



Lake Country Water Supply Plan & Drought Response Plan

For

County of Brunswick
Town of Alberta
Town of Brodnax
Town of Lawrenceville
County of Mecklenburg
Town of Boydton
Town of Chase City
Town of Clarksville
Town of La Crosse
Town of South Hill



Adopted 2011

7—LAKE COUNTRY REGIONAL DROUGHT RESPONSE & CONTINGENCY PLAN

9 VAC 25-780-120

“A drought management plan is a document that (1) defines the conditions under which a drought-induced water supply emergency exists and (2) specifies the actions that are to be taken in response.” AWWA Drought Management Handbook, 2002

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A. Plan Background and Purpose

Background

In 2005, the Southside Planning District began to prepare a regional water supply plan for the counties of Brunswick and Mecklenburg and the towns therein—Alberta, Boydton, Brodnax, Chase City, Clarksville, La Crosse, Lawrenceville and South Hill. This activity was in response to the Commonwealth of Virginia, Local and Regional Water Supply Planning Regulation, 9VAC 25-780, which established a planning process and criteria for local governments to use in the development of local or regional water supply plans. This plan is a cooperative effort among these localities to inventory existing water resources, supply, and use and to project future water demand. Additionally these regulations include a component regarding drought response and contingency plans. Communities that withdraw more than 300,000 gallons per month of surface water and ground water must develop a drought contingency and response plan. The need for such a plan resulted from the severe drought of 2001-2002, brought about by precipitation deficits from 1999, which raised awareness for the need to prepare for future drought events.

Although the 2002 drought was not as severe as the drought of record (1930-1932), increased water demand when compared to the 1930's resulted in significant impacts to all sectors of Virginia's economy and society. The intensity of these drought impacts peaked in late August 2002. Wildfire indices were at levels previously unrecorded in Virginia, the vast majority of Virginia agricultural counties had applied for Federal drought disaster designation, streamflows reached period of record lows, and thousands of individual private wells failed. As a result of the severity of the drought effect, the Governor declared a drought emergency for most of the state by Executive Order #33 and mandatory restrictions of outdoor water uses were imposed.

Locally during the 2002 drought, while the water supplies were adequate and no emergencies were

declared, there were concerns. Kerr Lake was five (5) feet below normal at the worst of the event (August 2002) and Clarksville did not experience supply problems. Great Creek Reservoir, which holds the water supply for the town of Lawrenceville, was approximately 22 inches below normal but was able to maintain streamflow below the dam to service the town's intake. Voluntary conservation measures were encouraged. As in the rest of the state, numerous private individual wells failed within the two counties.

South Hill, which utilized the Meherrin River as its water source at the time, experienced the most severe dilemma during the drought. In August of 2002 the town estimated that there were only about 28 days of supply available in the river. Pumps and generators were being utilized to fill the tank, as stream flow was so low the intake pumps were not functioning properly. Fortunately in September 2002 the Roanoke River Service Authority plant went into operation and the town's supply was switched to Lake Gaston along with three municipalities utilizing groundwater—the towns of Brodnax, La Crosse and Boynton.

Purpose

While these local experiences were not as dire as the rest of the state, rather than face emergency mandates in the future, a regional drought response plan that meets local need has been prepared. This plan will identify the conditions under which conservation measures should be implemented and the level of response needed based on the drought severity. In addition to establishing a method to monitor drought conditions, the plan provides a public notification system, tiered responses to the drought stages, and recommends appropriate actions by residents, businesses as well as local governments. In order to implement the plan, each municipality must draft and adopt a local ordinance. This Plan will serve as a guide for the development of the ordinances.

Authority

Code of Virginia

The Code of Virginia includes two sections that authorize localities to restrict water use in declared emergencies. Section 15.2-923 states that any locality may by ordinance (i) require installation of water conservation devices in the case of the retrofitting of buildings constructed prior to July 1, 1978 and (ii) restrict the nonessential use of ground water during declared water shortages or water emergencies. ("Non-essential use" shall not include agricultural use.) This section would apply to private wells.

