



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Central Regional Office, 627 Main Street, Worcester, MA 01608

MITT ROMNEY  
Governor

STEPHEN R. PRITCHARD  
Secretary

KERRY HEALEY  
Lieutenant Governor

ROBERT W. GOLLEDGE, Jr.  
Commissioner

Date: July 6, 2006

Ted Kozak, Executive Secretary  
Town Hall  
18 Main St.  
Hopkinton, MA 01450

RE: City/Town: HOPKINTON  
PWS: Hopkinton Water Department  
WMA Permit Application: 9P-2-14-139.01  
Program: WMA  
Action: WMA Permit Amendment  
Activity #: MassDEP Trans. # W052514

Dear Mr. Kozak:

Please find the attached documents:

- Findings of Fact in Support of the Permit Amendment Decision and 5 Year Review; and
- Water Management Act Permit Amendment #9P-2-14-139.01 (Concord Basin) issued to the Town of Hopkinton.

If you have any questions regarding the Permit, please call Barbara Kickham at (508) 767-2724 or Duane LeVangie at (617) 292-5706. Please note that the signature on this cover page indicates formal issuance of the attached document.

Sincerely,

Paul Anderson  
Drinking Water & Municipal Serv. Chief  
Bureau of Resource Protection

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W:\DWP Archive\CERO\Hopkinton- #9P-2-14-139.01-2006-07-06

Cc: DWP/Boston Office (without attachment)  
Duane LeVangie, DEP-Boston WMA  
Eric Carty, Hopkinton Water Department, Hopkinton, MA  
Hopkinton Bd of Selectman, Town Hall, Hopkinton, MA  
Hopkinton Board of Health, Town Hall, Hopkinton, MA  
Frederica Gilesie, Sudbury River Watershed Assoc.  
Margaret Kearns, Riverways-MA F&W  
Rosemary Blacquier, EarthTech

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator, at 1-617-556-1057. TDD Service - 1-800-298-2207.

**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。



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**Findings of Fact in Support of the Permit Amendment Decision  
And 5 Year Review  
Water Management Permit # 9P-2-14-139.01  
Town of Hopkinton**

The Massachusetts Department of Environmental Protection (MassDEP or the Department) has completed its review of the Town of Hopkinton (Hopkinton) Water Management Act Permit Amendment application to add a new withdrawal location for its authorized withdrawal from the Concord River Basin.

The Hopkinton Water Department currently operates the Fruit Street Wells #1, #2, and #3 (Source Code IDs 2139000-01G, -02G, and -03G). These Fruit Street Wells are registered withdrawal points with Zone II approved rates of 0.36 million gallons per day (MGD), 0.27 MGD, and 0.12 MGD, respectively. The Hopkinton Water Department also operates the Whitehall Wells #4 and #5 (Source Codes ID 2139000-04G, and -05G). Whitehall Wells #4 and #5 are withdrawal locations authorized by the Water Management Act permit. The Whitehall Wells have elevated concentrations of iron and manganese, therefore, the Hopkinton Water Department minimizes withdrawal from the Whitehall Wells and is considering the construction of a treatment plant. The Town of Hopkinton currently has an Inter-Municipal Agreement (IMA) with the Town of Ashland that requires Hopkinton to purchase a daily minimum of 0.3 million gallons per day (MGD), a maximum of 1.0 MGD, with an average annual purchase of 0.5 MGD.

**Town of Hopkinton Withdrawal History**

The Town of Hopkinton has applied for this permit amendment to add Well Site H-2 (Fruit Street Well #6) as a withdrawal point and is not requesting additional withdrawal volumes above those previously allocated under the existing permit. The Town of Hopkinton is currently authorized through Water Management Act Permit #9P-2-14-139.01 and Registration #2-14-139.01 to withdraw 0.94 million gallons per day (MGD) through August 31, 2006. From September 1, 2006 through August 31, 2011, the end of the permit, Hopkinton is authorized to withdraw 0.98 MGD.

The Town of Hopkinton received a certificate from the Executive Office of Environmental Affairs (EOEA) on the Supplemental Environmental Impact Report (SEIR) dated March 3, 2006. The SEIR was required as a result of the MEPA thresholds that were triggered by the development of the Fruit Street Master Plan. Information related to the development of Well Site H-2 (Fruit Street #4) was included in the SEIR. Hopkinton is required to submit a Notice of Project Change (NPC) to EOEA to comply with MEPA prior to construction of the proposed well.

The pumping test report for Well Site H-2 has been reviewed by MassDEP and the Source Approval permit (BRP WS 19) is issued with the Water Management Act permit. MassDEP provided careful consideration of the potential environmental impacts of the withdrawal on Whitehall Brook and the sub-basin. The Zone

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator, at 1-617-556-1057. TDD Service - 1-800-298-2207.

II for the proposed well was developed using a three-dimensional groundwater flow model assuming the conservative baseline conditions of 180 days without recharge. The model predicts that the majority of the water pumped from the well is derived from the south; the area between the proposed well and Whitehall Reservoir and not from Whitehall Brook. The withdrawal from the proposed Fruit Street Well #6 will be limited to withdrawals currently authorized for the three existing Fruit Street Wells. The Town of Hopkinton is developing plans to construct a wastewater disposal facility as part of the Fruit Street Master Plan. This would provide up to 350,000 gallons per day of groundwater recharge in the Whitehall Brook Sub-basin. Should construction of the wastewater disposal facility be approved, the Town of Hopkinton may request a Maximum Daily Withdrawal Rate for Fruit Street Well #6 of 0.72 MGD based on the pumping test results.

In response to Hopkinton's application for a permit to withdraw water from an additional location within the Concord River Basin, and after reviewing the information that Hopkinton has provided, MassDEP hereby approves the Water Management Act Permit #9P-2-14-139.01 (the Permit) in accordance with the Act.

