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DECLARATION OF A STATE OF WATER SUPPLY EMERGENCY
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The purpose of this document is to state Department policy and procedure with regard to declaring, terminating, and extending a state of water supply emergency pursuant to Massachusetts General Law (MGL) c. 21G, sec. 15, 16, and 17 (Water Management Act). The emergency provisions allow the Department to declare a state of water emergency at the request of a public water supplier and to condition the declaration so as to require measures to end the emergency situation. This document also describes the conditions under which a municipal public water supplier may impose local mandatory water use restrictions pursuant to MGL c. 41, sec. 69B. This policy should be read together with the Massachusetts Water Management Act, which contains many important provisions not included in this policy.

Policy

The following policy and procedure shall be followed when processing a petition from a public water supplier for a declaration of a state of water supply emergency in accordance with MGL c. 21G, sec. 15, 16, and 17.

The power granted the Department by Water Management Act does not include the authority to impose a state of water supply emergency on a public water supplier who does not request it. In cases where no request is made by the public water supplier, and the Department finds upon its own investigation that there is an existing or impending shortage of water which endangers public health, safety, or welfare, the Department may issue an administrative order requiring the public water supplier to take specific action to relieve the situation under MGL c. 111, sec. 160.

The Department may also issue orders pursuant to MGL c. 111, sec 160 when it finds upon investigation that measures are necessary to ensure the delivery of a fit and pure water supply to all consumers.

Definitions

“Allowable withdrawal rate” means the maximum day yield divided by the peaking factor.

“Average day demand” means the average daily demand on a water supply system over any one month.

“Contingency plan” means a written plan establishing operating procedures for adequately handling water supply emergencies. The plan shall include provisions for emergency water supply in the event of a sudden loss of existing sources and for a progressively stringent schedule for limiting water use during seasonal and extended dry periods. For the purposes of this policy the Drought and Emergency Procedures/Planning section of the Water Resources Commission’s Water Conversation Plan will serve as a contingency plan.

“Department” means the Department of Environmental Protection.

“Division” means the Department’s Drinking Water Program.

“Drought” means a condition of dryness due to lower than normal precipitation, resulting in effects such as reduced stream flows, reduced soil moisture, and lowering of the potentiometric surface in wells.

“Emergency connection” means any emergency connection either approval pursuant to MGL c. 21G or authorized by law to provide a necessary or adequate water supply and shall include connections to other existing supply systems, the obtaining of water directly from a new source or a previously abandoned source, or the obtaining of greater amounts of water from an existing source.

“Existing demand” means the average daily consumption over the past two years, or such lesser period as the Department may determine to be adequate to provide an accurate figure, based on meter readings.

“Existing water service connection” means an active water supply service including connecting piping and a water meter.

“Increase in existing connection” means any activity which will increase the anticipated consumption of water at an existing meter by more than 10% above the existing demand at that service over the past two years.

“Maximum day yield” means the pumping capacity of all sources based upon 24-hour pumping.

“Moratorium” means restrictions on new connections to a water system.

“New connections” means any new water supply service which requires installation of a new (not replacement) meter, except any particular connection mandated by a court order.

“Peak day demand” means the peak demand in any given month.

“Peaking factor” means two times the existing demand on a system unless a different number is indicated by the historical record.

“Public water supplier” means any city, town, district, water company, public agency or authority of the Commonwealth or its political subdivisions which operates a public water system.

“Public water system” means a system for the provision of the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year.

“Unaccounted for water” means water withdrawn by a purvey or from a source and not accounted for as being delivered to customers.

“Water” means all water beneath or on the surface of the ground whether wholly or partly within the Commonwealth.

“Water bank” means an allocation method which requires that water withdrawn from new water sources, increases in existing water sources, or water recovered through demand management, or other means be divided between new users and the reduction of a water deficit situation.

“Water demand increase” means the projected consumption of water for any new connection or increase in demand in an existing connection recommended to the Department by the municipality for approval. Projections shall be made consistent with good planning practice and shall be verified based on the actual meter reading during the first six months of full operation.

“Water demand decrease” means the projected water savings to be achieved through actions including but not limited to termination of services, reduction in services, installation of permanent water conservation devices, detection and repair of leaks, and rehabilitation of mains. Projections of water savings shall be made consistent with good engineering practices and must be measurable and verifiable.

“Water supply emergency” means one of the following situations.