Section 15.2-924, Water Supply Emergency Ordinances, gives authority to localities to adopt an ordinance restricting the use of water during a water emergency or to prevent the occurrence of a water supply emergency. This section of the Code is applicable to water supplied by a locality, authority, or company distributing water for a fee or charge. Furthermore, Virginia allows local restrictions to take precedence if an ordinance is in place. Therefore, if the Governor declares an emergency because of severe conditions in another part of the state and conditions in Lake Country do not warrant it, the local governments do not have to initiate.

B. Identifying Drought Conditions

For the Lake Country localities the drought response indicators have been established based on the local water resource.

Identifying Drought Conditions in Lake Country

As detailed in the previous Water Supply Plan sections, Existing Resources and Water Sources, the public water suppliers of the Lake Country region utilize all three water source types—streams, groundwater and reservoirs. Additionally given the rural nature of both Brunswick and Mecklenburg counties, most of the population is served by individual wells. The plan inventory estimates that there are more than 12,800 individual wells in the two counties. In Mecklenburg purveyors of public water are the town of Clarksville (Kerr Reservoir), Chase City (wells), and Roanoke River Service Authority (Lake Gaston), which serves the towns of South Hill, La Crosse, Boydton and Brodnax. In Brunswick County, Lawrenceville (Great Creek and the Meherrin River) is the service provider for itself and the town of Alberta.

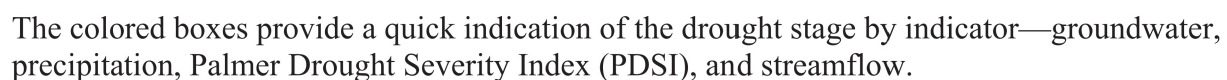
Therefore these water purveyors will be responsible for recognizing changes in the water sources and the potential impact to their customers. These purveyors will:

1. Determine when the indicators of drought stage conditions are met as described below in Paragraph C, and
2. Recommend that the Board of Supervisors of Brunswick and/or Mecklenburg counties and, the town councils of Alberta, Boydton, Brodnax, Chase City, Clarksville, La Crosse, Lawrenceville, and South Hill declare the appropriate drought stage and implement the designated response measures. The purveyors should provide a written memo or report to the authorities, which sets forth the water source data and factors utilized in determining the drought stage threshold has been met.

To assist local system operators in assessing drought conditions, DEQ has developed a web tool to present the current drought indicator data by the state drought management regions.

A Sub-region map customized to cover the Lake Country Region is available at: <http://www.deq.virginia.gov/watersupplyplanning/drought/southside/current.html> and a screen capture is shown below. This will provide the Lake Country localities better access to monitoring tools and drought response triggers.

- **Precipitation** - Precipitation totals are calculated for the water year (from the previous October 1st) and are compared to the normal annual values (indicated in the map legend as "Prcp").
- **Stream Flow** - Mean daily stream flows over the previous 7 days are used to determine stream drought condition (indicated in the map legend as "Flow").
- **Groundwater** - Current groundwater surface elevation is evaluated against historical normals (indicated in the map legend as "GW"). It is important to note that groundwater levels are measured as feet *below* the surface, therefore, *lower* numbers are equivalent to a *higher* amount of groundwater, and vice-versa.
- **Reservoir Levels** - The current level of reservoirs are evaluated against historical normals for some of the state drought regions.
- **Palmer Drought Severity Index** - The Palmer Drought Severity Index is a measure of "the relative dryness or wetness effecting water sensitive communities," such as agriculture (indicated in the map legend as "PDSI"). The Palmer index is calculated for the previous week by NOAA Climate Prediction Center for various regions in the United States, with 6 different geographical regions inside of the state of Virginia



C. Drought Stage Indicators & Responses

DROUGHT WATCH—STAGE I

Drought Watch stage responses are intended to increase public and private sector awareness that climatic conditions are favorable for an oncoming significant drought event. Public outreach activities shall be identified targeted to prepare citizens for the onset of a drought event, to inform the population served by community water systems of the potential for drought conditions, and prepare the public for any potential water conservation activities that may be utilized. In rural areas public outreach to individual well owners during early drought conditions may be critical, especially if such users institute conservation measures that may reduce the likelihood of well failures during significant drought conditions (warning or emergency stages).