### **The Water Management Act**

The Act requires that the Department issue permits that balance a variety of factors including:

- Reasonable protection of existing water uses, land values, investments and enterprises;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

To better achieve the balance of competing water uses mandated by the Act, the Department has adopted the "Water Management Policy For Permit and Permit Amendment Applications and 5-Year Review, Effective Date: April 2, 2004" and the "Guidance Document for Water Management Act Permitting Policy, Effective Date: January 17, 2006". The Policy, WMA Policy #: BRP/ DWM/DW/P04-1, and Guidance, Guidance #BRP/DWM/DW/G05-01, can be found on the Department's web site at <http://www.mass.gov/dep/water/laws/policies.htm#wmgt>.

The Policy and Guidance identify specific Performance Standards and conditions to be applied to new Water Management permits and to existing permits at the time they are amended, during 5-year permit review or permit renewal. The Department has applied these Performance Standards and conditions in Hopkinton's permit.

### **Findings of Fact for the Performance Standards in the Hopkinton Water Management Permit**

As required by MGL c 21G, s 11 and 310 CMR 36.00, the Department makes the following Findings of Fact in support of the Permit, and includes herewith its reasons for approving the Permit and for imposing the conditions of approval.

In applying the Performance Standards in Water Management permits, the Department relies primarily upon the determinations of relative stress established by the Water Resources Commission's (WRC) Stressed Basins Report approved December 13, 2001. The Department also reviews other available research, such as reports by the United States Geological Survey, the Department's Watershed Water Quality Assessment Reports and any other pertinent reports available for specific river basins.

Town of Hopkinton's sources are located in the Concord River Basin, which is identified as a medium stress basin to which the following Performance Standards apply:

1. Residential gallons per capita day water use (RGPCD) of 65 gallons or less;
2. Unaccounted for water (UAW) of 10% or less; and
3. Summer Limits on Withdrawals implemented through either a calendar trigger or a streamflow trigger.
4. Offset Feasibility Studies for permittees that exceed the baseline withdrawal volume (Baseline) established for each permittee.

The map of stressed basins can be reviewed at the following link:

<http://www.mass.gov/dep/water/resources/stresmap.htm>.

Baseline withdrawal is the volume withdrawn in compliance with the Act during the calendar year prior to the effective date of the Permit, the average volume withdrawn in compliance with the Act during the three (3) years prior to the effective date of the Permit, or the registered volume, whichever is greater.

Hopkinton's Baseline is 0.94 MGD, the withdrawal volume reported on the Annual Statistical Report (ASR) for 2005.

The Performance Standards of 65 gallons per day or less for residential per capita water use and 10% or less for unaccounted for water are consistent with the WRC's Interbasin Transfer Performance Standards and with the WRC Stressed Basins Report finding that these Performance Standards could be applied in stressed basins. The Department believes these standards are reasonable and warranted based on studies and data developed throughout the country, the use of 10% UAW in various water supply industry standards, and the fact that the average values in 2004 for Massachusetts were 67 RGPCD, and 13% UAW. In addition, while these Performance Standards represent minimum standards required for compliance with Hopkinton's Permit, the Department believes that the cumulative effect of complying with all the terms and conditions of its Permit will enable Hopkinton to go beyond these Performance Standards for RGPCD and UAW.

The Guidance as revised on January 17, 2006 includes implementation and enforcement guidelines for permitting. It establishes:

- reasonable timelines for compliance with the Performance Standards;
- procedures and requirements for permittees that fail to document compliance with the Performance Standards within those timelines;
- some flexibility in enforcement with enforcement forbearance that the Department may employ for permittees in high and medium stress basins.

For more information on enforcement margins and forbearance, see Guidance Document for Water Management Act Permitting Policy, Section II, paragraph 3 and Section III, paragraph 3. In 2005, Hopkinton's RGPCD was 66.7 based on the number of residential service connections (2,763), the average household size (2.97), and residential water use. The average household size was obtained from the Department of Community Development website. In 2005, UAW was 16.8% and the average day demand was 0.94 (million gallons per day) MGD, which is equal to its authorized withdrawal volume through August 31, 2006.

### **Findings of Fact for Specific Permit Conditions**

In issuing permits in the Concord River Basin, the Department looked primarily at site-specific impacts and other issues specific to the system, such as impacts to nearby streams, wetlands, or other water users, justification of long-term demand projections and the capacity of permitted withdrawal points. The conditions are intended to ensure the efficient use of water and to mitigate the potential impact of withdrawals.

**Special Conditions 1, Maximum Authorized Annual Average Withdrawal Volume**, reflects the registered withdrawal volume of 0.56 MGD and a permitted increase of 0.38 MGD for a total authorized withdrawal volume of 0.94 MGD through August 31, 2006. Hopkinton's permit will increase to 0.98 MGD September 1, 2006 through August 31, 2011. Water use above 0.94 MGD will require offsets, if feasible. Hopkinton has an agreement with Ashland to purchase water at an average annual rate of 0.5 MGD. Hopkinton's overall water use, whether through withdrawal from their own registered and permitted sources and/or from a purchase of water from Ashland, is limited to the volumes authorized in this condition.

**Special Condition 2, Maximum Authorized Daily Withdrawal Volume From Each Withdrawal Point**, reflects the volume of groundwater withdrawal expressed as a maximum daily rate for each source, according to the Department approved Zone II rates. The individual Zone II approved rate for Fruit Street Well #6 is 0.72 MGD. The existing Fruit Street Wells (2139000-01G, -02G, and -03G) share a combined Zone II maximum daily rate of 0.75 MGD. The addition of Fruit Street Well #6, which has the same Zone II, does not alter the current authorized maximum daily withdrawal rate. The overall withdrawal from all four Fruit Street Wells (the three existing and proposed Well #6) shall not exceed the combined Zone II rate of the three existing Fruit Street Wells (0.75 MGD).