“Short-term water supply emergency” means the problem has been identified and can be remedied quickly and is not expected to recur. (Short-term water supply emergencies do not include water supply emergencies that occur repeatedly for the same reason. That type of water supply emergency indicates a more serious, longer-term problem and will be classified as an interim or a long-term water supply emergency).

“Interim water supply emergency” means that additional sources have been identified or are in the process of being developed or that water sources which had been previously closed will be brought back on line.

“Long-term water emergency” means that no permanent solution to the state of water supply emergency has been identified.

Department Policy on Water Emergencies

It is the Department’s policy to:

- Ensure that no area served by a public water system will be without water.
- Ensure that public health, safety, and welfare concerns are adequately addressed during any Department declared state of water supply emergency.
- Encourage water conservation as a means to control demand.
- Encourage and assist public water suppliers to develop or expand existing water sources where water supply deficiencies exist which cannot be eliminated through conservation.
- Assist in the resolution of emergency water supply problem(s), and to guide public water suppliers in meeting long-term water supply needs within each area served by the public water system.
- Work with public water suppliers to develop specific and practicable contingency plans and water supply emergency responses and wherever feasible, prior to the issuance of an order by the Division, solicit recommendations from public water supplier seeking an emergency declaration..
- Encourage public water suppliers to develop and implement drought management and contingency plans which become progressively more stringent depending on the seriousness of the state of water supply emergency, the time needed to provide permanent solutions, the availability of emergency relief, environmental impacts on both the users experiencing the emergency as well as other uses who depend, or may in the future depend on any emergency connection.
- Encourage public water suppliers to take advantage of the technical and financial assistance programs offered by the Commonwealth.
- Ensure that any public water supplier receiving water through an emergency connection is taking all reasonable steps to reduce the demand for water for the duration of the state of water emergency.

Locally Imposed Water Use Restrictions

The Department believes it is the best interest of municipal public water suppliers and the Department for communities with properly enacted municipal legislation to impose mandatory water use restrictions during

periods of high water demand without requesting a formal emergency declaration from the Department. Pursuant to MGL c. 41, sec. 69B, restrictions that may be imposed through local registration include odd/even day watering bans, prohibitions on filling swimming pools, and the use of automatic sprinkler systems. Persons violating the locally imposed restrictions are subject to civil fines. Before enacting local legislation, municipal counsel should be consulted to ensure the legislation is enforceable and legally valid.

The Department requires all public water systems establishing a mandatory restriction on water use to notify the Department in writing within 14 days of its effective date. In its notice to the Department, the water system shall include all appropriate regulations, by laws, or ordinances establishing and imposing the restriction.

If a public water system is experiencing complex system problems affecting its ability to consistently provide an adequate supply of water, adapting and implementing a bylaw may not address the problem. The Department strongly suggests that systems experiencing such problems should consider requesting from the Department a declaration of a state of water supply emergency, pursuant to MGL 21G.

The Department has developed a model bylaw for communities wishing to establish enforceable mandatory water use restrictions. Copies of the model by law are available from the Water Management Program.

Petitioning For A Declaration Of A State of Water Supply Emergency

Pursuant to MGL 21G section 15, any public water supplier may petition the Department for a declaration of a state of water supply emergency. The Department will review any petition submitted by a public water supplier for a declaration of a state of water supply emergency.

It is the policy of the Department not to approve a petition for a state of water supply emergency from any public water supplier who represents a public water system where a water source has been closed on local authority and that closure is a primary cause of water shortage unless the closure is approved by the Department.

Contents Of A Plan To Bring An End To A State of Water Supply Emergency

Pursuant to MGL 21G section 15, public water suppliers who petition the Department's for a declaration of a state of water supply emergency must, on DEP request, submit for review and approval, their plan for bringing about an expeditious end to the state of water supply emergency. For the purpose of this policy, public water suppliers will be required to submit as their plan a completed Water Resources Commission Conservation Plan and a written discussion of each of the following:

1. Past water supply emergency situations with this supply system and the cause(s) of such situations.
2. Causes of the present alleged state of water supply emergency.

Situations for which the Department may declare a state of water supply emergency include, but are not limited to, one or a combination of the following:

- a. Mechanical failure or similar type of emergency which results in an inability to meet average daily demand for water, including inability to maintain storage tanks, loss of power, loss of pumping capacity, loss of storage capabilities, or major breaks or leaks.
- b. Water Quality Emergencies – contamination of the public water supply, the distribution system or of storage tanks and inability to meet average daily demand with remaining public water supplies.
- c. Inadequate source, inadequate distribution system capacity, inadequate storage capacity or drought. This also includes seasonal water shortages which repeatedly affect the same water system.