Municipality/Community Water System (CWS)	Water Source	Drought Watch Indicator (Public Notice)
Alberta	Great Creek	<i>Trigger: Great Creek Reservoir level =214 msl</i>
Lawrenceville		<i>Trigger: Gauge Valve #3 open 13 turns</i>
RRSA Boydton Brodnax La Crosse South Hill River Ridge & all RRSA individual customers	Kerr Reservoir/Lake Gaston	<i>Trigger: Kerr Lake level = 292' msl</i>
Clarksville	Kerr Reservoir	<i>Trigger: Kerr Lake level = 292' msl</i>
Chase City	Municipal Wells	If any of the other localities go into drought watch stage, town will enter drought watch stage.
Brunswick County Mecklenburg County	Individual Wells	If any of the other localities go into drought watch stage, county will enter drought watch stage.

Stage I—The Drought Watch Stage response will include a public outreach campaign to notify all citizens in the region that a significant drought is likely given the current climatic conditions. The public will be notified via billing inserts, newspapers, televisions, local websites, and/or radio announcements.

Once a drought watch declaration is issued, the following actions are recommended:

- A public awareness and education process will be implemented to distribute water-conservation information and other special notices to customers to encourage each resident of the county and each customer to employ restraint in water usage.

DROUGHT WARNING—STAGE II

Drought Warning stage responses are required when the onset of a significant drought is imminent, the water supply in the planning area is threatened by these drought conditions, and restrictions are necessary to preserve an available supply of water. During the drought warning stage, voluntary water conservation activities are enacted with the goal of reducing water use by 5 – 10%, as such conservation measures may result in delayed progression towards a drought emergency stage.

Municipality/Community Water System (CWS)	Water Source	Drought Warning Indicator (Voluntary restrictions)
Alberta	Great Creek	<i>Trigger: Great Creek Reservoir level = 211 msl</i>
Lawrenceville		<i>Trigger: Gauge Valve #3 open 13 turns</i>
RRSA Boydton Brodnax La Crosse South Hill River Ridge & all RRSA individual customers	Kerr Reservoir/Lake Gaston	<i>Trigger: Kerr Lake level = 290' msl</i>
Clarksville	Kerr Reservoir	<i>Trigger: Kerr Lake level = 290' msl</i>
Chase City	Municipal Wells	If any of the other localities go into drought warning stage, town will enter drought warning stage.
Brunswick County Mecklenburg County	Individual Wells	If any of the other localities go into drought warning stage, county will enter drought warning stage.

Stage II—Drought warning responses

When any of the individual locality drought warning stage indicators are met, the Water System manager will notify the local governments and recommend a drought warning declaration for the respective locality(ies). Proximate localities in the regional planning area whose indicators have not reached the warning level will be recommended to declare a drought watch stage and initiate or maintain public outreach measures. Press releases will be distributed to the media to publicize updates to the drought conditions and needed actions. Voluntary water conservation measures will be encouraged. Encourage reduction in non-essential water use as detailed in Paragraph E. In the event of a drought warning, the public will be notified via billing inserts, newspaper, television, and/or radio announcements.

During a Drought Warning declaration, the following **voluntary** restrictions are strongly encouraged:

- Encourage that the watering of outside shrubbery, trees, lawns, grass, plants, home vegetable gardens, or any other vegetation be conducted only between the hours of 8:00 p.m. and 9:00 a.m., and only as necessary to preserve plant life.