Fruit Street Wells #1, 2, and 3 are registered withdrawal locations and were not requested for inclusion in this permit. Therefore the withdrawals from these three Fruit Street Wells are limited to the registered withdrawal rate of 0.56 MGD (plus the threshold volume of 0.1 MGD).

**Special Condition 3, Zone II Delineations**, requirement has been met and no further delineations are required as a condition of this Permit.

**Special Condition 4, Wellhead Protection**, discusses the wellhead protection requirements of the Drinking Water Regulations, 310 CMR 22.21 for Fruit Street Well #6. This requirement must be met and the information submitted to MassDEP prior to placing the Fruit Street Well #4 on-line.

**Special Condition 5, Wetlands Monitoring**, near the Whitehall Brook Wells is not required as a condition of this permit. After conducting a site reconnaissance in spring 2002 and inspecting the well site location the Department determined that wetland monitoring was unnecessary at this site.

**Special Condition 6, Surface Water Requirement**, refers to the water level elevation in Hopkinton Reservoir that triggers water use restrictions in Ashland. Hopkinton is required to implement the same restrictions as those required in Ashland when Hopkinton is purchasing water from Ashland.

**Special Condition 7, Emergency Planning Requirement**, refers to the implementation of water use restrictions in Ashland should repairs of the dam at Hopkinton Reservoir in Ashland be required. Hopkinton is required to implement the same restrictions as those required in Ashland when Hopkinton is purchasing water from Ashland.

**Special Condition 8, Performance Standard for Residential Gallons Per Capita Day Water Use**, discussed previously.

**Special Condition 9, Performance Standard for Unaccounted for Water**, discussed previously.

**Special Condition 10, Summer Limits on Withdrawals**, addresses limits on nonessential outside water use from May through September. Note that this condition requires the Hopkinton Water Department continue to implement and enforce for the summer of 2006, any restrictions on summer withdrawals that were in effect during the summer of 2005, in advance of the adoption and implementation of any new restrictions adopted in response to this condition.

**Special Condition 11, Water Withdrawals that Exceed Baseline Withdrawal Volumes**, for the Town of Hopkinton is the withdrawal above the baseline of 0.94 MGD. The baseline withdrawal for the Town of Hopkinton will be the average daily withdrawal for calendar year 2005. For withdrawals exceeding the baseline volume beginning with calendar year 2008, an Offset Feasibility Study will be required. A groundwater discharge of up to 0.35 MGD of treated wastewater has been proposed for a portion of the Fruit Street Development Site. If pursued, this project should be included in the Offset Feasibility Study and MassDEP will consider this project in fulfillment of their offset requirement. Should the groundwater discharge facilities be approved and constructed the Maximum Daily Withdrawal Rate for Fruit Street Well #6 may be increased to 0.72 MGD independent of the withdrawals of the three existing Fruit Street Wells. Prior to receiving this change in Maximum Daily Withdrawal Rate, written approval must be obtained from MassDEP through a Zone II permit application (BRP WS 08).

**Special Condition 12 Water Conservation Requirements**, incorporates the Water Conservation Standards for the Commonwealth of Massachusetts reviewed and approved by the WRC in October 1992.

**Special Condition 13, Requirement to Report Raw and Finished Water Volumes**, ensures that the information necessary to evaluate compliance with the conditions included herein is accurately reported.

The summary of Permit conditions above as part of the Department's findings of fact is not intended to, and should not be construed as, modifying any of the Permit conditions. In the event of any conflict or ambiguity between this letter and the Permit, the Permit language shall control.



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**WATER WITHDRAWAL PERMIT**  
**MGL c 21G**

This permit is issued pursuant to the Massachusetts Water Management Act for the sole purpose of authorizing the withdrawal of a volume of water as stated herein 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:** 9P-2-14-139.01      **RIVER BASIN:** Concord

**PERMITTEE:** Town of Hopkinton  
 85 Wood Street  
 Hopkinton, MA 01748

**ISSUANCE DATE:** January 1, 1993

**MODIFICATION DATE:** July 6, 2006

**EXPIRATION DATE:** August 31, 2011

**NUMBER OF WITHDRAWAL POINTS:** Groundwater: 3

**USE:** Public Water Supply

**DAYS OF OPERATION:** 365

**LOCATION(S):**

Table 1: Withdrawal Point Identification

Well Name	PWS Source ID Code
Whitehall Well #4	2139000-04G
Whitehall Well #5	2139000-05G
Fruit Street Well #6	2139000-0AG*

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057.

<http://www.mass.gov/dep> • Phone (508) 792-7650 • Fax (508) 792-7621 • TDD # (508) 767-2788

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\* A final Source ID Code will be assigned when the well is constructed and MassDEP grants the approval to go on-line.

**SPECIAL CONDITIONS**

**1. Maximum Authorized Annual Average Withdrawal Volume**

This permit authorizes the Town of Hopkinton (Hopkinton) to withdraw water from the Concord River Basin at the rate described below (Table 2). The volume reflected by this rate is in addition to the 0.56 million gallons per day (MGD) previously authorized to Hopkinton under WMA Registration #214139.01 for withdrawal from the Concord River Basin.

The Department of Environmental Protection (the Department, or MassDEP) bases these withdrawal volumes on the raw water withdrawn from the authorized withdrawal points, and will use the raw water amount to assess compliance with the registered and permitted withdrawal volumes.

