

BOARD OF SELECTMEN

June 24, 2014

Needham Town Hall

Revised Agenda

	6:45	Informal Meeting with Citizens <i>One or more members of the Board of Selectmen will be available between 6:45 and 7:00 p.m. for informal discussion with citizens. While not required, citizens are encouraged to call the Selectmen's Office at (781) 455-7500 extension 204 in advance to arrange for an appointment. This enables the Board to better assure opportunities for participation and respond to citizen concerns.</i>
1.	7:00	Certificate of Recognition – Trish Hegarty
2.	7:00	Public Hearing – NSTAR Fair Oaks Park
3.	7:00	Public Hearing – Teleport Communications America, LLC – Cabot Street • Richard Solitro, TCG representative • Fred York, Phoenix Communications representative
4.	7:05	Public Hearing – Road Event Policy
5.	7:20	Little Libraries • Jeanne Carey • Devra Bailin
6.	7:20	Approval of Voting Machines • Tedi Eaton, Town Clerk • David Davison, Assistant Town Manger/Finance
7.	7:30	Town Manager • Set Water and Sewer Rates • DEP Water Management Act
8.	8:00	Board Discussion • Committee Reports
9.	8:05	Executive Session Exception 3

APPOINTMENTS

1.	Historical Commission	Rose Doherty (term expires 6/30/2017)
2.	Various Committee Reappointments (see attachment)	

CONSENT AGENDA *=Backup attached

1.*	In accordance with Section 20B (5) of the Town Charter, and upon the recommendation of the Town Manager and the Personnel Board, adopt a classification and compensation plan for fiscal year 2015.
2.*	Approve a Special One Day Wines & Malt Beverages licenses from Steve Volante of Volante Farms to hold "Dinner in the Field" events on Thursday, July 10, 2014, Thursday, July 31, 2014 and Saturday, August 23, 2014 from 6:00 p.m. to 10:00 p.m. at Volante Farms, 292 Forest Street, Needham. The events will be held in the field

	and not in the building at Volante Farms.				
3.	Approve continuation of the experimental Traffic Regulation in accordance with the Needham Traffic Rules and Regulations Section 3-6 for Great Plain Avenue for the period June 27, 2014 to July 27, 2014: one Handicap Parking spot, and one 15 minute Parking spot, in front of the former Eaton Square Right of Way adjacent to MBTA Right of Way.				
4.	Approve continuation of the experimental Special Permit Parking Regulation to allow temporary parking for construction vehicles on Ellis Street at Mills Field. This regulation will allow parking for up to twelve vehicles for the period June 25, 2014 to July 25, 2014.				
5.	Accept the following donation made to the Needham Community Revitalization Trust Fund from the following residents: \$ 500 from Holly & Bruce Johnstone.				
6.*	Approve a 2014 Common Victualler License for Rowden, LLC. d/b/a Orange Leaf located at 1185 Highland Avenue, Needham.				
7.	Grant permission for the Needham Business Association to use the Town Common and surrounding area for its Harvest Fair and Souperbowl on Saturday, September 27, 2014. Permission includes: utilizing the parking lot behind Town Hall for pony rides and for two portable toilets; closing Chapel Street from corner of Great Plain Avenue to the Chapel Street parking lot for food court and booths; NBA member business to have items for sale on sidewalk in front of their own stores; a hayride that will run from Highland Avenue by the Town Common and loop back around the town to the Town Common; a tent erected on Chapel Street to host the soup tasting contest; and any changes as recommended by the Needham Police Department.				
8.	Grant permission for free meter parking in the downtown area on Saturday, September 27, 2014 so that residents may enjoy the Street Fair.				
9.	Accept a \$948.52 donation made to the Department of Public Works' Parks and Forestry Division from the Needham War Memorial Committee. The monies will be utilized to cover the expense of asphalt purchased by the Needham Highway Division for the creation of a new pathway by the memorials at the Park.				
10.	Accept donations made to the Needham Fire Department from Annie Roboff and Suzanne R. Merna in memory of Melvin Roboff. The donations totaling \$300 will be used to support the activities of The Student Awareness of Fire Education program.				
11.*	Approve the text of the proposed 9/11 Memorial to be located at the Police/Fire Station on the corner of School Street and Chestnut Street.				
12.*	Water & Sewer Abatement Order #1182				
13.	Support Youth Services' "Needham Unplugged" for the month of March including its annual no-meeting night which will be held on Thursday, March 12, 2015.				
14.*	Approve minutes from June 10, 2014 meeting.				
15.	Grant permission for the following resident to hold a Block Party:				
Name	Address	Party Location	Party Date	Party Rain Date	Party Time
Rachel Black	83 Nardone Road	Corner of Jarvis Circle and Nardone Rd to where Jarvis Circle meets Jarvis Circle by Central Ave	8/17/2014	8/24/2014	1-6pm