3. Historical and up-to-date water demand and supply data including a comparison of existing average day demand, maximum day demand, and fire flow requirements with current system pumping capacity, storage capabilities and system safe yield;
4. Estimated length of time that the water supply emergency is expected to exist or continue (six months, one year, or more), and the factors upon which the predicted end of the emergency is based;
5. Any bans or restrictions that are to be implemented immediately or in the future as a result of the state of water supply emergency;
6. A statement describing how the community affected by the emergency will be kept informed of the state of water supply emergency, (through newspaper advertisements, flyers, bill stuffers, etc.);
7. Any rehabilitation projects to upgrade or expand the system that are planned or in progress, including a discussion of how any of these projects may help relieve or eliminate the state of water supply emergency;
8. Identification of any possible interconnection with another public water supplier and their viability. A public water supplier, requesting approval for an emergency connection under MGL 21G section 16, must also indicate whether approval of a Water Bank is being sought.

Declaring A State Of Water Supply Emergency

Upon receiving a petition for a declaration of a state of water supply emergency from a supplier the Department may declare a state of water supply emergency if it finds that the demand for water exceeds the availability of water by 10% or there is an existing or impending shortage of water in part or in all of the areas served by the public water system which presents a threat to public health, safety or welfare. The Department will limit the applicability of any state of water supply emergency to the city or town submitting the petition or to the geographical area served by the public water system submitting the petition. Water suppliers whose service area crosses Department regional boundaries shall make submittals to the DEP Boston Office, where all determinations will be made that would normally be made by the appropriate DEP Regional Office, provided, however, that the DEP Boston Office shall consult with the DEP Regional Office prior to making a determination.

Procedure

Verbal Authorization

Whenever the Department determines that the protection of the public health requires an immediate declaration of a state of water supply emergency, it may verbally authorize a water supply emergency. A verbal authorization of a water supply emergency will be valid for no more than 10 business days unless, and on the condition that the water supplier complies with the procedures for written authorization set forth below. A written declaration shall be issued as soon as possible after the verbal authorization. The Regional Director will notify Water Management Program staff within 48 hours of issuance of a verbal declaration of a state of water supply emergency.

Under a verbal authorization of a water supply emergency the Department may authorize the public water supplier to augment supply and implement bans or restrictions on certain water uses. Enforcement measures may include fines where authorized by by-law or ordinance and the disconnection or shutoff of service at the meter or curb cock.

Written Authorization

1. The public water supplier should submit to the DEP Regional Office in the region where the water supply is located, a written petition for a declaration of a state of water supply emergency along with a plan to bring about an end to the state of water supply emergency.

The DEP Regional Office may accept an outline of the plan provided that the public water supplier includes a brief discussion of specific action that may be taken immediately to relieve the state of

- water supply emergency and agrees to submit a complete plan within 30 days of any declaration of a state of water supply emergency.
2. If time and conditions permit, a meeting will be scheduled between the public water supplier and the DEP Regional Office, prior to any declaration of a state of water supply emergency, to discuss the situation in detail and to design conditions and orders accordingly.

 3. If it is not possible to arrange a meeting prior to the issuance of a declaration of a state of water supply emergency, the DEP Regional Office may proceed with the following steps, provided that such a meeting with the public water supplier is scheduled. All water supply declarations of a state of water supply emergency and orders issued in this manner should be considered interim measures, and may be changed upon meeting with the public water supplier.
 4. The DEP Regional Office will review the petition and the plan to make a final determination as to:
 - a. Whether a state of water supply emergency should be declared and;
 - b. Whether any such state of water supply emergency should be classified as an interim, short term, or long term state of water supply emergency.