**Table 2: Authorized Withdrawal Volumes**

5-Year Periods		Total Raw Water Withdrawal Volumes			
		Permit		Permit + Registration	
		Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
Period One Years 2-5	1/1/1993 to 8/31/1996	0.25	91.25	0.81	295.65
Period Two Years 6-10	9/1/1996 to 8/31/2001	0.33	120.45	0.89	324.85
Period Three Years 11-15	9/1/2001 to 8/31/2006	0.38	138.70	0.94	343.1
Period Four Years 16-20	9/1/2006 to 8/31/2011	0.42	153.30	0.98	357.7

- The baseline withdrawal for the purpose of triggering Special Condition 11, Water Withdrawals that Exceed Baseline Withdrawal Volumes, is 0.94 MGD, or 343.1 MGY.
- Hopkinton’s overall water use, whether through withdrawal from their own registered and permitted sources and/or from a purchase of water from Ashland is limited to the above volumes.

**2. Maximum Authorized Daily Withdrawal Volume From Each Withdrawal Point**

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volume listed below without specific advance written approval from MassDEP (Table 3). The authorized maximum daily volume is the approved rate of the source. In no event shall the combined withdrawals from the individual withdrawal points (registered and permitted) exceed the withdrawal volumes authorized above in Special Condition 1.

**Table 3: Maximum Daily Withdrawal Rate**

<b>Well Name</b>	<b>PWS Source ID Code</b>	<b>Maximum Daily Rate (MGD)</b>
Whitehall Well #4	2139000-04G	0.36
Whitehall Well #5	2139000-05G	0.47
Fruit St Well #6	2139000-0AG	0.72*

\* The individual Zone II approved rate for Fruit Street Well #4 is 0.72 MGD. The existing Fruit Street Wells (2139000-01G, -02G, and -03G) share a combined Zone II maximum daily rate of 0.75 MGD. The addition of Well #6, which has the same Zone II, does not alter the current authorized maximum daily withdrawal rate. The overall withdrawal from all four Fruit Street Wells (the three existing and proposed Well #6) shall not exceed the combined Zone II rate of the three existing Fruit Street Wells (0.75 MGD)

**3. Zone of Contribution Delineations**

MassDEP records show that the Fruit St. Wells #1, 2, 3, and 6 (2139000-01G, -02G, 03G, and -0AG) and the Whitehall Wells #4 and #5 (2139000-04G and -05G) have approved Zone II delineations. No further Zone II work is required as a condition of this permit at this time.

Should the proposed groundwater discharge facilities be approved and constructed at the Fruit Street site; the Zone II of the Fruit Street Wells (2139000-01G, -02G, 03G, and -0AG) must be re-delineated and submitted to MassDEP for approval to evaluate the potential changes in groundwater flow directions. The re-delineation of the Zone II must be completed prior to the completion of the groundwater discharge facilities. At that time, the Town of Hopkinton may also request authorization to change the Maximum Daily Withdrawal Rate for the combined wells to an individual maximum daily withdrawal rate for Fruit Street Well #6.

**4. Wellhead Protection**

MassDEP records indicate that the Town of Hopkinton meets the wellhead protection requirements of the Department's Drinking Water Regulations 310 CMR 22.21(2) for Whitehall Wells #4 and 5 (Source Code ID 2139000-04G, -05G). The Town of Hopkinton's Water Resources Protection District Bylaw and Map must be amended to include Fruit Street Well #6 (Source Code ID 2139000-0AG) and the information submitted to MassDEP **prior to receiving final approval to place the well in operation.**

**5. Wetlands Monitoring**

After conducting a site reconnaissance in spring 2002 and inspecting the locations of Whitehall Wells #4 and #5 with respect to the wetlands and Whitehall Reservoir, the Department has determined that wetland monitoring is not required at this site. Upon further review, it was determined that identifying the impacts of water withdrawal on the wetlands would be unlikely given the distance between the wells and the wetlands.

**6. Surface Water Requirements**

From June through August, the Massachusetts Department of Conservation and Recreation (DCR) maintains the level of Hopkinton Reservoir at an elevation of 296.35 NVGD (302 feet Boston City Base), 2 feet below the spillway elevation. Should the reservoir water level drop below 295.35 feet NVGD between June 1 and August 31 of each year, the Town of Ashland's Howe Street Well #7 and 8 may not be used. Ashland will also implement mandatory outdoor water use restrictions when this occurs. Hopkinton will be required to implement the equivalent restrictions when purchasing water from Ashland.

**7. Emergency Planning Requirements**

The Hopkinton Reservoir Dam was constructed in the 1890's, and has not had a full inspection in over 100 years. The center of Ashland is located downstream from the dam. The DCR Office of Dam Safety has concluded that within the next few years, the reservoir must be temporarily drained for the purposes of a full dam inspection. DCR expects to conduct any non-emergency maintenance work on the dam during the autumn. While the reservoir is drained, the Howe Street Wells will not be able to meet Ashland and Hopkinton's water needs. During reservoir repairs, Ashland will implement mandatory outdoor water use restrictions and Hopkinton will be required to implement the equivalent restrictions when purchasing water from Ashland.

**8. Performance Standard for Residential Gallons Per Capita Day Water Use**

The Town of Hopkinton's Performance Standard for Residential Gallons Per Capita Day (RGPCD) is 65 gallons. Hopkinton shall be in compliance with the Performance Standard by December 31, 2008. Hopkinton shall report its RGPCD water use annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard in its ASR for 2008 and each year thereafter.

Hopkinton shall report its RGPCD and the calculation used to derive that figure as part of its ASR including, without limitation, the source of the data used to establish the service population and the year in which this data was developed.

See Appendix A for additional information on the requirements if the Performance Standard for RGPCD is not met.

**9. Performance Standard for Unaccounted for Water**

Hopkinton's Performance Standard for Unaccounted for Water (UAW) is 10% of overall water withdrawal. Hopkinton shall be in compliance with the Performance Standard by December 31, 2008. Hopkinton shall report its UAW annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard in its ASR for 2008 and each year thereafter.