June 24, 2014 BOS Appointed Committee REAPPOINTMENTS

TERM EXPIRE	Name	COMMITTEE
06/30/2017	Howard S Goldman	Board of Appeals
06/30/2017	Kathleen Lind Berardi	Board of Appeals
06/30/2017	Peter E. Hess	Cable Television Advisory Board
06/30/2017	Sharon Soltzberg	Conservation Commission
06/30/2017	Brian Nadler	Council of Economic Advisors
06/30/2017	Glen Cammarano	Council of Economic Advisors
06/30/2017	Matthew D. Talcoff	Council of Economic Advisors
06/30/2017	Maurice P. Handel	Council of Economic Advisors
06/30/2017	William Day	Council of Economic Advisors
06/30/2017	Andrea Rae	Council On Aging
06/30/2017	Edward Cosgrove Jr	Council On Aging
06/30/2017	Phyllis Fanger	Council On Aging
06/30/2017	Susanne D Hughes	Council On Aging
06/30/2017	David Ecsedy	Cultural Council
06/30/2017	Michael E. Labrecque	Cultural Council
06/30/2017	Arthur Crocker	Design Review Board
06/30/2017	Mark Gluesing	Design Review Board
06/30/2017	Richard M. Reilly Jr	Design Review Board
06/30/2017	Robert Dermody	Design Review Board
06/30/2015	Andy Wise	Downtown Streetscape Working Group
06/30/2015	Bob Hentschel	Downtown Streetscape Working Group
06/30/2015	Gary Levine	Downtown Streetscape Working Group
06/30/2015	Gloria Greis	Downtown Streetscape Working Group
06/30/2015	Walter Collins	Downtown Streetscape Working Group
06/30/2015	Maurice P. Handel	Downtown Streetscape Working Group
06/30/2015	Mike McKay	Downtown Streetscape Working Group
06/30/2015	Nelson Hammer	Downtown Streetscape Working Group
06/30/2015	Paul Good	Downtown Streetscape Working Group
06/30/2015	Tom Jacob	Downtown Streetscape Working Group
06/30/2017	David Coelho	Future School Needs Committee
06/30/2017	Jon Schneider	Golf Course Advisory Committee
06/30/2017	Mary Grace Summergrad	Golf Course Advisory Committee
06/30/2017	Carol Johnson Boulris	Historical Commission
06/30/2017	Marlene Schultz	Human Rights Committee
06/30/2017	Michael T. Vaughn	Human Rights Committee
06/30/2017	Richard S Creem	MBTA Advisory Board
06/30/2017	John P Cosgrove Jr	MWRA Advisory Board
06/30/2017	Vincent Roy	MWRA Advisory Board
06/30/2017	Bill Dermody	Needham Community Revitalization Trust Fund
06/30/2017	Maryruth Perras	Needham Community Revitalization Trust Fund
06/30/2017	Peter Hess	Needham Community Television Dev Corp
07/31/2015	Ted Owens	Norfolk County Advisory Board
06/30/2017	Elizabeth P Handler	Property Tax Assistance Committee
06/30/2017	Jill C Kahn-Boesel	Property Tax Assistance Committee
06/30/2017	Peter Hess	Property Tax Assistance Committee
06/30/2017	Thomas J Mulhern	Property Tax Assistance Committee
06/30/2017	David Montgomery	Regional Transportation Advisory Council
06/30/2017	Rhain Hoyland	Regional Transportation Advisory Council/Alternate Member
06/30/2017	Barbara Doyle	Registrars of Voters
06/30/2017	Daniel P Matthews	Subcommittee to Study the Minuteman School
06/30/2017	Elizabeth P Handler	Taxation Aid Committee
06/30/2017	Evelyn M. Poness	Taxation Aid Committee
06/30/2017	Thomas J Mulhern	Taxation Aid Committee

June 24, 2014 BOS Appointed Committee REAPPOINTMENTS

TERM EXPIRE	Name	COMMITTEE
06/30/2017	Carl M. Rubin	Technology Advisory Board
06/30/2017	Michael M Mathias	Technology Advisory Board
06/30/2017	David S. Tobin	Town Counsel
06/30/2017	Glen Schneider	Traffic Management Advisory Committee
06/30/2017	Lt. John Kraemer	Traffic Management Advisory Committee
06/30/2017	Mark A. Rosen	Traffic Management Advisory Committee
06/30/2017	Robert Meltzer	Traffic Management Advisory Committee
06/30/2017	John P Cosgrove Jr	Water/Sewer Rate Structure Committee
06/30/2017	Nick Renzulli	Water/Sewer Rate Structure Committee

Certificate Of Recognition

From The
Town of Needham, Massachusetts
Board of Selectmen

Awarded to:

TRISH HEGARTY

The Town of Needham is proud to have one of its own outwit, outplay and outlast thirteen other competitors on the 28th season of Survivor.

The competitive spirit, perseverance and athletic skills you displayed week after week allowed you to finish in 5th place, an admiral accomplishment.

Thank you for providing an opportunity for your hometown to witness your achievement and to give Needhamites another reason to be proud of their community. Congratulations!

Signed this 24th day of June 2014

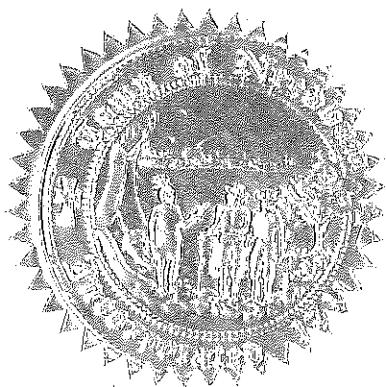
John A. Bulian, Chairman

Maurice P. Handel, Vice Chairman

Matthew D. Borrelli, Clerk

Marianne Cooley

Daniel P. Matthews





**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 06/24/2014

Agenda Item	Public Hearing – NSTAR Petition for Fair Oaks Park
Presenter(s)	Maureen Carroll, NSTAR

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
NSTAR requests permission to install approximately 33 feet of conduit at Pole 16/10 on Fair Oaks Park, Needham. This work is necessary to provide new underground electric service for a new house at 89 Fair Oaks Park. The Department of Public Works has approved this petition, based on NSTAR's commitment to adhere to regulation that all conduit installed must be 3" schedule 40 minimum; and, that when buried, the conduit must be placed at 24" below grade to the top of the conduit.			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO
<u>Suggested Motion:</u> Move that the Board of Selectmen approve and sign a petition from NSTAR to install approximately 33 feet of conduit at Pole 16/10 on Fair Oaks Park, Needham. This work is necessary to provide new underground electric service for a new house at 89 Fair Oaks Park.			
3.	BACK UP INFORMATION ATTACHED	YES	NO
(Describe backup below) a. Letter of Application b. Petition c. Order d. Petition Plan e. Notice Sent to Abutters f. List of Abutters			



200 Calvary Street
Waltham, Massachusetts 02453

May 28, 2014

Board of Selectmen
Town Hall
1471 Highland Ave
Needham, MA 02192

#89
RE: Fair Oaks Park
Needham, MA
W.O. #1998795

Dear Members of the Board:

The enclosed petition and plan is being presented by the NSTAR Electric Company for the purpose of obtaining a Grant of Location to install approximately 33'± feet- conduit @ Pole 16/10 Fair Oaks Park, Needham.