 5. If the Regional Director finds that a state of water supply emergency exists the Department will take the following steps.
 - a. The DEP Regional Office will draft a declaration of a state of water supply emergency and order following the format in Attachment A. Any orders included in the declaration will be specific to the type of water supply emergency and the situation. Requirements may include but are not limited to:
 - (1) A detailed analysis of existing and future supply and demand
 - (2) A plan for short-term measures to provide immediate relief to the water supply emergency
 - (3) A plan for long-term actions designed to prevent recurrence of the emergency
 - (4) A program for water auditing including installation of water meters
 - (5) A contingency plan
 - (6) A plan to implement system rehabilitation
 - (7) Implementation of a leak detection program
 - (8) Development of new sources or construction of storage

 - b. The Department will specify the actions the public water supplier is authorized to take under the declaration of water emergency. These may include but are not limited to:
 - (1) Bans or restrictions on certain water uses including any necessary enforcement provisions.
 - (2) Provisions to augment supply
 - (3) The initiation of water bank as a mechanism to restrict or limit issuances of new water connections.

 - c. The provision of any order pursuant to a declaration of a state of water supply emergency shall be approved by the Regional Director prior to issuance. A copy of the final declaration of a state of water supply emergency must be forwarded to the Water Management Program staff in Boston.

If the emergency is the result of unusual circumstances or will require restrictions on future connections to the water system, a copy of the draft declaration shall be forwarded to the DEP Boston Office for consultation prior to its issuance.

- d. The Regional Director will notify the Water Management Program, the Legislative Liaison, the Commissioner's Office, the Public Affairs Office (PAO), the Massachusetts Civil Defense Agency and the Department of Public Health at least 24 hours prior to issuance of a written declaration of a state of water supply emergency.
 - e. The legislative Liaison will notify appropriate legislators and PAO will prepare a press release if appropriate.
 - f. The DEP Regional Office will prepare and send the final declaration of a state of water supply emergency to the public water supplier, and the Chairman of the Board of Selectman or the Chairman of the City Council and the Mayor or the chief official of the water company or district, as the case may be. The declaration of a state of water supply emergency and order will be sent to the public water supplier by certified mail, return receipt requested, or by hand. The public water supplier may be informed of its contents by telephone prior to delivery.
6. If the Regional Director finds that no state of water supply emergency exists the DEP Regional Office will inform the public water supplier. The DEP Regional Office may request that the public water supplier provide regular updates should the situation warrant such action.

Terminating A State Of Water Supply Emergency

All declared states of water supply emergency will remain in effect for the entire six month period following the date of its issuance unless revoked by the Department. The declaration will be revoked if the Department finds that:

1. The demand for water no longer exceeds available supply;
2. The public health, safety, or welfare is no longer endangered by an existing or impending water shortage in part or all of the area to which the state of water supply emergency applies; and
3. The public water supplier has demonstrated to the Department that each of the following has occurred.
 - a. The facts relied upon by the Department in its declaration of the state of water supply emergency have been altered or no longer exist.
 - b. The public water supplier has successfully implemented its plan for bringing about an end to the state of water supply emergency and plans for preventing similar occurrences have been developed.
 - c. The public water supplier has complied with, or is taking action to comply with all orders issued with the Department's declaration of a state of water supply emergency to the satisfaction of the Regional Director.

Procedure For Termination

1. The DEP Regional Office will review the existing state of water supply emergency with the public water supplier.
2. The public water supplier will demonstrate that all conditions of the water supply declaration of a state of water supply emergency and orders have been met and that all conditions for terminating a state of water supply emergency have been met.
3. The DEP Regional Office will make a recommendation to the Regional Director to terminate the state of water supply emergency.
4. When the Regional Director determines that the demand for water no longer exceeds available supply or that public health, safety or welfare is no longer endangered by a water supply shortage, the DEP Regional Office will be notified. The DEP Regional Office will notify the public water supplier and the chairman of the Board of Selectmen or the Chairman of the City Council and the Mayor or the chief official of the district or water company, as appropriate, of the determination in

writing. A copy of the termination notice will be forwarded to the Water Management Program staff in Boston.

- a. The Regional Director will notify the Water Management Program, the Legislative Liaison, the Commissioner's Office, the Public Affairs Office (PAO), the Massachusetts Civil Defense Agency and the Department of Public Health at least 24 hours prior to issuance of a written termination of a declaration of a state of water supply emergency
- b. The Legislative Liaison will notify the appropriate legislators and PAO will prepare a press release if appropriate.
- c. The DEP Regional Office will prepare and send the termination of a declaration of a state of water supply emergency to the public water supplier, and the Chairman of the Board of Selectmen or the Chairman of the City Council and the Mayor or the chief official of the water company or district as appropriate. The termination of a state of water supply emergency and order will be sent to the public water supplier by certified mail, return receipt requested, or by hand. The public water supplier may be informed of the termination by telephone prior to delivery.