- Washing of automobiles, trucks, trailers, boats, airplanes, or other types of mobile equipment except from a bucket or other container not exceeding three (3) gallons in capacity;
- Washing of streets, driveways, parking lots, service station aprons, office buildings, the exterior of homes or apartments, or other outdoor surfaces by commercial washing/cleaning services except from a bucket or other container not exceeding three (3) gallons of capacity.
- The operation of any ornamental fountain or other structure making similar use of water.
- The filling of swimming and/or wading pools, or the refilling of swimming and/or wading pools that were drained after the effective date of the declaration is not permitted.
- The use of water from fire hydrants for any purpose other than fire suppression or other emergency is not permitted except as authorized by the Locality.
- Serving of water in restaurants except upon request of customers.
- All public waterworks and self-supplied water users who withdraw more than 10,000 gallons per day should reduce or eliminate non-essential uses of water including the elimination of non-essential flushing of water lines.
- All persons who utilize any source of water for outdoor irrigation will assure that the minimum amount of water is utilized in the most efficient manner practical.
- All self-supplied users who withdraw less than 10,000 gallons per day, including private well users, will be encouraged to voluntarily reduce or eliminate non-essential uses of water.
- Local governments and public waterworks may impose water use restrictions consistent with local water supply conditions at any time.

DROUGHT EMERGENCY—STAGE III

Drought Emergency Stage responses are required during the height of a significant drought event, when the water supply in its planning area is threatened by emergency drought conditions and where more water use restrictions than previously enacted are necessary to preserve an available supply of water. During this period, it is likely that some water supplies will not be able to provide the amount of water needed by all users and therefore, non-essential uses of water should be eliminated to reduce unnecessary water demands on the systems. During the drought emergency stage, mandatory water conservation activities are enacted with the goal of reducing water use by 10 – 15%.

Municipality/Community Water System (CWS)	Water Source	Drought Emergency Indicator (Mandatory restrictions)
Alberta	Great Creek	<i>Trigger: Great Creek Reservoir level = 210 msl</i>
Lawrenceville		<i>Trigger: Gauge Valve #3 fully open</i>
RRSA	Kerr Reservoir/Lake Gaston	<i>Trigger: Kerr Lake level = 288 msl</i>
Boydton		
Brodnax		
La Crosse		
South Hill		
River Ridge & all RRSA individual customers		
Clarksville	Kerr Reservoir	<i>Trigger: Kerr Lake level = 288 msl</i>
Chase City	Municipal Wells	If any of the other localities go into drought emergency stage, town will enter drought emergency stage.
Brunswick County Mecklenburg County	Individual Wells	If any of the other localities go into drought emergency stage, county will enter drought emergency stage.

Stage III—Drought emergency responses

When any of the individual locality drought emergency stage indicators are met, the Water System manager will notify the local governments and recommend a drought emergency declaration for the respective locality(ies). For those proximate localities within the planning area that have not reached the emergency level, the committee will recommend that these local governments declare or maintain the drought watch or warning status. In the event of a drought emergency, the public will be notified via billing inserts, newspaper, television, and/or radio announcements.

Stage III—Drought emergency responses are mandatory water conservation requirements:

- All public waterworks and self-supplied water users who withdraw more than 10,000 gallons per day will initiate mandatory water conservation requirements listed in the mandatory non-essential water use restrictions as shown in Paragraph E and including the elimination of non-essential flushing of water lines.
- All self-supplied users, who withdraw less than 10,000 gallons per day, including private well users, will initiate the mandatory non-essential water use restrictions listed below.

D. Notification of Drought Conditions

The Water Purveyors will contact all the respective local government officials within their system to notify them that the drought stage indicator(s) has been met and make the recommendation to implement the appropriate drought stage response. The Purveyors will also notify the County Board of Supervisors through the County Administrator. Additionally all other purveyors in the region will be notified as a courtesy and so that a coordinated region-wide stage may be initiated if deemed warranted by a consensus of the localities.

- The purveyors should provide a written memo to the authorities that states the water source determining factors for drought stage announcement.
- The County Administrator may call a meeting of the Local Emergency Planning Committee [Brunswick] who may review the report of the water provider(s) and other data. Such additional local drought information may include the frequency of well failure reports and agricultural drought designation requests (FSA & VA Extension Service) as reported to the local governments.
- The declaration will be issued to the public, and to commercial and industrial customers through local newspapers, radio and cable television public access channels and any other means of communication deemed appropriate or identified in Paragraph F. The declaration will state specific conservation efforts to be taken.
- When the County declares a Drought Stage, the entire county will be under that Stage and the water conservation measures will be recommended for the entire area.