This work is necessary to provide new underground electric service for new home @ #89 Fair Oaks Park.

If you have any further questions, contact Maureen Carroll @ (617) 369-6421.
Your prompt attention to this matter would be greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "William D. Lemos".

William D. Lemos
Rights & Permits Supervisor

WDM/amw
Attachments

A handwritten note enclosed in a hand-drawn cloud-like shape. The text inside reads: "OK to proceed", "T. Ryder", "6/11/14", "OK R.P. Merben", "Dpw Director", and "6/11/14".

**PETITION OF NSTAR ELECTRIC COMPANY FOR LOCATION FOR
CONDUITS
AND MANHOLES**

To the **Board of Selectmen** of the Town of **NEEDHAM** Massachusetts:

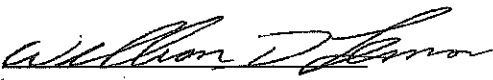
Respectfully represents **NSTAR Electric Company** a company incorporated for the transmission of electricity for lighting, heating or power, that it desires to construct a line for such transmission under the public way or ways hereinafter specified.

WHEREFORE, your petitioner prays that, after due notice and hearing as provided by law, the Board may by Order grant to your petitioner permission to construct, and a location for, such a line of conduits and manholes with the necessary wires and cables therein, said conduits and manholes to be located, substantially as shown on the plan made by **A. Debenedictis Dated May 23, 2014**, and filed herewith, under the following public way or ways of said Town:

Fair Oaks Park - Westerly @ pole 16/10 approximately 400'± feet north of Great Plain Ave
a distance of about 33'± feet - conduit

(WO. 1998795)

NSTAR ELECTRIC COMPANY

BY 
William D. Lemos
Rights & Permits, Supervisor

Dated this 28th day of May 2014

Town of **NEEDHAM** Massachusetts

Received and filed _____ 2014

ORDER FOR LOCATION FOR CONDUITS AND MANHOLES
Town of NEEDHAM

WHEREAS, **NSTAR ELECTRIC COMPANY** has petitioned for permission to construct a line for the transmission of electricity for lighting, heating or power under the public way or ways of the Town thereafter specified, and notice has been given and a hearing held on said petition as provided by law.

It is ORDERED that **NSTAR ELECTRIC COMPANY** be and hereby is granted permission to construct and a location for, such a line of conduits and manholes with the necessary wires and cables therein under the following public way or ways of said Town:

Fair Oaks Park - Westerly @ pole 16/10 approximately 400'± feet north of Great Plain Ave a distance of about 33'± feet - conduit

(WO. 1998795)

All construction work under this Order shall be in accordance with the following conditions:

1. Conduits and manholes shall be located as shown on the plan made by **A.Debenedictis, Dated May 23, 2014** on the file with said petition.
2. Said shall comply with the requirements of existing by-laws and such as may hereafter be adopted governing the construction and maintenance of conduits and manholes.
3. Company All work shall be done to the satisfaction of the Board of Selectmen or such officer or officers as it may appoint to supervise the work.

1	_____	
2	_____	Board of Selectmen
3	_____	the Town of
4	_____	NEEDHAM
5	_____	

CERTIFICATE

We hereby certify that the foregoing Order was adopted after due notice and a public hearing as prescribed by Section 22 of Chapter 166 of the General Laws (Ter. Ed.), and any additions thereto or amendments thereof, to wit:-after written notice of the time and place of the hearing mailed at least seven days prior to the date of the hearing by the Selectmen to all owners of real estate abutting upon that part of the way or ways upon, along or across which the line is to be constructed under said Order, as determined by the last preceding assessment for taxation, and a public hearing held on the _____ day of _____ 2014 at _____ in said Town.

