



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
METROPOLITAN BOSTON – NORTHEAST REGIONAL OFFICE

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May 20, 2005

John K. McNabb, Chairman
Town of Cohasset, Water Department
339 King Street
Cohasset, Massachusetts 02025

RE: COHASSET – South Coastal Basin
Town of Cohasset
Program: Water Management Act
Action: Water Withdrawal Permit Approval
Activity: Transmittal # W048772
Permit #9P4-3-21-065.01

Dear Mr. McNabb:

Please find attached the following:

- Findings of Fact in Support of the Draft Permit Decision; and,
- Final Water Management Act Permit # 9P4-3-21-065.01 for the Town of Cohasset, Massachusetts.

Please note that the signature on this cover letter indicates formal issuance of the attached document. If you have any questions concerning this letter, please contact Kellie O'Keefe at 617-654-6522 or e-mail at Kellie.Keefe@state.ma.us.

Very truly yours,

Madelyn Morris
Deputy Regional Director
Bureau of Resource Protection

cc: DWP/Boston Office (no attachment)

Michael Sullivan, Chairman, Board of Selectmen, Town Hall, 41 Highland Ave., Cohasset, MA 02025
Thomas J. Keefe, P.E., Tutela Engineering Assoc., Inc., 12 Bay Rd., Wilmington, MA 01887
Michele Drury, DCR
Linda Marler, DCR
Kathy Romero, DEP

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WRITTEN FINDINGS OF FACT IN SUPPORT OF PERMIT DECISION:
WATER MANAGEMENT PERMIT #9P4-3-21-065.01

The Department of Environmental Protection (“DEP” or “the Department”) has completed the review of the Town of Cohasset’s (the “Town” or “Cohasset”) water withdrawal permit application dated March 15, 2004, Transmittal # W048772 and the Town’s December 20, 2004 response to the Order to Complete (“OTC”) issued by the Department on November 24, 2004. In addition, the Department reviewed the “Inter-Basin Transfer Application, Request for Determination of Insignificance”, the “Aaron River Reservoir Dam and Bound Brook Control Structure Flow Releases and Operational Plan”, the “Drought Management Plan” dated March 15, 2004 and Response to DEP and WRC Comments dated July 29, 2004, all prepared by Tutela Engineering Associates, Inc., Wilmington, MA. This review was conducted in regard to the permit application for Cohasset to withdraw water from the South Coastal Basin. The Department makes the following *Findings of Fact* in support of the attached permit, and includes herewith its reasons for issuing the permit and for the conditions of approval imposed, as required by the Water Management Act, M.G.L. c.21G, s. 11 and Massachusetts Water Resources Management Program Regulations, 310 CMR 36.00.

The Water Management Act Registration authorizes Cohasset to withdraw from its water sources an annual average daily volume of 0.65 million gallons per day (“MGD”).

The Town of Cohasset’s Water Management Act Permit # 9P4-3-21-065.01 authorizes the Town to increase its annual average daily withdrawal volume from Ellms Meadow Wellfield and Lily Pond, including Aaron River Reservoir, by 0.23 MGD through August 2005 and 0.30 MGD through August 2010. The Department acknowledges that on August 14, 2003, the Massachusetts Water Resources Commission approved Cohasset Water Needs Forecast (Permit Application – Exhibit L) to accommodate water purchases by Linden Ponds at Hingham, a retirement community currently under development, of up to 306,000 gallons per day at project completion anticipated in 2015. However the current permit expires on August 31, 2010. The Department cannot authorize water withdrawals beyond the expiration date of a permit term.