The following table indicates the party that each locality has determined to be the responsible party for drought monitoring and coordination.

Municipality	Water System	Authority to declare
Community Water System (CWS)	Providers/ Monitor	Providers will contact: For Public Notification
Alberta	Lawrenceville	Alberta Mayor
Lawrenceville		Lawrenceville manager & mayor
Boydton	Roanoke River Service Authority (RRSA)	Boydton mayor
Brodnax		Brodnax manager & mayor
La Crosse		La Crosse manager & mayor
South Hill		South Hill manager & mayor
River Ridge & all RRSA individual customers		RRSA Board
Clarksville		Clarksville manager & mayor
Chase City	Chase City	Chase City manager & mayor
Brunswick County	Various Groundwater CWS*	County Administrator (& LEPC)
Mecklenburg County	Various Groundwater CWS*	County Administrator

*Groundwater Systems outside the systems listed above should also notify the county(s) to assist with public notification.

E. Non-essential Water Use Restrictions

The following non-essential water uses will be prohibited during periods of declared drought emergencies. Please note the exceptions that follow each prohibited use. These prohibitions and exceptions will apply to uses from all sources of water. Water use restrictions shall not apply to the agricultural production of food or fiber, 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.

1. Unrestricted irrigation of lawns is prohibited.

- a. Newly sodded and seeded areas may be irrigated to establish cover on bare ground at the minimum rate necessary for no more than a period of 60 days.
- b. Irrigation rates may not exceed one inch of applied water in any 7-day period.
- c. Gardens, bedding plants, trees, shrubs and other landscape materials may be watered with hand held containers, hand held hoses equipped with an automatic shutoff device, sprinklers or other automated watering devices at the minimum rate necessary but in no case more frequently than twice per week.
- d. Irrigation should not occur during the heat of the day.
- e. All allowed lawn irrigation must be applied in a manner to assure that no runoff, puddling or excessive watering occurs.
- f. Irrigation systems may be tested after installation, routine maintenance or repair for no more than ten minutes per zone.

2. Unrestricted irrigation of golf courses is prohibited.

- a. Tees and greens may be irrigated between the hours of 9:00 p.m. and 10:00 a.m. at the minimum rate necessary.
- b. Localized dry areas may be irrigated with a hand held container or hand held hose equipped with an automatic shutoff device at the minimum rate necessary.
- c. Greens may be cooled by syringing or by the application of water with a hand held hose equipped with an automatic shutoff device at the minimum rate necessary.
- d. Fairways may be irrigated between the hours of 9:00 p.m. and 10:00 a.m. at the minimum rate necessary not to exceed one inch of applied water in any ten-day period.
- e. Fairways, tees and greens may be irrigated during necessary overseeding or resodding operations in September and October at the minimum rate necessary. Irrigation rates during this restoration period may not exceed one inch of applied water in any seven-day period.
- f. Newly constructed fairways, tees and greens and areas that are re-established by sprigging or sodding may be irrigated at the minimum rate necessary not to exceed one inch of applied water in any seven-day period for a total period that does not exceed 60 days.
- g. Fairways, tees and greens may be irrigated without regard to the restrictions listed above so long as:
 - The only water sources utilized are water features whose primary purpose is stormwater management,
 - Any water features utilized do not impound permanent streams,
 - During declared Drought Emergencies these water features receive no recharge from other water sources such as ground water wells, surface water intakes, or sources of public water supply, and,
 - All irrigation occurs between 9:00 p.m. and 10:00 a.m.

- h. All allowed golf course irrigation must be applied in a manner to assure that no runoff, puddling or excessive watering occurs.
- i. Rough areas may not be irrigated.