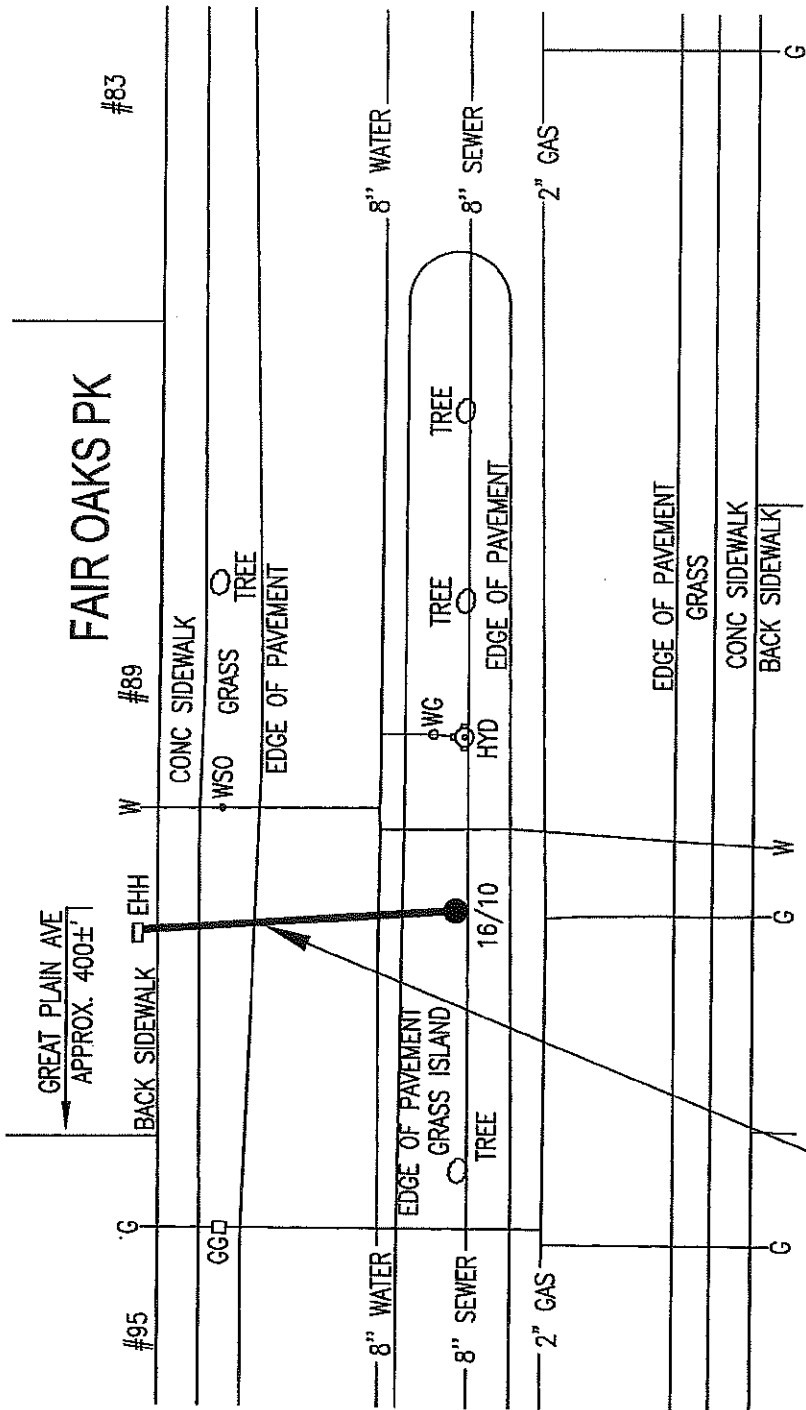
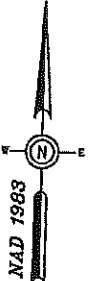
1	_____	
2	_____	Board of Selectmen
3	_____	the Town of
4	_____	NEEDHAM
5	_____	

CERTIFICATE

I hereby certify that the foregoing are true copies of the Order of the **Board of Selectmen** of the Town of **NEEDHAM**, Masssachusetts, duly adopted on the _____ day of _____, 2014 and recorded with the records of location Orders of said Town, Book _____, Page _____ and of the certificate of notice of hearing thereon required by Section 22 of Chapter 166 of the General Laws (Ter.Ed.) and any additions thereto or amendments thereof, as the same appear of record.

Attest: _____
Clerk of the Town of **NEEDHAM**, Massachusetts

NAD 1983



33.3'±

CUSTOMER TO INSTALL
1 - 4" PVC PIPE
TYPE EB IN CONCRETE

0 20 40



SCALE IN FEET

BY YOUR USE OF THE INFORMATION CONTAINED IN THIS MAP YOU AGREE THAT NO WARRANTY OF ANY KIND IS MADE FOR THE INFORMATION. NEITHER NSTAR ELECTRIC COMPANY, NSTAR GAS COMPANY, NOR ITS EMPLOYEES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES OR AGENTS (COLLECTIVELY THE "NSTAR GROUP") SHALL BE LIABLE FOR ANY LOSS OR INJURY CAUSED IN WHOLE OR IN PART BY USE OF THIS INFORMATION, OR IN RELIANCE UPON IT, TO THE MAXIMUM EXTENT ALLOWED BY LAW. YOU AGREE BY YOUR ACCEPTANCE OF THE INFORMATION TO RELEASE, INDEMNIFY AND HOLD THE NSTAR GROUP HARMLESS FROM ANY SUCH LOSS OR INJURY.

THE INFORMATION MAY NOT REPRESENT A SURVEY, MAY NOT BE THE MOST COMPLETE AND IS SUBJECT TO CHANGE WITHOUT NOTICE. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION, EITHER EXPRESSED OR IMPLIED, OR FOR ANY OTHER PURPOSES ARE PROVIDED.

MASS. LAW

REQUIRES 72 HOURS ADVANCE NOTICE TO UTILITY COMPANIES
BEFORE DIGGING BY ANYONE. CALL DIG-SAFE 1-888-344-7233

C# 88-14

Ward #

Work Order # 1988795

Surveyed by: SC/PR

Research by: LM

Plotted by: PDR

Proposed Structures: MR

Approved: A DEBENEDICTIS

P# 3



A Northeast Utilities Company
1165 MASSACHUSETTS AVE. DORCHESTER, MASS. 02122

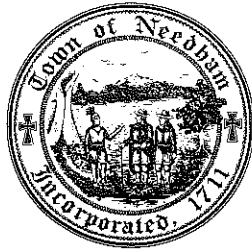
Plan of FAIR OAKS PARK, NEEDHAM

Showing PROPOSED CONDUIT LOCATION

REVISED 5/28/14

Scale 1"=20' Date 5/23/14

SHEET 1 of 1



NOTICE

To the Record

You are hereby notified that a public hearing will be held at the **Needham Town Hall, 1471 Highland Avenue, at 7:00 p.m. on June 24, 2014** upon petition of NSTAR dated **May 28, 2014** to install approximately 33 feet of conduit at Pole 16/10 Fair Oaks Park, Needham. This work is necessary to provide new, underground electric service for a new home at 89 Fair Oaks Park, Needham. A public hearing is required and abutters should be notified.