On April 2, 2004, the Department issued the Water Management Policy For Permit And Permit Amendment Applications And 5-Year Reviews. The guiding principles for this Policy are the goals set out in the Water Management Act, including the directive to ensure a balance among competing water withdrawals and uses and the statutory factors DEP is required to consider. This policy requires more protection of our stressed water resources through implementation of conservation standards and other measures affecting nonessential water uses, prevents conditions from getting worse by using higher standards to evaluate all proposed increases in water use, and requires increased withdrawals to evaluate the feasibility of mitigating impacts through offsets in water management elsewhere and implement those that are feasible, commensurate with the degree of stress in the basin and impact of the withdrawal. For the purpose of defining stressed water resources for the implementation of this policy, the Department adopts the stressed basin determinations contained in the Water Resources Commission (WRC) Report, *Stressed Basins in Massachusetts* (approved December 13, 2001). The Report evaluated hydrologic stress on flow, and developed a classification of high, medium, and low stressed basins or those defined as unassessed. The water management policy and guidance document may be accessed at: <http://www.mass.gov/dep/brp/wtrm/wtrmregs.htm>

The Town of Cohasset’s water sources are located in the South Coastal Basin. The Massachusetts Water Resources Commission Stressed Basin report, approved on December 13, 2001, classified that portion of the South Coastal Basin as being unassessed (unclassified due to a lack of data). To achieve the balance mandated by the Water Management Act, the Department has established the following performance standards for unassessed basins.

1. Residential per capita water use of 80 gallons per day or less; and
2. Unaccounted for water of 15% or less

The Department believes that through the implementation of all the terms and conditions of the Permit, the Town can continue to achieve the standard for residential per capita water (rgpcd) use and continue to meet or exceed the standard for unaccounted for water. The Town’s Annual Statistical Reports show that the Town has averaged 77 residential gallons per capita day (rgpcd) rate from 1998 to 2002, with usage between 62 rgpcd in 1998 and 85 rgpcd in 2002. The Town’s unaccounted for water has met the 15% standard, averaging 7% during the same 5 year period.

Special Condition # 1, Authorized Annual Average Withdrawal Volume indicates that the Permit and Registration together authorize Cohasset to withdraw from its water sources an annual average daily volume of 0.88 million gallons per day (MGD). The Permit further authorizes the Town to increase the permitted annual average daily withdrawal to 0.95 MGD in August of 2005 through August 2010.

Special Condition # 2, Maximum Authorized Daily Withdrawal Points authorizes daily withdrawal volumes from the Ellms Meadow Wellfield and Lily Pond, including Aaron River Reservoir, and limits the daily withdrawal volume to the Department approved daily withdrawal volume determined from the Ellms Meadow Wellfield replacement pumping test and the design capacity of the Water Treatment Plant supplied by Lily Pond and Aaron River Reservoir. Based upon information submitted in the pumping test report for the Ellms Meadow Wellfield dated September 25, 2002, the Department in a letter dated February 11, 2003 (Permit Application – Exhibit E) approved a daily withdrawal volume of 0.17 MGD and an approved pumping rate of 120 gallons per minute (gpm). Based upon information submitted in plans and specification dated December 22, 1975 by SEA Consultants, Inc., for Cohasset’s water treatment plant located off King Street, the Department in a letter dated January 14, 1976, approved a design capacity for the water treatment plant of 3.0 million gallons per day. In addition, the contract for water supply improvements, “Contract 2 Construction of Water Treatment Plant, February, 1976” by SEA Consultants, Inc. (Permit Application – Exhibit K) identifies the specifications for the inlet screens to the treatment plant and states that the inlet velocity shall not be greater than 0.5 feet per second. This inlet velocity not only protects the intake structure from damage from ice buildup, it minimizes entrainment and impingement of fish and larvae.

The Town discontinued use of the Sohier Street Wells in the 1970’s, when the water treatment plant first went online and the well pumps could not overcome the increased distribution system head resulting from treatment plant pumping. The Town determined that these wells were not needed to meet demand at that time, but maintained them as emergency sources. Thus, the wells were not in use during the registration period, but were erroneously listed on the registration statement dated January 17, 1989. This error was not corrected when the registration statement was renewed on September 24, 1997. The Department has sent under separate cover a modified registration statement correcting this inaccuracy.

