls
 - Watering of annual or non-woody plants, lawns, parks, golf course fairways, playing fields and other recreational areas
 - Washing down buildings or structures for purposes other than immediate fire protection
 - Flushing gutters or permitting water to run or accumulate in any gutter or street
 - Expanding nursery facilities, placing new irrigated agricultural land in production, or planting of landscaping except when required by a site design review process
 - Use of water for dirt control or compaction
 - Watering of lawns, parks, golf course fairways, playing fields and other recreational areas
 - Washing sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surface areas
 - Recreational uses other than those specified as Class 2
 - Non-commercial washing of motor and other vehicles
 - Refilling air conditioning cooling towers after draining

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By 
Executive Director

Contract No.

CONTRACT BETWEEN THE UNITED STATES OF AMERICA
AND

FOR

RELEASE OF DROUGHT EMERGENCY WATER

FROM

LAKE, KENTUCKY

THIS CONTRACT, entered into this _____ day of _____, 19____, by and between the UNITED STATES OF AMERICA (hereinafter called the "Government") represented by the Contracting Officer executing this contract, and _____ (hereinafter called the "User");

WITNESSETH THAT:

WHEREAS, pursuant to applicable Public Law(s), the Government has constructed and is operating _____ Lake (hereinafter called the "Project"); and,

WHEREAS, the User desires to contract with the Government for the privilege of having water released from the Project;


NOW, THEREFORE, the parties do mutually agree as follows:

ARTICLE 1 -- Water Supply and Withdrawals

(a) The User shall have the privileges of release of water from _____ acre-feet of storage in the Project for municipal and industrial purposes at a rate not to exceed _____ cubic feet per second above the normal release rate during the term of this contract as specified in Article 6 hereof. However, these releases will be made only when the level of the water in the Project is above elevation _____ feet mean sea level.

(b) The Government agrees to release water through the outlet works of the Project in amounts up to _____ cubic feet per second, as requested by the User until such time as the contracted storage is utilized. The User can request start and/or stop of contracted release during normal duty hours at any time during the contractual period. The rate of contracted release will be measured using outlet ratings current at the outset of the contract.

(c) The Government reserves the right to take such measures as may be necessary in the operation of the Project to preserve life or property, to preserve the safety of the Project, or to satisfy project purposes.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5.011
SECTION 9 (1)
By 
Executive Director

(d) The User recognizes that this contract provides only for releases of water from the contracted storage in the Project and losses associated with transmission will be borne by the user. The Government makes no representation with respect to the quality of water and assumes no responsibility therefore, or for treatment of the water released. This contract shall not be construed as giving User and rights to have the water level maintained at any elevation. The User further recognizes that it is acquiring no right to the use of storage space in the Project.

ARTICLE 2 -- Metering

For the purpose of maintaining an accurate record of the water released from the Project, the Government agrees to maintain records of the releases made as to times and amounts.

ARTICLE 3 -- Federal and State Laws

(a) User shall obtain any permits required pursuant to the Clean Water Act of 1977 in connection with any facilities constructed, as well as any other permits or approvals required by Federal, state, or local governments in connection with User activities hereunder.

(b) The User shall utilize the water released from the Project in a manner consistent with Federal, state, and local laws.

(c) The User furnishes, as part of the contract, an assurance that the User will comply with Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. 2000d, et seq) and Department of Defense Directive 5500.11 issued pursuant thereto and published in Part 300 of Title 32, Code of Federal Regulations.

ARTICLE 4 -- Regulation of the Use of Water


The regulation of the use of the water withdrawn of the user's intake shall be the sole responsibility of the User and under the sole authority of the User in accord with Federal, state, and local laws and shall not be considered a part of this contract. The Government shall not be responsible for the use of water withdrawn by the User, nor will it become a party to any controversies involving the water withdrawn, except as such controversies may affect the operations of the Project.

ARTICLE 5 -- Consideration of Payment

In consideration of the privilege of having emergency water supply storage in the Project for municipal and industrial purposes, the User shall pay the following sums to the Government.

(a) Water Supply Costs. Costs will be determined by the governing pricing policy current at the time of contract negotiations. Costs to the User will be for storage required in the project as determined under Article 1 and will be billed upon approval of this contract. The User shall pay these costs in lump sum by the end of each month.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5-011
SECTION 9(1)

By  Executive Director

(b) If the User shall fail to make payment under this contract within 30 days of the date due, interest thereon shall accrue at the rate of 6.0 percent per annum compounded annually from the date due until paid. This provision shall not be construed as waiving any other rights the Government may have in the event of default by the User, including but not limited to the right to terminate this contract for default.

ARTICLE 6 -- Period of Contract

This contract shall become effective as of the date of the approval by the Contracting Officer, and it shall continue in full force and effect under the conditions set forth herein, for a period of ___ months from the said date of approval.

ARTICLE 7 --Termination of Contract

(a) Either party may terminate this contract and its privileges upon 10-day written notice. The user will pay all charges which have accrued through the date of the termination.

(b) The Government may terminate this contract and its privileges upon 10 day written notice, if the User shall default in performance of any obligation of this contract. Upon such a termination, User shall continue to be liable to the Government for any monies owed and for any costs incurred by the Government as a result of the default.

ARTICLE 8 - Release of Claims

The User shall hold and save the Government, including its officers, agents, and employees, harmless from liability of any nature or kind for or on account of any claim for damages which may be filed or asserted as a result of the release of water from the Project for the User, or as a result of the construction, operation, or maintenance of any facilities or appurtenances owned and operated by the User.

ARTICLE 9 - Transfer or Assignment

The User shall not transfer or assign this contract nor any rights acquired thereunder, nor suballot said water or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this contract. This restriction shall not be construed to apply to any water which may be released for the User from the Project under the terms of this contract and furnished to any third party or parties or to the rates charged therefor.

ARTICLE 10 -- Officials Not to Benefit

No member of or delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By 
Executive Director

ARTICLE 11 -- Covenant Against Contingent Fees

The User warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the User for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability, or in its discretion, to add to the contract price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE 12 -- Definitions

The term "Contracting Officer" as used herein means the person executing this contract on behalf of the Government and includes a duly appointed successor or authorized representative.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written.

THE UNITED STATES OF AMERICA
APPROVED: _____

By: _____

DATE: _____

By: _____

DATE: _____

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By  _____
Executive Director

Request for Army Corps of Engineers to Increase Outflow

Fax To:

Bill Byron, A.C.E. (502-582-6841)

Dave Morgan, KY Division of Water, Water Resources Division (502-564-0111)

Bowling Green Municipal Utilities has been under a Water Shortage Emergency since _____. We have placed our customers under mandatory water use restrictions and have enforced these measures when necessary. The Barren River is our only source of water and has received no significant rainfall for since _____. Over the past _____ weeks, the level in the river has fallen steadily, and the current level of _____ feet is insufficient for our raw water pumps to operate properly as well as meeting the essential water needs of our customers even with the aforementioned restrictions in place.

For these reasons we are requesting that the Army Corps of Engineers increase the outflow of the Barren River Reservoir so as to establish a river level of 4.20 feet at the telemark station below our treatment plant. BGMU will, if necessary, enter into contract with the A.C.E. for the purchase of the additional outflow of water to meet the needs of our customers.


Please respond to this request promptly as our situation is becoming increasingly critical.

Thank You,

cc: Dave Morgan, KY DOW

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
11/19/2007
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By



Executive Director