If you have any questions regarding this petition, please contact NSTAR representative, Maureen Carroll at 617-369-6421.

John A. Bulian
Maurice P. Handel
Matthew D. Borrelli
Marianne Cooley
Daniel P. Matthews

BOARD OF SELECTMEN

Dated: June 11, 2014

89 FAIR OAKS PARK

<u>PARCEL ID</u>	<u>St No.</u>	<u>Street</u>	<u>Owner Names</u>	<u>Owner Address</u>	<u>Mailing Address</u>	
					<u>OWNER CITY</u>	<u>OWNER ZIP</u>
199/049.0-0079-0000.0	76	FAIR OAKS PK	DANEHY, KEVIN R. & DANEHY, PATRICIA M.	76 FAIR OAKS PK	NEEDHAM	MA 02492
199/049.0-0080-0000.0	84	FAIR OAKS PK	SQUIRE, ROGER N., III & SQUIRE, QUINBY Y	84 FAIR OAKS PK	NEEDHAM	MA 02494
199/049.0-0081-0000.0	90	FAIR OAKS PK	LARKIN, ROBERT F. JR. & LARKIN, LEE REGAN	90 FAIR OAKS PK	NEEDHAM	MA 02492
199/049.0-0082-0000.0	96	FAIR OAKS PK	GREEN, THOMAS H., III + KAY, FREDIE DIANE	96 FAIR OAKS PARK	NEEDHAM	MA 02492
199/049.0-0083-0000.0	102	FAIR OAKS PK	CONNOLLY, BRIAN D. & CONNOLLY, NICOLE	102 FAIR OAKS PK	NEEDHAM	MA 02492
199/050.0-0063-0000.0	79	FAIR OAKS PK	SHEA, MICHAEL J. + SHEA, MARY ELLEN	79 FAIR OAKS PARK	NEEDHAM	MA 02492
199/050.0-0064-0000.0	83	FAIR OAKS PK	DUGGAN, BARBARA RIDGE	83 FAIR OAKS PK	NEEDHAM	MA 02492
199/050.0-0065-0000.0	89	FAIR OAKS PK	VACCA, RALPH N. & VACCA, FIONA B.	89 FAIR OAKS PARK	NEEDHAM	MA 02492
199/050.0-0066-0000.0	95	FAIR OAKS PK	CARE, STEPHEN & CAREY JEANNE	95 FAIR OAKS PK	NEEDHAM	MA 02492
199/050.0-0067-0000.0	101	FAIR OAKS PK	LANDE, DIANE L.	101 FAIR OAKS PK	NEEDHAM	MA 02492

Certified as list of parties in interest under Mass. General Laws and Needham Zoning By-Law, to the Best of our knowledge
For the Needham Board of Assessors.....





**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 06/24/2014

Agenda Item	Public Hearing – TCG Petition for Cabot Street
Presenter(s)	Richard Solitro, Teleport Communications America, LLC Fred York, Phoenix Communications

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED						
Teleport Communications America, LLC requests permission to lay and maintain underground conduit, with cables placed therein under the surface of the following public way or ways: the conduit will begin at existing Level 3 mh#008-0005 on First Avenue, and then proceed down Cabot Street to an existing Digital Realty Trust HH placing approximately 570' of 4" sch40 PVC conduit concrete encased in the roadway. This proposal is to add (1) 4" sch40 PVC conduit to Level 3 Communications conduit system for the use of Teleport Communications America, LLC. Construction for this project is to run congruent with Level 3's project. The Department of Public Works has approved this petition, based on Teleport Communications America, LLC's commitment to adhere to regulation that all conduit installed must be 3" schedule 40 minimum; and, that when buried, the conduit must be placed at 24" below grade to the top of the conduit.							
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO				
<u>Suggested Motion:</u> Move that the Board of Selectmen approve and sign a petition from Teleport Communications America, LLC to lay and maintain underground conduit, with cables placed therein under the surface of the following public way or ways: the conduit will begin at existing Level 3 mh#008-0005 on First Avenue, and then proceed down Cabot Street to an existing Digital Realty Trust HH placing approximately 570' of 4" sch40 PVC conduit concrete encased in the roadway. This proposal is to add (1) 4" sch40 PVC conduit to Level 3 Communications conduit system for the use of Teleport Communications America, LLC. Construction for this project is to run congruent with Level 3's project.							
3.	BACK UP INFORMATION ATTACHED	YES	NO				
(Describe backup below) <table><tr><td>a. Letter of Application</td><td>b. Petition Plan</td></tr><tr><td>c. Notice Sent to Abutters</td><td>d. List of Abutters</td></tr></table>				a. Letter of Application	b. Petition Plan	c. Notice Sent to Abutters	d. List of Abutters
a. Letter of Application	b. Petition Plan						
c. Notice Sent to Abutters	d. List of Abutters						



Teleport Communications America, LLC
157 Green Street, Suite 2
Foxboro, MA 02035
Tel: 508.216.0033
Fax: 508.216.0068

Petition for Conduit Installation - 105 Cabot St.

Town of Needham

Board of Selectman

5-22-2014

Teleport Communications America, LLC requests permission to lay and maintain underground conduit, with cables placed therein under the surface of the following public way or ways at this location:

The conduit will begin at an existing Level 3 mh#008-0005 on First Ave. We will then proceed down Cabot St to an existing Digital Realty Trust HH the total length is approx. 570'. We would place approximately 570' of 4" sch40 PVC conduit concrete encased in the roadway.