The Town is currently investigating the rehabilitation/replacement of the Sohier Street Wells. In the response to the Order to Complete, Cohasset provided a schedule for the permitting and construction of the replacement wells. The estimated timeline for completion of the work is July 1, 2007. Although, the Sohier Street Wells were included in the Town’s permit application, the Department is unable to evaluate the well yield and environmental impacts from pumping of these sources at this time. Therefore, the wells are not included in this permit. When the results of the pumping test of the Sohier Street Wells are available and the Department is able to evaluate impacts from the water withdrawal, Cohasset may apply for a Water Management Act Permit Amendment for addition of those sources.

Special Condition # 3, Zone of Contribution (Zone II or Zone III) Delineation The Department in a letter dated February 11, 2003 (Permit Application – Exhibit E) accepted the existing Zone II delineation, previously approved on September 20, 2001, for the Ellms Meadow Wellfield replacement.

Special Condition # 4, Wellhead Protection The Department requires the adoption of land use controls and water supply protection measures meeting the requirements of 310 CMR 22.21(2) within the Zone II boundaries of your Ellms Meadow Wellfield. For further information regarding this special condition and the adoption of land use controls please contact Anita Wolovick, DEP-NERO, Drinking Water Program, at (617) 654-6535.

Special Condition # 5, Surface Water Protection The Department requires the adoption of land use controls and water supply protection measures meeting the requirements of 310 CMR 22.20C(1)(e)(2) within the Zone A of Lily Pond and Aaron River Reservoir. The Department in a letter dated October 4, 2002 accepted the document titled “Surface Water Supply Protection Plan For Lily Pond & Aaron River Reservoir, dated June 2002” (Permit Application-Exhibit J) and approved the plan as meeting the requirements of the Department’s “Developing a Local Surface Water Protection Plan, updated May 2000” and 310 CMR 22.20C(1)(d)(4). For further information or for assistance with meeting the requirements of this special condition and developing land use controls please contact Kathy Romero, DEP, Drinking Water Program, at (617) 292-5727.

Special Condition # 6, Firm Yield of Surface Water Supplies

The document submitted by Tutela Engineering Associates, Inc entitled "Draft Firm Yield Evaluation, Cohasset, MA Water System" dated June 2, 2003 modeled several reservoir configurations and reservoir release options utilizing DEP's "Firm Yield Estimator Version 1.0"

In addition, Tutela Engineering Associates, Inc. provided further clarification in a July 29, 2004 "Response to DEP and WRC Comments, Exhibit B." The combined Firm Yield of 4.06 million gallons per day represents the modeling of Lily Pond and Aaron River Reservoir in series with the required releases to Bound Brook outlined in Special Condition # 7.

Special Condition # 7, Seasonal Flow Release and Drought Management Plan On November 4, 2004, the Water Resources Commission unanimously determined that the proposed purchase of water by Linden Ponds at Hingham from the Cohasset water system, through an interconnection between Cohasset and the Aquarion Water Company, Hingham, is insignificant under the Interbasin Transfer Act. This determination is made based on establishing a protocol for maintaining minimum seasonal releases through fish ladders at Aaron River Reservoir and Bound Brook Control Structure. To satisfy instream flow concerns and anadromous fish passage needs, Cohasset developed the "Aaron River Reservoir Dam and Bound Brook Control Structure Flow Releases and Operational Plan" (the "Plan"), dated March 2004. The proposed releases included in Table D (page 11) of the Plan are included here in Special Condition # 7 as Table 1.

The Plan outlines the basis for measuring streamflow (Chapter 4.0) and the operation plan (Chapter 5.0) as amended in the Response to DEP and WRC Comments dated July 29, 2004, Exhibit L. The Department approves this plan and the Town shall implement the plan and report daily streamflow monitoring as required in Special Condition # 12.

Cohasset has developed a "Drought Management Plan", dated March 2004, to maintain the target releases while providing public drinking water to its customers. Table 2-Drought Phase Levels of the Drought Management Plan as accepted by the Water Resources Commission on November 4, 2004, identifies the Drought Phase, Precipitation, Streamflow, Reservoir, and resulting Drought Phase Action to be implemented in an effort to minimize outdoor water use and reduce non-essential water use when releases are not achieved. Cohasset shall implement the Drought Management Plan as approved and attached hereto.