Extensions to A State Of Water Supply Emergency Beyond The Six-Month Period

No state of water supply emergency will remain in effect for more than six months in the aggregate in any 12-month period unless the Department determines that the demand for water continues to exceed available supply by 10% or that a longer state of water supply emergency is required to protect the public health, safety, and welfare in all or in part of the area served by the public water system, and that the public water supplier has demonstrated the following to the department.

1. The problem which caused the state of water supply emergency has not been corrected. (The DEP Regional Office should consider changing the type of water supply emergency to an interim or a long term water emergency should it be determined that the problem will take longer to remedy or is not reparable).
2. Records indicate that existing and future demand cannot be met with existing water supplies.
3. For interim or long term water supply emergencies, the new source has not been identified or if it has, it has not been put on line or it is still not adequate to meet existing demands.

An extension will be considered on DEP's own initiative or at the request of the public water supplier.

Before considering whether to continue a state of water supply emergency the Department will require the public water supplier to submit an update to his plan to bring about an end to the state of water supply emergency.

In reviewing the need for an extension, DEP will take into consideration efforts taken by the public water supplier to reduce consumption, implement long term plans, and comply with any requirements or orders.

Procedure

1. If the Department determines that an extension to the state of water supply emergency is required, or if the public water supplier requests an extension of the state of water supply emergency, the public water supplier should submit to the DEP Regional Office an updated plan to bring about an end to the state of water supply emergency PRIOR to the end date of the state of water supply emergency in effect at that time. (If the public water supplier is requesting an extension then it should include a written request with the plan).
2. Generally, a meeting should be held between the public water supplier and the DEP Regional Office to discuss the request and the Department's determination of necessity and the progress made toward abating the emergency by the public water supplier since the last declaration of a state of water supply emergency. Documentation of such progress should be provided by the petitioning public water supplier

3. Following the meeting or discussion with the water supplier, the DEP Regional office will make a recommendation to the Regional Director and the DEP Boston Office to continue, amend or to allow the declaration to expire.
4. If the Regional Director and the DEP Boston Office determine that a longer state of emergency is required to protect the public health the DEP Regional Office will amend the declaration of water supply emergency and the following notice procedures will be followed:
 - a. The Regional Director, in consultation with the DEP Boston Office, will approve the water supply declaration of a state of water supply emergency and Order prior to issuance. A copy of the final declaration of a state of water supply emergency will be forwarded to the Boston Office for the files.
 - b. The Regional Director will notify the Water Management Program, the Legislative Liaison, the Commissioner's Office, the Public Affairs Office, the Massachusetts Civil Defense Agency, and the Department of Public Health at least 24 hours prior to issuance of the amended declaration of a state of water supply emergency.
 - c. DEP's Legislative Liaison will notify appropriate legislators, and PAO will prepare a press release if appropriate.
 - d. The DEP Regional Office will draft and send the amended declaration of a state of water supply emergency to the public water supplier, and the Chairman of the Board of Selectmen or the Chairman of the City council and the Mayor, or the chief official of the water company or district as appropriate. The declaration of a state of water supply emergency will be sent by certified mail, return receipt requested, or by hand. The DEP Regional Office may inform the public water supplier of its contents over the phone prior to delivery.
5. If the Regional Director and the Boston Office determine that no basis for continuing state of water supply emergency exists they will forward their decision to the DEP Regional Office. The notice procedure outlined above in 4b-4d (with a denial substituted for the amended declaration in 4d) shall be followed. The DEP Regional Office may require the public water supplier to provide regular reports of progress or problems.

Policy on Emergency Interconnections, Takings, Purchase And Sales Of Water

During a state of water emergency, declared under section 15, of the Department has approved a plan designed to bring about an expeditious end to the emergency, a water company, public agency or authority of the Commonwealth or its political subdivisions which is the operator or a public water system affected by the emergency may, for such periods of time as may be approved by the Department, not to exceed six months cumulatively in any twelve month period, take by eminent domain under chapter 79 the right to use any land for the time necessary to use such water, or purchase water from another public water system; provided, however, that during a state of emergency affecting the water system of the Massachusetts Water Resources Authority, such power of eminent domain may be exercised by the Division of Watershed Management of the Metropolitan District Commission. Any operator of a public water system may, for such periods of time and may be approved by the Department, sell to any water company, public agency or authority of the Commonwealth or its political subdivisions, which has been authorized to make purchases of water pursuant to this section, such volumes of water as may be available for sale from time to time.