This proposal is to add (1) 4" sch40 PVC conduit to Level 3 Communications conduit system for the use of Teleport Communications America, LLC construction for this project is to run congruent with Level 3's project.

Phoenix Communications is our preferred contractor for this work. Phoenix has filed a bond in the town.

Please see Level 3's submitted plan Numbered 13663
Showing location of conduit to be constructed is filed herewith
Teleport Communications America, LLC thanks the Town of Needham

Best Regards,

Richard Solitro

Richard Solitro
Northeast OSP Construction Manager
Teleport Communications America, LLC

OK to
proceed
T. Byler, Eng.
6/12/14
OK R.P. Marson
DPA Director
6/12/14



NOTICE

To the Record

You are hereby notified that a public hearing will be held at the **Needham Town Hall, 1471 Highland Avenue, at 7:00 p.m. on June 24, 2014** upon petition of TCG dated **May 22, 2014** to lay and maintain underground conduit, with cables placed therein under the surface of the following public way or ways: the conduit will begin at existing Level 3 mh#008-0005 on First Avenue, and then proceed down Cabot Street to an existing Digital Realty Trust HH placing approximately 570' of 4" sch40 PVC conduit concrete encased in the roadway. This proposal is to add (1) 4" sch40 PVC conduit to Level 3 Communications conduit system for the use of Teleport Communications America, LLC. Construction for this project is to run congruent with Level 3's project.

Phoenix Communications is the preferred contractor for the work and they have filed a bond in the Town.

A public hearing is required and abutters should be notified.

If you have any questions regarding this petition, please contact Teleport Communications America, LLC representative, Richard Solitro at 508-216-0033.

John A. Bulian
Maurice P. Handel
Matthew D. Borrelli
Marianne Cooley
Daniel P. Matthews

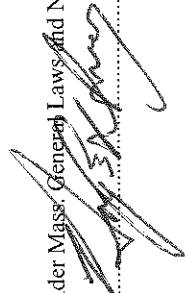
BOARD OF SELECTMEN

Dated: June 16, 2014

105 CABOT ST

<u>PARCEL_ID</u>	<u>St No.</u>	<u>Street</u>	<u>Owner Names</u>	<u>Owner Address</u>	<u>Mailing Address</u>		
					<u>OWNER CITY</u>	<u>State</u>	<u>OWNER ZIP</u>
199/001.0-9999-9999.0	0	ROUTE 128	COMMONWEALTH OF MASSACHUSETTS DEPT. OF PUBLIC WORKS - MDC	10 PARK PLAZA	BOSTON	MA	02116
199/300.0-0033-0000.0	72	A ST	DIGITAL FIRST AVENUE, LLC	128 FIRST AVENUE	NEEDHAM	MA	02494
199/300.0-0042-0000.0	140	CABOT ST	ATS-NEEDHAM LLC C/O AMERICAN TOWER CORPORATION	P. O. BOX 723597	ATLANTA	GA	31139
199/300.0-0052-0000.0	180	FIRST AVE	130-150 A STREET, LLC	197 FIRST AVENUE SUITE 300	NEEDHAM	MA	02494
199/300.0-0053-0000.0	114	FIRST AVE	JMDH REAL ESTATE OF NEEDHAM, LLC	15-24 132 STREET	COLLEGE POINT	NY	11356
199/300.0-0054-0000.0	1	FIRST AVE	MCMANUS, JAMES H. III, TRUSTEE ONE FIRST AVENUE REALTY TRUST	188 NEEDHAM ST	NEWTON	MA	02464
199/300.0-0055-0000.0	50	CABOT ST	50 CABOT REALTY ASSOC LLC	250 FIRST AVE SUITE 200	NEEDHAM	MA	02494
199/300.0-0056-0000.0	0	CABOT ST	TERRAZZINO, SAMUEL, TR. TERRAZZINO INVESTMENT TRUST	18 OAK HILL ROAD	NEEDHAM	MA	02492
199/300.0-0058-0000.0	254	HIGHLAND AVE	COHEN, RONI TRUSTEE THE HIGHLAND AVENUE NOMINEE TRUST	2400 N. BRAESWOOD BLVD #305	HOUSTON	TX	77030
199/300.0-0059-0000.0	238	HIGHLAND AVE	TERRAZZINO, SAMUEL TRS TERRAZZINO INVESTMENT TRUST	18 OAK HILL ROAD	NEEDHAM	MA	02492
199/300.0-0066-0000.0	100	CABOT ST	STARWOOD NEEDHAM CMBS I LLC C/O EPROPERTY TAX - DEPT 206	P O BOX 4900	SCOTTSDALE	AZ	85261-4900
199/300.0-0073-0000.0	105	CABOT ST	DIGITAL CABOT LLC	128 FIRST AVE	NEEDHAM	MA	02494

Certified as list of parties in interest under Mass. General Laws and Needham Zoning By-Law, to the Best of our knowledge
For the Needham Board of Assessors.....





**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 6/24/2014

Agenda Item	Public Hearing – Road Events
Presenter(s)	Kate Fitzpatrick, Town Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
The Board of Selectmen will hold a public hearing regarding a proposed policy to govern road events (walking/running, bicycling and motorcycles). The Board will invite public comment.			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO
3.	BACK UP INFORMATION ATTACHED	YES	NO
a. Draft Road Event Policy b. Public notice in Needham Times			

Board of Selectmen

Policy Number:	
Policy:	Road Event Policy
Date Approved:	
Date Revised:	
Approved:	Chairman, Board of Selectman

It is the policy of the Town of Needham to allow Road Events (walking/running, bicycling, and motorcycles) to be held on/through Needham roads. The event organizers must represent a not-for-profit entity.