Special Condition # 8, Performance Standards, Control of Unaccounted for Water Although a full leak detection survey of the Town's distribution system has not occurred in the last five years, Cohasset monitors its water storage tanks on a nightly basis to determine if leaks are present. If leaks are indicated, Cohasset water system personnel detect leaks in remote portions of the distribution system using standard leak detection methodology and repairs are made in a timely manner. In addition, Cohasset has conducted annual distribution system improvements, including replacement or cleaning and lining of 1 to 2 miles of pipe each year. These combined efforts resulted in an Unaccounted for Water of 3.7% as reported on the 2003 Annual Statistical Report.

Special Condition # 9, Rate Structure. As noted in Special Condition # 9 of the attached Permit the Town shall continue to fully fund its water system.

Special Condition # 10, Water Conservation

In response to the Department's OTC the Town submitted information on its water conservation practices. In addition, Cohasset Water Department's Water Conservation Plan for Public Water Suppliers dated July 14, 2003 has been reviewed as a part of this permit application. Implementation of this conservation plan is approved as part of this Permit Condition.

Leak Detection -The Town shall conduct a full leak detection of its entire distribution system by June 30, 2006. Thereafter, Cohasset shall conduct a full leak detection survey at least every three years. In addition, the Town shall perform a leak detection survey of its entire distribution system whenever the volume of unaccounted for water is greater than 15% of overall water use or whenever the percentage of unaccounted for water increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on its Annual Statistical Report for the prior calendar year.

Along with the Annual Statistical report for any calendar year in which a leak detection survey takes place, the Town shall submit to the Department for its review a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, and the estimated water savings if repaired.

Leaks are to be fixed as soon as possible but in no event shall any leak remain unrepaired more than seven (7) days after detection

Plumbing – The Town shall enforce the March 1, 1989 plumbing code for new construction and building rehabilitation where installation of water saving devices and low flow toilets is required. Additionally, public buildings shall be retrofitted with water saving devices (such as faucet aerators, low flow shower heads, toilet displacement bottles/dams, low flow toilets, and automatic shut off faucets). If any buildings are not retrofitted with water saving devices, the Town shall submit a report and schedule identifying how they plan to complete the retrofitting by December 31, 2006.

The Town is below the standard for residential consumption of 80 gallons per capita per day. If this is exceeded a program must be implemented to make retrofit devices (faucet aerators, low flow shower heads and toilet displacement bottles/dams) available to customers at cost. In order to ensure greater consumer participation and proper installation of retrofit devices, professional installation is recommended.

Special Condition # 11, Water Use Restrictions, all future submittals of the Annual Statistical Report must document any implementation and/or enforcement of all water use bylaw(s).

Special Condition #12, General Reporting Requirements, The Town shall report on the Annual Statistical Report both the raw and finished water volumes for the entire water system and the manner in which these values are calculated. At a minimum, the Town shall report on its Annual Statistical Report, the following categories of water use: residential, commercial, industrial, agricultural, unaccounted for water, other public water systems.

WATER WITHDRAWAL PERMIT
MGL c 21G

This permit is issued pursuant to the Massachusetts Water Management Act (the "Act") for the sole purpose of authorizing the withdrawal of a volume of water as stated below and subject to the following special and general conditions. This permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

PERMIT NUMBER: 9P4-3-21-065.01

RIVER BASIN: South Coastal

PERMITTEE: Town of Cohasset
Cohasset Water Department
339 King Street
Cohasset, MA 02025

ISSUANCE DATE: May 20, 2005

EXPIRATION DATE: August 31, 2010

TYPE AND NUMBER OF WITHDRAWAL POINTS:

Groundwater: 1
Surface Water: 1

USE: Public Water Supply

DAYS OF OPERATION: 365

WITHDRAWAL POINT IDENTIFICATION:

| Name | Point ID Code |
|--------------------------------------------|---------------|
| Ellms Meadow Wellfield | 3065000-02G |
| Lily Pond, including Aaron River Reservoir | 3065000-02S |