Hopkinton shall report its UAW and the calculation used to derive that figure as part of its ASR. UAW is defined as the difference between water pumped or purchased and water that is metered or confidently estimated. UAW shall include, without limitation, water that cannot be accounted for due to meter problems, unauthorized hydrant openings, unavoidable leakage, recoverable 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 as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported on Hopkinton’s ASR.

See Appendix B for additional information on requirements if the Performance Standard for UAW is not met.

**10. Summer Limits on Withdrawals**

Nothing in this permit shall prevent Hopkinton from implementing water use restrictions stricter than those set forth in Options 1 and 2. Hopkinton shall limit summer water withdrawals by implementing one of the following two options (Table 4).

**Table 4: Options for Summer Limits on Withdrawals**

<b><u>Option 1: Calendar Trigger</u></b>	<b><u>Option 2: Stream Flow Trigger</u></b>
<p>At a minimum, implement the following restrictions on nonessential outdoor water use between May 1<sup>st</sup> and September 30<sup>th</sup>.</p> <ul style="list-style-type: none"> <li>• No nonessential outdoor water use allowed, except that sprinklers may be used for lawn watering outside the hours of 9 AM to 5 PM up to <b>two (2)</b> days per week.</li> <li>• Upon the declaration of a drought level of “Watch” (or higher drought designation) by the Massachusetts Drought Management Task Force for the region in which Hopkinton’s withdrawal source(s) is located*, the restrictions set forth in Option 2 must be implemented and remain in place until the drought level is returned to “Advisory” or “Normal”.</li> </ul>	<p>At a minimum, implement the following restrictions on nonessential outdoor water use whenever stream flow falls below a mean daily streamflow of 0.50 cubic feet per second per square mile (cfsm) for <b>three (3)</b> consecutive days between May 1<sup>st</sup> and September 30<sup>th</sup>. Stream flow shall be measured at the USGS Gauge on the Sudbury River at Saxonville, Gauge Station #01098530 (Saxonville Gauge)**. At the Saxonville Gauge, 0.50 cfsm is equal to 53 cubic feet per second (cfs).</p> <ul style="list-style-type: none"> <li>• No nonessential outdoor water use allowed, except that sprinklers may be used for lawn watering outside the hours of 9 AM to 5 PM <b>one (1)</b> day per week.</li> <li>• Once implemented, the restrictions shall remain in place until streamflow at the Saxonville Gauge meets or exceeds 0.50 cfsm (53 cfs) for <b>seven (7)</b> consecutive days.</li> </ul>

\*This information is available at <http://www.mass.gov/dcr/waterSupply/rainfall/drought.htm>.

\*\*Gauge readings can be accessed at <http://waterdata.usgs.gov/ma/nwis/current/?type=flow>. See Appendix C for more detailed instructions on accessing mean daily streamflows for the Saxonville Gauge.

As used herein, “nonessential outdoor water use” includes uses that are not required:

- (a) for health or safety reasons;
- (b) by regulation;
- (c) for the production of food and fiber;
- (d) for the maintenance of livestock; or
- (e) to meet the core functions of a business.

For additional guidance on nonessential outdoor water use, see Appendix C.

Hopkinton shall choose either Option 1 or Option 2 above, and implement and enforce the required restrictions starting no later than May 1, 2007. Hopkinton shall continue to implement and enforce any restrictions on summer use that were in effect during 2005 until those restrictions are superseded by the restrictions adopted in accordance with this permit.

Hopkinton shall document its compliance with the summer limits on withdrawal requirements annually in its ASR for 2007, and each year thereafter.

### **Option 1: Calendar Trigger**

If Hopkinton chooses **Option 1: Calendar Trigger**, then Hopkinton shall notify its customers of the need to adhere to restrictions as applicable on or before May 1, 2007. Notice must include:

- The need to limit water use, especially nonessential outside water use, to protect streamflow for aquatic life and to ensure a sustainable drinking water supply;
- Ways individual homeowners can limit water use, especially nonessential outdoor water use;
- A detailed description of the restrictions and penalties for violating the restrictions.

Notice that restrictions have been put in place shall be filed each year with MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

### **Option 2: Stream Flow Trigger**

If Hopkinton chooses **Option 2: Stream Flow Trigger**, when streamflow falls below 0.50 cfs (53 cfs at the Saxonville Gauge) for three (3) consecutive days, Hopkinton shall notify its customers as soon as possible, and in any event no more than three days after implementation, of the restrictions and the consequences for failing to adhere to the restrictions. Notice must include:

- The streamflow value triggering the required notification;
- The need to limit water use, especially nonessential outdoor water use, to protect streamflow for aquatic life and to ensure a sustainable drinking water supply;
- Ways individual homeowners can limit water use, especially nonessential outdoor water use;
- A detailed description of the restrictions and penalties for violating the restrictions.

Notice that restrictions have been put in place shall be filed each year with MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

Notice to customers and MassDEP need not be provided if Hopkinton has already implemented water use restrictions that conform to the applicable restrictions and those restrictions are still in force.

Should the reliability of flow measurement at the Saxonville Gauge Station be so impaired as to question its accuracy, Hopkinton may request the Department's review and approval for the trigger mechanism to be transferred to another gauge. The Department reserves the right to require use of a different gauge.

## **11. Water Withdrawals that Exceed Baseline Withdrawal Volumes**

Based upon Hopkinton's withdrawals for calendar year 2005, Hopkinton's baseline withdrawal rate is 0.94 MGD or 343.1 MGY (Baseline). Hopkinton shall perform an Offset Feasibility Study the first time its water withdrawals for a calendar year exceed its Baseline, beginning with calendar year 2008. Hopkinton shall report its water withdrawal volumes annually in its ASR.