POLICY

1. Running/walking events that start and finish in Needham are limited to 5K or shorter.
2. For matters of public safety, baby strollers and/or dogs on leashes are allowed only in walking events.
3. Event courses may not have multiple loops. Multiple loop courses, because of their nature, are difficult to cover safely and may cause confusion for those involved.
4. No more than one road event will be held in Needham on any given day. Event applications will be processed on a first-come, first-served basis and priority will be given to those that have complete packets of information.
5. Event applications will be reviewed by the Police Department and the use of Police details may be required. Police detail requirements are based on factors such as public safety considerations, number of participants, and general size of event.
6. An on-site event day contact with cell phone number must be provided to the Police Department before the day of the event.
7. The Town Manager is authorized to limit the number of participants in an event and determine that some days are not available for an event.
8. The Town Manager is authorized to make exceptions to this policy if it is deemed to be in the best interest of the community to do so.

PROCEDURE

9. A completed road event application must be received by the Town at least 60 days prior to the event date and will be accepted for the current twelve-month period only. Also required with application form and fee:
 - route plan including parking plan, route plan should include map version and also written turn by turn directions;
 - logistics and volunteer locations;
 - location of restroom facilities and approval for building use (if applicable); and clean-up plan.
10. A certificate of insurance is required to be filed with the Office of the Town Manager no later than 10 working days before the event.

FEES

Event application fees:

- \$25 for routes that strictly start and finish in Needham;
- \$50 to pass through Needham with one stop in Needham; and
- \$50 to pass through Town with no stops, payable to the Town of Needham.

Payment must be submitted with completed application.

OTHER

11. Events where alcohol is served require a One day special permit from the Board of Selectmen.
12. Use of Town fields, parks and playgrounds require approval from the Park and Recreation Commission; please call (781)455-7550, option 3 or visit <http://www.needhamma.gov/index.aspx?nid=718> for more information.
13. Use of school parking lots require approval from the Public Facilities Department at (781)455-7550 extension 365 or for more information, visit <http://www.needhamma.gov/index.aspx?nid=2324>.



**Town of Needham, Massachusetts
Road Event Form**

INTERNAL USE ONLY

☐ DPW ☐ Police
☐ Fire ☐ OTM
☐ Park & Rec
☐ PFD ☐ Paid

TYPE OF EVENT: (check all that apply)

☐ RUN ☐ WALK ☐ BICYCLE ☐ MOTORCYCLE

Name of Event:

Name of Organization:

**Has this event been conducted in other
Towns in the past?** ☐ YES ☐ NO

If yes, name of Town and date:

Organization Mailing Address:

☐ **Organization
is
Not-for-Profit**

Organization Billing Address (if Police Detail is required):

Primary Contact:

Contact Title:

Contact Address:

Contact Phone (Day):

Contact Phone (Cell):

Contact Email:

Event Date(s):

Date Expected to be in Needham:

<i>Earliest Time Expected in Needham:</i>	<i>Latest Time Expected in Needham:</i>
--	--

<i>Number of Expected Participants:</i>	<i>Number of Expected Spectators at Peak Time:</i>
--	---

<i>Are participants charged a fee?</i>	☐ <i>YES</i>	☐ <i>NO</i>
---	--	---

<i>Estimated Number of Vehicles:</i>	<i>What type of Parking is required:</i>
---	---

<i>Describe Parking Plan, include where participants and spectators will park and length of time expected to be parked:</i>
--

<i>Are event organizers available to meet with members of the Town to plan event?</i>
--

<i>Do event organizers foresee the need for any road closures (subject to police review)?</i>
--

<i>What will be done in case of inclement weather?</i>

<i>Will neighborhoods be impacted by parking and traffic?</i>
--

<i>What activities are planned for the start of the race (if in Needham)?</i>
--

<i>What activities are planned for the end of the race (if in Needham)?</i>
--

<i>What facilities are needed for the start of the race (if in Needham)?</i>

What facilities are needed for the end of the race (if in Needham)?	
Once the event begins, how long will it take to complete the event?	
Are signs requested to post at the start of the race? At the end of the race? Are signs requested for along the route?	
Will volunteers be placed along the route?	
Will you be using a sound system? (includes music) If yes, please describe where and when it will be used.	
Will there be any food served? (contact Needham Health Dept: 781-455-7500 x262)	
Will portable toilets be used? List locations	
Will hydration stops be set up along route? If yes, please include these on route plan.	
If the event takes place after dark, what is the plan to meet lighting needs?	
What safety measures are being made for participants and spectators? What are plans for handling first aid and medical emergencies?	
Does the event take place during commuter times?	
Is school in session during the event? Will school drop off or pick up be impacted by the event?	
Are businesses open during the time of the event?	
Does the route pass any business that might be impacted by the event? (e.g. funeral homes, markets, restaurants)	
Are there any churches/houses of worship located along the event route? Will church/house of worship services take place during the event?	
What is the plan to handle trash?	

Please return the completed application and attachments to the Office of the Town Manager, Needham Town Hall, 1471 Highland Avenue, Needham, MA 02492:

- ***event route map (include map and text of route, parking plan, volunteer placement)***
- ***application fee***
- ***certificate of insurance***



Office of the
TOWN MANAGER

TOWN OF NEEDHAM

TOWN HALL
Needham, MA 02492-2669

TEL: (781) 455-7500
FAX: (781) 449-4569
TDD: (781) 455-7558

Public Hearing on Road Events

The Board of Selectmen will hold a public hearing regarding a proposed policy to govern road events (walking/running, bicycling and motorcycles) held in the Town of Needham.