3. Unrestricted irrigation of athletic fields is prohibited.

- a. Athletic fields may be irrigated between the hours of 9:00 p.m. and 10:00 a.m. at a rate not to exceed one inch per application or more than a total of one inch in multiple applications during any ten-day period. All irrigation water must fall on playing surfaces with no outlying areas receiving irrigation water directly from irrigation heads.
- b. Localized dry areas that show signs of drought stress and wilt (curled leaves, foot-printing, purpling) may be syringed by the application of water for a cumulative time not to exceed fifteen minutes during any twenty-four hour period. Syringing may be accomplished with an automated irrigation system or with a hand held hose equipped with an automatic shutoff device at the minimum rate necessary.
- c. Athletic fields may be irrigated between the hours of 9:00 p.m. and 10:00 a.m. during necessary overseeding, sprigging or resodding operations at the minimum rate necessary for a period that does not exceed 60 days. Irrigation rates during this restoration period may not exceed one inch of applied water in any seven-day period. Syringing is permitted during signs of drought stress and wilt (curled leaves, foot-printing, purpling).
- d. All allowed athletic field irrigation must be applied in a manner to assure that no runoff, puddling or excessive watering occurs.
- e. Irrigation is prohibited on athletic fields that are not scheduled for use within the next 120-day period.
- f. Water may be used for the daily maintenance of pitching mounds, home plate areas and base areas with the use of hand held containers or hand held hoses equipped with an automatic shutoff device at the minimum rate necessary.
- g. Skinned infield areas may utilize water to control dust and improve playing surface conditions utilizing hand held containers or hand held hoses equipped with an automatic shutoff device at the minimum rate necessary no earlier than two hours prior to official game time.

4. Washing paved surfaces such as streets, roads, sidewalks, driveways, garages, parking areas, tennis courts, and patios is prohibited

- a. Driveways and roadways may be pre-washed in preparation for recoating and sealing.
- b. Tennis courts composed of clay or similar materials may be wetted by means of a hand-held hose equipped with an automatic shutoff device at the minimum rate necessary for maintenance. Automatic wetting systems may be used between the hours of 9:00 p.m. and 10:00 a.m. at the minimum rate necessary.
- c. Public eating and drinking areas may be washed using the minimum amount of water required to assure sanitation and public health.
- d. Water may be used at the minimum rate necessary to maintain effective dust control during the construction of highways and roads.

5. Use of water for washing or cleaning of mobile equipment including automobiles, trucks, trailers and boats is prohibited.

- a. Mobile equipment may be washed using hand held containers or hand held hoses equipped with automatic shutoff devices provided that no mobile equipment is washed more than once per calendar month and the minimum amount of water is utilized.

- b. Construction, emergency or public transportation vehicles may be washed as necessary to preserve the proper functioning and safe operation of the vehicle.
 - c. Mobile equipment may be washed at car washes that utilize reclaimed water as part of the wash process or reduce water consumption by at least 10% when compared to a similar period when water use restrictions were not in effect.
 - d. Automobile dealers may wash cars that are in inventory no more than once per week utilizing hand held containers and hoses equipped with automatic shutoff devices, automated equipment that utilizes reclaimed water as part of the wash process, or automated equipment where water consumption is reduced by at least 10% when compared to a similar period when water use restrictions were not in effect.
 - e. Automobile rental agencies may wash cars no more than once per week utilizing hand held containers and hoses equipped with automatic shutoff devices, automated equipment that utilizes reclaimed water as part of the wash process, or automated equipment where water consumption is reduced by at least 10% when compared to a similar period when water use restrictions were not in effect.
 - f. Marine engines may be flushed with water for a period that does not exceed 5 minutes after each use.
- 6. Use of water for the operation of ornamental fountains, artificial waterfalls, misting machines, and reflecting pools is prohibited.**
- a. Fountains and other means of aeration necessary to support aquatic life are permitted.
- 7. Use of water to fill and top off outdoor swimming pools is prohibited.**
- a. Newly built or repaired pools may be filled to protect their structural integrity.
 - b. Outdoor pools operated by commercial ventures, community associations, recreation associations, and similar institutions open to the public may be refilled as long as:
 - Levels are maintained at mid-skimmer depth or lower,
 - Any visible leaks are immediately repaired,
 - Backwashing occurs only when necessary to assure proper filter operation,
 - Deck areas are washed no more than once per calendar month (except where chemical spills or other health hazards occur),
 - All water features (other than slides) that increase losses due to evaporation are eliminated, and
 - Slides are turned off when the pool is not in operation.
 - c. Swimming pools operated by health care facilities used in relation to patient care and rehabilitation may be filled or topped off.
 - d. Indoor pools may be filled or topped off.
 - e. Residential swimming pools may be filled only to protect structural integrity, public welfare, safety and health and may not be filled to allow the continued operation of such pools.
- 8. Water may be served in restaurants, clubs, or eating-places only at the request of customers.**
- 9. All residential, business and industrial water users; whether supplied by public water supplies, self-supplied sources, or private water wells; who do not normally utilize water for any of the listed prohibited uses are requested to voluntarily reduce water consumption by**