SPECIAL CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This Permit authorizes the withdrawal of water for the purpose of serving the residences, schools, businesses, municipal facilities, and institutions in the Towns of Cohasset and Hingham, at the rate described below on average over a calendar year. The volume reflected by this rate is in addition to the 0.65 MGD previously registered to the permittee through the Water Management Act Program. The permitted volume is expressed in millions of gallons, both as an average daily withdrawal rate per year and as a total annual withdrawal volume for each period of the permit term. The Department bases the authorized withdrawal volume on the raw water withdrawn from the water source and will use the raw water amount to assess compliance with permitted withdrawal volumes.

Withdrawals authorized by this permit are as follows:

| Five Year Periods | | Total Raw Water Withdrawal Volumes | |
|-----------------------------|------------------------|------------------------------------|--------------------|
| | | Daily Average (MGD) | Total Annual (MGY) |
| Period Three Years 11-15 | 5/20/2005 to 8/31/2005 | 0.23 | 83.95 |
| Period Four Years 16-20 | 9/1/2005 to 8/31/2010 | 0.30 | 109.50 |

2. Maximum Authorized Daily Withdrawal Points

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volume listed below without specific advance written approval from the Department.

| <u>Source</u> | <u>Source Code</u> | <u>Approved Maximum Daily Rate (mgd)</u> | <u>Approved Maximum Daily Rate (gpm)</u> |
|------------------------|--------------------|------------------------------------------|------------------------------------------|
| Ellms Meadow Wellfield | 3065000-02G | 0.17 | 120 |
| Lily Pond* | 3065000-02S | 3.0 | Not Applicable |

* Maximum daily withdrawal volumes are limited to 3.0 million gallons per day, the Department approved design capacity of the Water Treatment Plant. Water Treatment Plant intake velocity shall not exceed five feet per second.

3. Zone of Contribution (Zone II or Zone III) Delineations

Department records show that the Ellms Meadow Wellfield (3065000-02G) has a Zone II delineation approved on September 20, 2001 and accepted for the replacement wells on February 11, 2003. No further Zone II work is required as a condition of this permit.

4. Wellhead Protection

Submit a copy of any existing land use controls and water supply protection measures in the communities encompassed by the Zones of Contribution of the wells included in this permit and the draft proposed changes needed to meet the requirements of 310 CMR 22.21(2) by November 30, 2005. Land use controls meeting the requirements of 310 CMR 22.21(2) shall be in place in the Zones of Contribution covered by this permit by July 1, 2007. The final text of the control measures must be submitted to Water Management Program after adoption.

5. Surface Water Protection

Submit a copy of any existing land use controls and water supply protection measures in the communities encompassed by the Zone A of the surface water supplies included in this permit and the draft proposed changes needed to meet the requirements of 310 CMR 22.20C(1)(e)(2) by November 30, 2005. Land use controls meeting the requirements of 310 CMR 22.20C(1)(e)(2) shall be in place in the Zone A covered by this permit by July 1, 2007. The final text of the control measures must be submitted to Water Management Program after adoption.

6. Firm Yield of Surface Water Supplies

The Department accepts the Firm Yield of 4.06 million gallons per day for the combined surface water sources supplying the Town of Cohasset’s water system.

7. Seasonal Flow Releases and Drought Management Plan

The Town shall maintain releases from its reservoirs to meet minimum flow targets described below. Minimum flow targets for fish passage apply at both the Bound Brook Control Structure (“BBCS”) and the Aaron River Reservoir fish ladders during the Spring and Fall seasons. Minimum flow targets during the Summer and Winter seasons apply to the Bound Brook Control Structure.