If Hopkinton is required to perform an Offset Feasibility Study (Study), Hopkinton shall:

- Within 60 days of the filing of an ASR indicating that a Study is required, submit a Study Scope of Work to MassDEP for approval;
- Within 6 months of MassDEP's approval of the Study Scope of Work, submit the completed Study to MassDEP for approval;
- MassDEP's approval of the Study Scope of Work and the completed Study will be presumed if MassDEP does not issue a written approval or denial of such submission within 60 days of the date submitted to MassDEP for approval.

If Hopkinton files a subsequent ASR indicating that withdrawals for a calendar year again have exceeded its Baseline, then Hopkinton shall:

- Implement the results of the Study;
- Document such implementation annually at the time it files its ASR; and
- Continue to implement the results of the Study as long as withdrawals exceed Baseline.

## **12. Water Conservation Requirements**

At a minimum, Hopkinton shall implement the following conservation measures forthwith and shall be in compliance with these measures on or before the next 5 Year Review of this permit. The Department recognizes that Hopkinton is currently meeting a number of these requirements. Compliance with the water conservation requirements will be reported to the Department upon request or at the time of Permit Renewal unless otherwise noted below.

<b>Table 5: Minimum Water Conservation Requirements</b>	
<b>System Water Audits and Leak Detection</b>	
1.	At a minimum, conduct a full leak detection survey every three years. Hopkinton's last full leak detection was conducted in 2002. The next full leak detection survey shall be completed no later than December 31, 2007.
2.	Perform a leak detection survey of the entire distribution system within one year 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 the ASR for the prior calendar year. Within 60 days of completing the leak detection survey, Hopkinton 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, dates of repair and the estimated water savings as a result of the repairs.
3.	Conduct field surveys for leaks and repair programs in accordance with the <u>AWWA Manual 36</u> .
4.	Hopkinton shall have repair reports available for inspection by the Department. Hopkinton shall establish a schedule for repairing leaks that is at least as stringent as the following: <ul style="list-style-type: none"><li>- Leaks of three (3) gallons per minute or more shall be repaired as soon as possible and in any event no more than three (3) months after detection.</li></ul>

**Table 5: Minimum Water Conservation Requirements**

<ul style="list-style-type: none"> <li>- Leaks of less than three (3) gallons per minute at hydrants and appurtenances shall be repaired as soon as possible.</li> <li>- Leaks of less than three (3) gallons per minute shall be repaired in a timely manner, but in no event more than six (6) months from detection, except that leaks in freeway, arterial or collector roadways shall be repaired when other road work is being performed on the roadway.</li> </ul> <p>Leaks shall be repaired in accordance with Hopkinton’s priority schedule including leaks up to the service meter. However, in the event that the landowner is unwilling or unable to repair leaks between the property line and the service meter in accordance with Hopkinton’s schedule, Hopkinton shall repair such leaks within seven (7) days of obtaining either: (1) the written consent of the landowner; or (2) a warrant authorizing access to the property to make the necessary repair. Hopkinton shall exercise best efforts to obtain the written consent of the landowner or a warrant authorizing access to the property to make the necessary repair.</p>
<p>5. If the difference between the quantity of the raw water entering each treatment plant and the quantity of the finished water entering the distribution system from each treatment plant exceeds 5%, Hopkinton shall submit to the Department for its review and approval a scope of work and schedule for conducting a water audit of the treatment plant by December 31<sup>st</sup> of the year following the exceedance. The scope of work for the water audit shall provide for a comprehensive evaluation of the operations of the treatment plant and include a schedule for completing the evaluation. Hopkinton shall conduct the water audit in accordance with the scope of work and schedule approved by the Department. Within 60 days of completing the water audit of the treatment plant, Hopkinton shall submit to the Department for its approval a report documenting the results of the water audit, the recommended actions to save water during the treatment process, and the schedule for implementing the recommended actions. Hopkinton shall implement such actions as approved by the Department and in accordance with the schedule approved by the Department.</p>
<p><b>Metering</b></p>
<p>1. Calibrate all source and finished water meters at least annually and report date of calibration on the ASR.</p>
<p>2. 100% of the Hopkinton system must be metered by June 30, 2007. By that date, Hopkinton will have metered the remaining four residential service meters not currently metered. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards as set forth in <u>AWWA Manual M6 – Water Meters</u>.</p>
<p>3. Hopkinton reports an ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by your customers. The metering program shall include regular meter maintenance, including testing, calibration, repair, replacement and checks for tampering to identify and correct illegal connections. The plan shall continue to include placement of sufficient funds in Hopkinton’s annual water budget to calibrate, repair, or replace meters as necessary.</p>
<p><b>Pricing</b></p>
<p>1. Hopkinton must continue to implement a water pricing structure that includes the full cost of operating the water supply system. Evaluate rates every three to five years and adjust costs as needed. Full cost pricing factors all costs - operations, maintenance, capital, and indirect costs (environmental impacts, watershed protection) - into prices.</p>
<p>2. Hopkinton shall not use decreasing block rates. Decreasing block rates which charge lower prices as water use increases during the billing period, are not allowed by M.G.L. Chapter 40: Section 39L.</p>
<p><b>Residential and Public Sector Conservation</b></p>
<p>1. Hopkinton shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.</p>
<p>2. Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.</p>
<p>3. The Town of Hopkinton’s municipal buildings have been retrofitted with water-saving devices (faucet aerators, low flow shower heads and low flow toilets) as of the date of this permit. The Town of Hopkinton provides retrofit kits to customers at no cost.</p>