No taking, purchase or sale shall be made pursuant to this section unless the Department issues an order pursuant to MGL 21G, section 17 authorizing the taking, purchase or sale.

Should the Department approve a taking, purchase or sale, authorization for that action will be given in writing.

The Department may permit the use of emergency connections. The Department will review emergency connection options with the petitioning public water supplier and the donor community (if applicable).

In cases where an emergency connection between two public water suppliers is necessary, the Department will issue an order to the donor public water supplier requiring that the distribution of a specified amount of water to the public water supplier found to be in a state of water supply emergency. The Department's order will require the public supplier receiving water through an emergency connection to take all reasonable steps to reduce the demand for such water for the duration of the state of water supply emergency.

All parties must take steps to establish that the use of any emergency connection will not endanger or threaten to endanger the public health, safety or welfare of persons served by the donor community and that all conflicting or competing uses of the proposed emergency interconnection are considered and mitigated where possible.

In the Department's review of emergency water supply options, the DEP regional staff will prioritize supply augmentation options as follows:

1. Connection to an existing public water supply system
 - a. activation of an existing connection
 - b. creation of a new connection
2. Activation of an abandoned or reserve public water supply.
3. Development of new water supply source in the area served by the public water supplier (permanent or temporary).
4. Development or discovery of a new water supply source in a nearby community in the same river basin. Many public water suppliers have entered into agreements to draw from water supply sources owned or operated by other communities during water supply emergencies. It is the Department's policy to encourage public water suppliers to regularly review and update these agreements.
5. Development of an out of basin source.

Public Notice

During a state of water supply emergency, DEP will ensure that the people served by the public water system are notified of the emergency and kept informed of its status. In addition, the Department, through the Boston office, will maintain and update a monthly tracking list of public water systems operating under a state of water supply emergency and make the information available to Legislators, appropriate state agencies, and the Massachusetts Civil Defense Agency. The public water supplier will notify persons served by the public water system of the state of water supply emergency either through newspaper announcements, bill stuffers, or electronic media and forward copies of any water supply declaration of a water supply emergency to the City Council, the Board of Selectmen, or chief official of the water company, or district, etc. and provide monthly updated information regarding the state of water supply emergency to the public for as long as the state of water supply emergency exists.

Limitations On Connections To A Water System

It is the policy of the Department to restrict new connections to a water system only in extreme circumstances when it is determined that other measures will not adequately address public health and safety. In each case, the Department will carefully evaluate the facts to ensure that limiting connections to a water system is justified and a necessary means to protect the public health and safety. The public water suppliers will be ordered to take actions necessary to correct the system deficiencies. DEP will use water banks to respond to source-related or source and storage-related emergencies which will require several months to remediate from the time that new connections are actually halted. A water bank is a flexible method to control which can be shaped to address the situation in each public water supply. Credits to the bank are made for conservation, leak repair and new source development with limited withdrawals allowed under certain circumstances to accommodate hardship cases and limited growth.

The Department will use moratoriums on new connections to respond to emergencies resulting from pressure or storage problems. A moratorium is a prohibition on new connections to the water supply. The area impacted by the moratorium should be limited to that portion of the system where the problem exists or which could contribute to the problems experienced. The area is subject to the moratorium should be modified whenever information is available which demonstrates that new connections to portions of the distribution system will not exacerbate existing problems. For either a water bank or a moratorium, DEP will direct the public water supplier to determine the method used to restrict new connections and how allocation decisions are made. The Department will provide oversight and technical assistance but will not become involved in determining how hardship and growth decisions will be made. In cases where an emergency interconnection to another public water system is being used, the Department will not allow water from that system to be credited to a water bank.

For an initial sixty (60) days from the time DEP authorizes or orders a water bank to be in place, a moratorium will be instituted. During the first thirty (30) days of the moratorium the public water supplier will be directed to provide the Department with a plan detailing the implementation details of the water bank. The bank should be fully implemented by the end of the sixty (60) day moratorium. The Department may provide the public water supplier with examples from other communities.