| TABLE 1 | | | |
|---------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| SEASON | DESCRIPTION | CRITERIA | MINIMUM FLOW TARGET (cubic feet per second) |
| Spring | Fish Run (April, May or June) | The period (approximately 4 weeks) when ten or more River Herring are observed at the fish ladders. | 6 – Daylight Flow and 2.2 – Nighttime Flow |
| Summer | Summer Low Flow Period | The period following the spring fish run, during which flows are naturally lowest, to maintain suitable conditions for aquatic habitat. | 2.2 – Daily Flow in Bound Brook downstream of the BBCS |
| Fall | Fish Run (September, October or November) | The period (approximately 4 weeks) when ten or more River Herring are observed at the fish ladders. | 6 – Daylight Flow and 2.2 0 Nighttime Flow |
| Winter | Winter Flow Period | The period following the fall fish run to assist in maintaining suitable environmental conditions for aquatic habitat. | 2.2 – Daily Flow in Bound Brook downstream of the BBCS |

Reservoir releases will be discontinued when the water elevations at Aaron River Reservoir and BBCS fall below elevation 60.5 feet and 41.0 feet respectively; these elevations correspond to the minimum inverts of the fishway baffles. If reservoir releases are discontinued, Cohasset will implement the water conservation actions outlined in its Drought Management Plan.

The Department has reviewed and approved the Drought Management Plan dated March 2004, including Table 2 – Drought Phase Levels (accepted by Water Resources Commission on November 4, 2004). Cohasset shall implement the plan as attached in Table 2.

the Cohasset developed the “Aaron River Reservoir Dam and Bound Brook Control Structure Flow Releases and Operational Plan” (the “Plan”), dated March 2004. The Town shall implement streamflow monitoring plan and operations plan, as amended in Exhibit L of July 29, 2004 Response to DEP and WRC Comments and report its findings as outlined in Special Condition # 12

8. Performance Standards

Beginning calendar year 2006, the Town of Cohasset shall meet the following performance standards for low or unassessed river basins:

8.1 Performance Standard for Unaccounted-for Water

Unaccounted-for water (UAW) shall not exceed 15% overall water use.

The Annual Statistical Report submitted by the Town shall provide a detailed assessment of its UAW. "Unaccounted-for water" is defined by the Massachusetts Water Resources Commission as "the difference between water pumped or purchased and water that is metered or confidently estimated". UAW shall include water that cannot be accounted for due to meter problems, unauthorized hydrant openings, unavoidable leakage, recoverable leakage, illegal connections, and standpipe overflows.

The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported on the Water Supply Annual Statistical Report.

8.2 Performance Standard for Residential Per Capita Water Use

Residential Per Capita Water Use shall not exceed 80 gallons per day.

If the Town fails to meet the performance standard for keeping residential per capita water use at or below 80 gallons per day, the Department may require Cohasset to implement more stringent restrictions on nonessential outside water use.

If in the future residential consumption is over 80 gallons per capita per day as reported on the Annual Statistical Report, a program must be implemented to make retrofit devices (faucet aerators, low flow shower heads and toilet displacement bottles/dams) available to customers at cost.

9. Rate Structure

The Town shall continue to ensure that water supply system operations are fully funded by water supply system revenues. The pricing system shall at least reflect the full cost of supplying water, including but not limited to:

- Administrative costs;
- Staff salaries, benefits, insurance and pension costs;
- Distribution system operation, maintenance and repair, including leak detection and repair costs and metering costs;
- Pumping costs and utilities;
- Treatment costs;
- Capital replacement costs, capital depreciation and debt service;
- Costs associated with water conservation programs and public education programs;
- Enforcement of the building code and/or local regulations;
- Watershed or wellhead purchase and/or protection costs and land acquisition; and,
- Emergency planning.

10. Water Conservation

The Department has accepted the implementation of the July 14, 2003 Water Conservation Plan as a permit condition with the following conditions:

Metering and Retrofits

- The Town shall continue to achieve 100 percent metering of all service connection, including public or municipal buildings or uses, with all meters of proper size and accuracy to measure water flow to within the accuracy as specified by the American Water Works Association (AWWA) standards for the particular meter in question.
- At a minimum, master meters must be calibrated annually. Documentation of all calibrations shall be included with the Annual Statistical Report.
- Submit with the Town's Annual Statistical Report the results of any audits of larger or any other meters.