**Table 5: Minimum Water Conservation Requirements**

**Industrial and Commercial Water Conservation**

1. Hopkinton shall review the use records for its industrial, commercial and institutional water users and develop an inventory of the largest water users. Hopkinton shall develop and implement an outreach program designed to inform and (where appropriate) work with its largest industrial, commercial and institutional water users on ways to reduce their water use by the next permit renewal (September 1, 2011). Such outreach plans can include, but are not limited to: information on water audits, meter sizing, water reuse, low-flow plumbing fixtures, mandatory outdoor water use restrictions, suggestions for contacting trade associations for process specific information on water use reductions, and information on contacting the Executive Office of Environmental Affairs Office of Technical Assistance for Toxics Use Reduction (OTA) which offers a range of assistance and information to help facilities improve water use efficiency and reduce wastewater discharge. OTA can be contacted at (617) 626-1060 or at [www.mass.gov/envir/ota](http://www.mass.gov/envir/ota).
2. Upon request by the Department, Hopkinton shall report on industrial, commercial and institutional water conservation including the results of its review of water use records for industrial, commercial and institutional water users, the inventory of the largest water users, copies of any outreach materials distributed to industrial, commercial and institutional water users, and to the extent practical, a summary of water use reductions or savings that have resulted. Upon receipt of this report, the Department will take whatever action it deems appropriate to promote the interests of the Water Management Act, including without limitation requiring the Town to take additional actions to reduce industrial, commercial and institutional water use.

**Lawn and Landscape**

1. Adopt a water use restriction bylaw, ordinance or regulation by May 1, 2007, to provide authority to implement and enforce water use restrictions required by Special Condition #10.

**Public Education and Outreach**

1. Develop and implement a Water Conservation Education Plan. Hopkinton's Water Conservation Education Plan shall be designed to educate Hopkinton's water customers of ways to conserve water. Without limitation, Hopkinton's plan may include the following actions:
  - Include in bill stuffers and/or bills, a work sheet to enable customers to track water use and conservation efforts and estimate the dollar savings;
  - Public space advertising/media stories on successes (and failures);
  - Conservation information centers perhaps run jointly with electric or gas company;
  - Speakers for community organizations;
  - Public service announcements; radio/T.V./audio-visual presentations;
  - Joint advertising with hardware stores to promote conservation devices;
  - Use of civic and professional organization resources;
  - Special events such as Conservation Fairs;
  - Develop materials that are targeted to schools with media that appeals to children, including materials on water resource projects and field trips; and
  - Make multilingual materials available as needed.
2. Upon request of the Department, Hopkinton shall report on its public education and outreach effort, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.

**13. Requirement to Report Raw and Finished Water Volumes**

Hopkinton shall report on the ASR both the raw water volumes and finished water volumes for the entire water system. Raw water volumes shall also be reported for individual water withdrawal points.

**GENERAL PERMIT CONDITIONS (applicable to all permittees)**

No withdrawal in excess of 100,000 gallons per day over the registered volume (if any) 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.

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 specified on the form each year. Such report must be mailed or hand delivered to:

Department of Environmental Protection  
Drinking Water Program  
Water Management Program  
One Winter Street, 6 th Floor  
Boston, MA 02108

7. **Duty to Maintain Records** The permittee shall be responsible for maintaining daily withdrawal records.
8. **Metering** All withdrawal points included within the permit shall be metered within one year of the date of issuance of the permit. Meters shall be maintained and replaced as necessary to ensure the accuracy of the 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. Any such request must 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. In addition, the request must include a statement of the reasons why the decision of the Department is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, 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 must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, Ma. 02211

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 must file, together with the hearing request, an affidavit setting forth the facts which support the claim of undue hardship.

## Appendix A – Residential Gallons Per Capita Day

### **I. Compliance Plan Requirement**

If Hopkinton fails to document compliance with the RGPCD Performance Standard in its 2008 ASR, or in any ASR thereafter, then Hopkinton must file with that ASR a Residential Gallons Per Capita Day Compliance Plan (RGPCD Plan) which shall:

- a. meet the requirement set forth below in Section II;
- b. include measures to be implemented to meet the Performance Standard; and
- c. include the schedule for implementing such measures.

The filing of a RGPCD Plan shall not constitute a return to compliance, nor shall it affect the Department's authority to take action in response to Hopkinton's failure to meet the Performance Standard.

If a RGPCD Plan is required, Hopkinton must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its RGPCD Plan annually at the time it files its ASR; and
- b. continue to implement the RGPCD Plan until it complies with the Performance Standard and such compliance is documented in Hopkinton's ASR for the calendar year in which the standard is met.

### **II. Contents of a Residential Gallons Per Capita Day Compliance Plan**

At a minimum, all RGPCD Compliance Plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the Performance Standard;
- b. analysis of the cause of the failure to meet the Performance Standard;
- c. description and schedule of the actions that will be taken to meet the Performance Standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the Performance Standard.

RGPCD Plans may be amended to revise the actions that will be taken to meet the Performance Standard. Amended RGPCD Plans must include the information set forth in paragraph above.

At a minimum, all RGPCD Plans for failure to meet the RGPCD Performance Standard must include implementation of at least one of the following residential conservation programs:

- a. a program that provides water saving devices such as faucet aerators and low flow shower heads at cost;
- b. a program that provides rebates or other incentives for the purchase of low water use appliances (washing machines, dishwashers, and toilets); or
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require the installation of moisture sensors or similar climate related control technology on all automatic irrigation systems.

If Hopkinton is already implementing one or more of these programs, it must include in its RGPCD Plan the continued implementation of such program(s), as well as implementation of at least one additional

program. All programs must include a public information component designed to inform customers of the program and to encourage participation in the program.