As part of a petition for a declaration of a state water supply emergency, the public water supplier may request to allocate water by means of a water bank or to use a moratorium or the Department may independently require implementation of either a water bank or moratorium. In the first case, the public water supplier will characterize the emergency and provide the information required below. In the latter case, the Department may, depending on the circumstances of the case:

1. Issue an emergency declaration with a connection moratorium pending submittal of the additional information within thirty (30) days; or
2. Issue an emergency declaration and reserve the decision on the moratorium until after evaluation of the additional information to be submitted within thirty (30) days.

The public water supplier should include or the Department may request, a discussion of the nature of the emergency which shall include a characterization of the emergency as source dependent, storage dependent and/or distribution system dependent.

If the emergency is **SOURCE** dependent the water supplier shall:

1. Calculate the maximum day yield in million gallons per day of existing sources based on 24-hour pumping. The allowable withdrawal rate shall be determined by dividing the maximum day yield by the peaking factor (typically 2, unless pumping records demonstrate clearly that another multiplier is more appropriate). Actual consumption shall be compared to the allowable withdrawal rate for the preceding two years. An emergency in which there is a continuous exceedance of allowable withdrawals for a significant portion of the past two years, based upon the historical record and opinion of the DEP Regional Office, shall be eligible for consideration for a water bank after the information requested in b,c,d and e has been reviewed. A graph showing the maximum day yield, peak demand, and allowable withdrawal rate must be provided.
2. Provide information to support the projected increase or decrease in supply over the next three years.
3. Provide information to support the projected demand increase for the next 12 months based upon construction which is already underway or authorized.
4. Provide information to support the projected demand, with use restrictions in place, for the next three years.
 - a. Assuming no water bank
 - b. Assuming a water bank

5. Compare the anticipated supply and demand based upon the history of supply and demand for the past two years and the projections for the next three years.

If the emergency is **STORAGE** dependent, the water supplier should:

1. Calculate recommended storage for fire protection;
2. Define existing storage; and
3. Project both for the next three years and compare results.

If storage is significantly less than the recommended levels and new storage cannot be built for several months from the time new connections to the water system are restricted and the fire chief documents a concern regarding the ability to meet fire flow needs and there is also a source deficiency as described above, the Department may approve or impose a water bank. If there is no source component to the situation, then a moratorium may be authorized or imposed.

If the emergency is **DISTRIBUTION** system dependent, the water supplier should:

1. Define the severity, extent and location of the system problem, and document the recurrence over a period of time.
2. Define any risks posed by the problem-pressure, backflow/fire.
3. Define the deficiency in the distribution system known or suspected to be the cause of service problems.
4. Project a timetable for corrective action.
5. Project the extent and severity of the problem with and without water bank restrictions.
6. Define the area to be impacted by the water bank.

If upon review of the above information the Department finds that pressure in all or a portion of the system is deficient, the Department may authorize or impose a moratorium.

Upon reviewing a petition for a state of water supply emergency declaration (which may or may not include a request from the public water supplier to declare a water bank or moratorium) the Department may find that implementation of a water bank or moratorium is necessary to protect the public health and safety. The Department may issue an order to the public water supplier to maintain a water balance log to implement a water bank whenever it deems control of new water connections to be necessary under the circumstances described above.

The Department will establish a water bank or moratorium only in cases of long term water supply emergency when it determines that the public water supplier needs time to finance and construct additional facilities.

In the opinion of the Department a water bank or moratorium is warranted only when the projected supply and demand analysis indicates that there will be no relief from the causes of the water supply emergency for a substantial period from the time that new connections are actually restricted.

Procedure For Department Approval Of Water Bank Or Moratorium

1. The DEP Regional Office will review all the information submitted. Upon review of the information available the chief will make a recommendation to the Regional Director and the Division Director.
2. If the Regional Director and the Division Director determine that a water bank or moratorium is necessary they relay their decision to the DEP Regional Office, the DEP Regional Office will draft the water supply declaration of a state of water supply emergency and Order to include a water bank. Notice of determination of the status of a water bank or moratorium shall be provided in the manner prescribed in the approval or denial of an extension of a declaration of water supply emergency.

3. The duration and terms of any water bank or moratorium shall be determined by the Regional Director and Division Director at the recommendation of the DEP Regional Office.

Orders and Conditions Of A Water Supply Declaration Of A State Of Water Supply Emergency And Order

Under MGL 21G section 17, the Department is authorized to issue orders, applicable within or outside the area in which the water emergency exists during a state of water supply emergency. The Department will issue all declarations of a state of water supply emergency in the form of an order. Orders may require the public water supplier to take specific action outlined in this plan to bring an end to the state of water supply emergency or other actions deemed necessary and appropriate by the Department.