- Submit with the Town's Annual Statistical Report an estimate of water savings as a result of the repair/replacement of any meters during the previous year.

Leak Detection

- The Town must perform a leak detection survey of the entire system by June 30, 2006.
- The Town shall continue to conduct a full leak detection survey at least every three years. In addition, the Town shall perform a leak detection survey of its entire distribution system whenever the volume of unaccounted for water is greater than 15% of overall water use or whenever the percentage of unaccounted for water increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on its Annual Statistical Report for the prior calendar year.
- Along with the Annual Statistical Report for any calendar year in which a leak detection survey takes place, the City shall submit to the Department for its review a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, and the estimated water savings if repaired.

Leak Repair

- Leaks are to be fixed as soon as possible but in no event shall any leak remain unrepaired more than seven (7) days after detection. Documentation of compliance with this requirement shall be submitted together with the each Annual Statistical Report including the date that each leak was reported or found, the date on which each leak was repaired, and the estimated savings of each repair.
- The Town must have repair reports available for inspection by the Department.

Plumbing

- The Town shall enforce the March 1, 1989 plumbing code for new construction and building rehabilitation where installation of water saving devices and low flow toilets is required.
- Public buildings shall be retrofitted with water saving devices (such as faucet aerators, low flow shower heads, toilet displacement bottles/dams, low flow toilets, and automatic shut off faucets). The Town shall submit to the Department, in writing, together with the Annual Statistical Report for calendar year 2005, an accounting of all public buildings and their status of compliance with this condition. If any buildings are not retrofitted with water saving devices, the Town shall submit a plan and schedule to complete the retrofitting of public buildings by December 31, 2006.
- If in the future residential consumption is over 80 gallons per capita per day, a program must be implemented to make retrofit devices (faucet aerators, low flow shower heads and toilet displacement bottles/dams) available to customers at cost.

Education

- The Town shall continue to develop and implement public education programs that emphasize:
 - all the costs of providing water;
 - that investments in efficiency and conservation will provide consumers with long-term savings; and,
 - the environmental benefits of reducing water demand.
- Town shall continue to implement all the public education items described in the July 14, 2003 Water Conservation Plan for Public Water Suppliers and items noted below including, but not limited to:
 - Conservation message on cable Television
 - Notices with the annual Consumer Confidence Report;

- Newspapers
 - The Town's website
 - The Town's quarterly newspaper
 - Bill stuffers with water conservation tips or water saving messages should be included at least annually.
- The Town shall document in writing together with the Annual Statistical Report all Public Education efforts implemented during the previous year.

11. Water Use Restrictions

- The Town of Cohasset shall continue to implement its Water Use Restriction Bylaw, and institute the water use restriction indicated in the Drought Management Plan when triggered. Any implementation of restrictions should be coordinated with the ongoing public education program to make consumers aware of the water use restrictions and penalties for violation, and knowledgeable about potential shortfalls in the water supply system and the need for water conservation.
- In order to evaluate the effectiveness of the restrictions on outside water use, the Department requires that the Town submit, along with the Annual Statistical Report, a report documenting all actions taken to implement and enforce the restrictions, including without limitation the dates the restrictions on nonessential outside water use were in place, the reservoir capacity that triggered the restrictions, the restrictions imposed, and the City's efforts to enforce the restrictions, including the names and addresses of those against whom action was taken and any fines or penalties imposed. The Town shall also document any actions that Cohasset has taken to improve the efficiency of its municipal irrigation practices.