Without limitation, RGPCD Plans for failure to meet the RGPCD Performance Standard may include the following actions in addition to those outlined in the paragraph above:

- a. the use of an increasing block water rate or a seasonal water rate structure as a tool to encourage water conservation;
- b. a program that provides rebates or other incentives for the installation of moisture sensors or similar climate related control technology on automatic irrigation systems;
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require that all new construction include water saving devices and low water use appliances;
- d. the adoption and enforcement of an ordinance, bylaw or regulation to require that all new construction minimize lawn area and/or irrigated lawn area, maximize the use of drought resistant landscaping, and maximize the use of top soil with a high water retention rate;
- e. the implementation of a program to encourage the use of cisterns or rain barrels for outside watering; and
- f. the implementation of monthly or quarterly billing.

## **Appendix B – Unaccounted for Water**

### **I. Compliance Plan Requirement**

If Hopkinton fails to document compliance with the UAW Performance Standard in its 2008 ASR, or in any ASR thereafter, then Hopkinton must file with that ASR an Unaccounted for Water Compliance Plan (UAW Plan) which shall:

- a. meet the requirements set forth below in Section II;
- b. include measures to be implemented to meet the Performance Standard; and
- c. include the schedule for implementing such measures.

The filing of a UAW Plan shall not constitute a return to compliance, nor shall it affect the Department's authority to take action in response to Hopkinton's failure to meet the Performance Standard.

If a UAW Plan is required, Hopkinton must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its UAW Plan annually at the time it files its ASR; and
- b. continue to implement the UAW Plan until it complies with the Performance Standard and such compliance is documented in Hopkinton's ASR for the calendar year in which the standard is met.

### **II. Contents of an Unaccounted for Water Compliance Plan**

Hopkinton has the choice to file a UAW Plan with measures tailored to the specific needs of its water supply system (Individualized UAW Plan) or a UAW Plan that includes Best Management Practices (BMP UAW Plan).

At a minimum, all UAW Plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the applicable Performance Standard;
- b. analysis of the cause of the failure to meet the Performance Standard;
- c. description and schedule of the actions that will be taken to meet the Performance Standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the Performance Standard.

UAW Plans may be amended to revise the actions that will be taken to meet the Performance Standard. Amended UAW Plans must include the information set forth in the paragraph above.

#### **Individualized UAW Compliance Plan**

Without limitation, Individualized UAW Compliance Plans for failure to meet the UAW Performance Standard may include any of the actions set forth in the BMP UAW Compliance Plan below.

#### **BMP UAW Compliance Plan**

At a minimum, all BMP UAW Plans for failure to meet the UAW Performance Standard must include all of the following actions:

- a. within one year of filing the UAW Plan, complete a water audit and leak detection survey of the entire system and submit completed audit and survey to the Department; within one year of completing the audit and leak detection survey, conduct sufficient repairs to reduce by 75% (by water volume) all leaks detected in the survey; and within one year of completing such repairs,

- conduct additional repairs of leaks detected in the survey as may be necessary to reduce permittee's UAW to 10% or less;
- b. implementation of a program that ensures the inspection and evaluation of all water meters and, as appropriate, the repair, replacement and calibration of water meters in accordance with the following schedule:
    - Large Meters (2" or greater) - within one year of filing the BMP UAW Plan
    - Medium Meters (1" or greater and less than 2") - within two years of filing the BMP UAW Plan
    - Small Meters (less than 1") - by the next permit review (September 1, 2011);
  - c. implementation of monthly or quarterly billing by the next permit renewal (September 1, 2011); and
  - d. within one year of filing the UAW Plan, implementation of a water pricing structure that achieves sufficient revenues to pay the full cost of operating the system including, without limitation, the costs of repairs under paragraph a., the costs of meter repairs, replacements and calibrations under paragraph b., the costs of employees and equipment, and ongoing maintenance and capital costs.

## Appendix C – Summer Limits on Withdrawals

### I. Nonessential Outdoor Water Use

As stated in Special Condition 10 in Water Management Act permits, “nonessential outdoor water use” includes uses that are not required:

- a. for health or safety reasons;
- b. by regulation;
- c. for the production of food and fiber;
- d. for the maintenance of livestock; or
- e. to meet the core functions of a business.

Examples of **nonessential** outdoor water uses include:

- irrigation of lawns,
  - except by means of a hand-held hose outside the hours of 9AM and 5PM;
- washing of vehicles other than by means of a commercial car wash,
  - except as necessary for operator safety; and
- washing of exterior building surfaces, parking lots, driveways or sidewalks,
  - except as necessary to apply paint, preservatives, stucco, pavement or cement.

Examples of **acceptable** outdoor water uses outside the hours of 9 AM and 5 PM include:

- irrigation to establish a new lawn during the months of May and September;
- irrigation for the production of food and fiber or the maintenance of livestock;
- irrigation by plant nurseries as necessary to maintain stock;
- irrigation by golf courses as necessary to maintain tees and greens only; and
- irrigation of public parks and recreational fields.

### II. Accessing Mean Daily Streamflows for the Saxonville Gauge Via the USGS Website

The USGS Streamflow website default shows Massachusetts streamflows in real time, i.e., the most recent periodic, usually quarter hour, readings made at each USGS stream gauge. This real-time data can vary widely over the course of a day and is not used to trigger the Water Management Permit Summer Limits on Withdrawals.

To trigger the Summer Limits on Withdrawals, the Department relies on the mean daily streamflows. The mean daily cannot be calculated until after midnight each day when USGS computes the hourly data into a mean daily streamflow.

To find the mean daily streamflow at the Saxonville Gauge go to <http://waterdata.usgs.gov/ma/nwis/current/?type=flow> and scroll down to the Merrimack River Basin listings. Click on 01098530 Sudbury River at Saxonville, MA.

If you need assistance navigating the USGS web site to find the mean daily streamflow, contact Water Management Program staff at the MassDEP Boston office at (617) 292-5706, or Water Management Act Program staff at the Central Regional Office at (508) 767-2701.