The Department may also issue orders requiring public water supplier to:

1. Establish priorities for the distribution of any water or quantity of water use and to implement any priority scheme established. Any such scheme may include establishing a priority system for issuing and denying building permits, based on the priority given to existing services.
2. Permit any public water supplier to reduce or increase by a specified amount or to cease the distribution of the water, or to distribute a specified amount of water to certain users as specified by the Department, or to share any water with other water supply systems. This includes orders to take land by eminent domain, or to buy water from another public water supplier, or to require a public water supplier to sell water.
3. Direct any public water supplier to reduce, by specified volume, the withdrawal or use of any water, or to cease the withdrawal or use of any water.
4. Require the implementation of specific water conservation measures whether or not mentioned in the plan. Water conservation measures may include but are not limited to:
 - a. Within 30 days of the date of issue of the water supply declaration of a state of water supply emergency and Order, a completed plan to bring about an end to the state of water supply emergency.
 - b. Bans and restrictions on the use of water
 - c. A water audit (includes metering of service connections)
 - d. Leak detection and repair activities and programs
 - e. Public education activities and programs
 - f. Retrofit programs for public and private buildings
 - g. Measures for protecting existing water supplies
 - h. Other drought/emergency related measures designed to conserve water
5. Mandate the denial for the duration of the state of water supply emergency, of all applications for withdrawal permits within the areas of the Commonwealth to which the state of water supply emergency applies.

In addition, the Department may issue orders requiring the water suppliers to undertake any actions not specifically mentioned above, which in the opinion of the Department, are necessary to ensure delivery of fit and pure water.

Adopted: 2-13-97
Effective: 2-13-07
Date: 2-13-97

Arleen O'Donnell, Assistant Commissioner
Bureau of Resource Protection

ATTACHMENT A
TO
DWS POLICY 87-5
COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Town or District
WS ID #

Declaration of A State of
Water Emergency and Order

I. Parties

1. (Public Water Supplier) is a Massachusetts corporation established by Chapter _____ of the acts of _____, for the purpose of supplying the inhabitants of _____ with water. _____ is a public water supplier having its principal place of business at _____, Massachusetts.

or

1. (City or Town) is a duly constituted municipal corporation in the Commonwealth of Massachusetts. (City or Town) owns and operates a public water supply for the provision of _____, Massachusetts.

Or

1. (District) is a district established by _____ of Chapter _____ of the Acts of _____ for the purpose of providing water to its inhabitants. Its principal place of business is at _____, Massachusetts.

2. The Department of Environmental Protection ("The Department") is an agency of the Commonwealth having a principal place of business at One Winter Street, Boston, Massachusetts. The Department has authority to issue this declaration and order pursuant to MGL c. 21G, sec 15 and 17. The Department maintains a regional office at _____ Street, _____, Massachusetts.

II. FACTS:

2. On _____, 199 _____. Petitioned the Department for a declaration of a state of water emergency alleging:

- a. _____
- b. _____
- c. _____

4-6 . (Other facts in support of the Department's finding). State with precision any facts relevant to the determination that follows:

III. DETERMINATION

For reasons stated above, the Department hereby determines that a state of water supply emergency exists or impends within the area served by _____ in the Town of _____ which currently endangers the public health, safety or welfare of the person currently served and issues the following Order:

- 1. _____ shall—

(In addition to requirements deemed necessary by the Department to address the particular emergency-if no plan has been submitted-such plan must be included as a requirement. If the supplier is to take or purchase water or land for temporary supply for approval by the Department, authorization for that action must be included as well.)

- Include dates or number of days from date of issuance.

If _____ fails to comply with the provisions of this Order, MGL c. 21G, sec 14 requires the Department to assess a civil administrative penalty as provided in section sixteen of chapter twenty-one A, on the supplier. Each day of continued violation shall constitute a separate offense.

Issued on _____
By the Department of Environmental Protection

Regional Director

cc: Board of Health, _____
Board of Selectmen, _____
Executive Secretary, _____
Division of Watershed Management, Water Management program, Boston
Public Affairs Office
Office of the Commissioner
Office of the General Counsel, DEP, Boston
Legislative Liaison, DEP, Boston
Massachusetts Department of Public Health
Massachusetts Civil Defense Agency
Municipal Offices (as appropriate)