12. General Reporting Requirements

- The Town shall report on the Annual Statistical Report both the raw and finished water volumes for the entire water system.
- The Town shall document how it determines raw and finished water volumes. This information shall be provided with the Annual Statistical Report.
- At a minimum, the Town shall report on its Annual Statistical Report, the following categories of water use: residential, commercial, industrial, agricultural, unaccounted for water, and other public water systems.
- The need for water main flushing and the use of water in construction shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported annually in the appropriate section of the Water Supply Annual Statistical Report.
- The Town shall reports its residential gallons per capita per day (rgpcd) and the calculation used to derive that figure on the Annual Statistical Report. The rgpcd is the total volume of residential water used in gallons divided by the population served divided by 365 days. The source of the data used to establish the service population and the year in which the data was developed data shall be provided. At a minimum, residential water use shall include mobile home parks, condominiums, apartments, senior housing, subsidized housing, affordable housing and other forms of residential dwellings. Water use for rented apartments must be reported as residential use and not reported as commercial water use.
- The Town shall provide a detailed assessment of its Unaccounted for Water in the Annual Statistical Report. Unaccounted for water is defined by the Massachusetts Water Resources Commission as the difference between water pumped or purchased and water that cannot be accounted for due to meter problems, unauthorized hydrant openings, unavoidable leakage, illegal connections, stand pipe overflows, and fire protection, where it cannot be confidently estimated. The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated to assist in determining actual demand. Volumes flushed to waste shall be reported in the Annual Statistical Report.

- The Town shall provide a detailed report with its Annual Statistics Report depicting daily depth of flow over the weir gates at Bound Brook Control Structure and Aaron River Reservoir Dam, stage and flow measurements made at staff gages #1, 2, 4, and 5, document releases made from each of the structures, and river temperature measurements. In addition, the annual report should describe whether or not river herring have used the fish ladders during the reporting period, and if so, what dates the fish were observed during the spring and fall migration periods.

GENERAL CONDITIONS

1. **Duty to Comply** The permittee shall comply at all times with the terms and conditions of this Permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw up to the authorized volume so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The permittee or the permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property for the purpose of determining compliance with this Permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this Permit are subject to restriction in any water emergency declared by the Department pursuant to MGL c 21G ss 15-17, MGL c 150 ss 111, or any other enabling authority.
5. **Transfer of Permits** This Permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The permittee shall submit annually, on a form provided by the Department, a certified statement of the withdrawal, such report to be received by the Department by the date noted on the Annual Report Form for each year. Such report shall be mailed or hand delivered to:

Department of Environmental Protection
Water Management Program
One Winter Street, 6th Floor
Boston, MA 02108
7. **Duty to Maintain Records** The permittee shall be responsible for maintaining monthly withdrawal records.

APPEAL RIGHTS AND TIME LIMITS

This Permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing under the provisions of M.G.L.c.30A. Any such request shall be made in writing, by certified mail and received by the Department within twenty-one (21) days of the date of receipt of this Permit.

No request for an appeal of this Permit shall be validly filed unless a copy of the request is sent by certified mail, or delivered by hand to the local water resources management official in the city or town in which the withdrawal point is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. For any person not the applicant, the request shall include a clear and concise statement of how that person is aggrieved by the issuance of this Permit.

FILING FEE AND ADDRESS

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 shall be mailed to:

Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 3982
Boston, MA 02241-3982

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person, seeking a waiver shall file, together with the hearing request, an affidavit setting forth the facts that support the claim of undue hardship.

NO WITHDRAWAL IN EXCESS OF THE PERMITTED VOLUME SHALL BE MADE FOLLOWING THE EXPIRATION OF THIS PERMIT, UNLESS BEFORE THAT DATE THE DEPARTMENT HAS RECEIVED A RENEWAL PERMIT APPLICATION PURSUANT TO 310 CMR 36.00

Communication for Non-English Speaking Parties (310 CMR 1.03(5)(a))

English

This document is important and should be translated immediately.

Spanish

Este documento es importante y se debe traducir inmediatamente.

Portuguese

Este original é importante e deve ser traduzido imediatamente.

Italian

Questo documento è importante e dovrebbe essere tradotto immediatamente.

Greek

Αυτό το έγγραφο είναι σημαντικό και πρέπει να μεταφραστεί αμέσως.

French

Ce document est important et devrait être traduit immédiatement.

Chinese (traditional)

這個文件重要和應該立刻被翻譯。

这个文件重要和应该立刻被翻译。