at least 10%. This reduction may be the result of elimination of other non-essential water uses, application of water conservation practices, or reduction in essential water uses.

F. Public Notification procedures

Official notification of a drought emergency and the associated drought stage shall be effective upon their publication in any newspaper of general circulation in the affected county or counties. Drought stages and procedures should also be broadcast on any radio station serving the region and a notice included with the water bills of customers of a community water system.

Ongoing Public Information

A successful drought response plan will require public acceptance and understanding. The public should understand the need for continual conservation measures as well as the impact of inaction during periods of low precipitation that might lead to drought. Methods to educate the public regarding conservation needs as well as to inform of drought response needs may include:

- Presentations to school groups by health department, DEQ, and/or utility personnel.
- Periodic letters advising of climatic conditions and reminder of water conservation methods will be mailed or enclosed with bills.
- Drought information and conservation efforts or needs may will be mailed or enclosed with bills.
- Initiate periodic press releases regarding water conservation methods and/or needs.
- Initiate radio commentary/advisories.
- Localities and public service agencies will include conservation tips on their websites
- School programs/curriculum include water conservation methods; water supply information; and, the cycle of water resources.
- Building code changes to require low water use equipment.

G. Termination of Drought Declaration

Drought stages may be reduced in severity when the drought indicators for the source of the community water system has been lowered as shown by the DEQ Drought Indicator Analysis on-line tool or the water purveyor has recorded that the improved water level status has remained at that designation for 15 consecutive days, or by mutual agreement of the water purveyors in the locality.

When the drought indicator for the source of the community water system has returned to Normal as calculated by DEQ Drought Indicator Analysis on-line tool and has remained at that designation for 15 consecutive days, or by mutual agreement of the water purveyors in the locality, or when the declaration of a water emergency is lifted by the Governor of Virginia, the drought management requirements for that stage may be lifted. All customers will be notified in accordance with Paragraph F. It should be emphasized that personal conservation efforts should be maintained to avert other emergency situations.

H. Implementation

A Drought Ordinance is the tool to enforce water conservation efforts during a drought emergency. Local governments of the Commonwealth are authorized to adopt local ordinances to enforce the mandatory non-essential water use restrictions and to establish,

collect, and retain fines for violations of these restrictions. The ordinances should provide for the following:

1. **Authority**—Define who has the authority to declare drought or emergency conditions and impose water conservation measures.
2. **Conditions for Drought Declaration**—Set forth the conditions (drought stages) for drought declaration and potential water shortage.
3. **Additional Measures**—Authorize the locality to implement additional restrictions if needed in extreme emergency situations and prior efforts were insufficient to produce adequate water savings. *(recommended)*
4. **Enforcement**—Specify actions and/or penalties that will be imposed upon violators of the drought management ordinance.
5. **Appeals Procedure**—Upon declaration of the Drought Warning stage, establish an appeals review board to review applications for exemptions and institute power to approve, modify, or revoke such determinations. *(recommended)*
6. **Public Notice and Duration of Restrictions**—Indicates that the above restrictions shall become effective upon their being printed in any newspaper of general circulation within the locality, and/or broadcast upon any radio or television station serving the locality. This section also states that the Drought Watch, Drought Warning, and Drought Emergency Stage restrictions shall remain in effect until the designated authority determines that a water emergency in the locality no longer exists.

Adopted Drought Response Ordinances and supporting resolutions from Lake Country localities are contained in Appendix F.