The hearing will be held on Tuesday, June 24, 2014 at 7:05 pm at the Needham Town Hall, 1471 Highland Avenue, Needham.

The draft policy can be viewed on the Town's website at:
www.needhamma.gov/roadevent.

The Board of Selectmen invites organizers and members of all organizations that use Needham roads for events and all residents and interested parties to attend and provide input regarding road events in Needham. Written comments may also be submitted to the Board of Selectmen, c/o Needham Town Hall, 1471 Highland Avenue, Needham, MA or by email to selectmen@needhamma.gov.

Needham Times
Hometown Weekly
6/12, 6/19, 2014



**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 6/24/2014

Agenda Item	Little Library Boxes
Presenter(s)	Jean Carey, Library Foundation of Needham (LFN) Devra Bailin, Director Economic Development

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
Jean Carey, from the Library Foundation of Needham (LFN), will inform the Board about an initiative to bring “Little Library Boxes” to Needham. The LFN was created to support and raise money the Needham Free Public Library. Their belief is that the Little Free Library Boxes (painted “Black, White & Read all over”) would build into a fundraiser to carry through with the theme of the LFN’s gala, while providing access to books 24/7. They would like to kick off the program with the installation of 3 boxes initially. LFN would oversee the maintenance, care and weekly check of the boxes. Minuteman Regional High School was contacted by Devra Bailin and asked if they would consider building of these boxes (plans to be provided). Minuteman exceeded the request to consider and has already completed 3 boxes, all made with excess materials in the shop.			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO
None.			
3.	BACK UP INFORMATION ATTACHED	YES	NO
a. Picture of a library box installed in Kalamazoo b. Proposal for Maintenance of 3 Little Free Library Boxes from LFN			



Kalamazoo Little Free Library Plans



Building your own Kalamazoo Little Free Library

These instructions provide step by step instructions for constructing a little free library (LFL). This project requires a moderate degree of experience working with wood and associated power tools. The design shown is modified from plans on the Little Free Library web site (<http://www.littlefreelibrary.org/plans-and-tips-for-builders.html>). We encourage you to check out this site.

Required materials and tools:

- Most LFLs are constructed from 3/4" plywood.
- The face frame and doors are constructed from solid lumber (mostly 3/4" x 1.5")
- Plexi-glass for door (if desired)
- Self closing hinges.
- Screws or nails for assembly
- Table saw (a hand-held circular saw can be substituted)
- Miter saw (power or hand)
- Power drill (if using screws) or hammer
- Post hole digger
- Level

Proposal for Maintenance of 3 Little Free Library Boxes

Greens Field – Children's Literature

Senior Center/Commuter lot – adult library type materials

Needham Center Commuter lot – adult library type material

Overview

The Library Foundation of Needham (LFN) recognizes with great appreciation the Town of Needham's willingness to allow the three Little Library boxes to be posted on town property. We at the LFN are grateful for our forward thinking government officials who are allowing books and reading to extend beyond the Needham Free Public Library and benefit members of the community who do not regularly patronize the Needham Free Public Library.

Content

It is expected that each box will contain the materials described above. The concept of the little free libraries is a give and take process. The LFN cannot monitor the contents of each box other than to describe the type of books to be included in a general posting inside of the box and the weekly checking described in the paragraphs below. (More specific information will be posted in the Children's box at Greene's field, as described below.)

Maintenance

Greene's Field Box

1. Inappropriate Literature: This box will be placed in the recently renovated playground and perhaps presents the greatest risk for inappropriate literature to be placed inside the box. It is proposed by the LFN that LFN board members on a weekly basis inspect the site. As this may not be sufficient given the expected use of the box, and potential for abuse, the LFN plans to post inside the box, the following notice:

Information for Users -

This box is for Children's books/literature only. If you should find any inappropriate or non-children's literature, please remove it immediately. Please use your discretion to either destroy the item or return it to Jeanne Carey, care of the LFN at the Needham Free Public Library. Please contact Jeanne at sjamecarey@comcast.net if you are finding inappropriate literature in the box on a regular basis. We very much appreciate your support of this project. The LFN.

2. Regular checking. The box will be checked weekly on a Monday to assure that no damage has occurred over the weekend and the contents of the box are appropriate.
3. If damage to the box is found, the LFN volunteer will remove the books and follow the procedures established with the LFN to obtain repairs. *
4. If the box has been removed from the ground or is no longer standing, LFN volunteers will remove the books and contact Jeanne Carey, who will contact the appropriate town official.
5. If the box is empty of books, the LFN volunteer will fill it with books in a timely manner.

Senior Center/Commuter Lot Box

1. Regular checking. The box will be checked weekly on a Monday to assure that no damage has occurred over the weekend and the contents of the box are appropriate.

2. Damage: if damage to the box is found, the volunteer will remove the books and follow the procedures established with the LFN to obtain repairs.*
3. Removed from the ground/not standing: If the box has been removed from the ground or is no longer standing, LFN volunteers will remove the books and contact Jeanne Carey, who will contact the appropriate town official.
4. Empty: If the box is empty of books, the LFN volunteer will fill it with books in a timely manner.
5. Contact information for users to report damage/other problems will be placed inside the box.

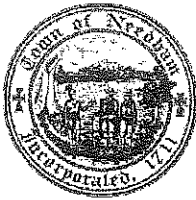
Needham Center Commuter Lot Box

1. Regular checking: The box will be checked weekly on a Monday to assure that no damage has occurred over the weekend and the contents of the box are appropriate.
2. Damage: if damage to the box is found, the volunteer will remove the books and follow the procedures established with the LFN to obtain repairs.*
3. Removed from the ground/not standing: If the box has been removed from the ground or is no longer standing, LFN volunteers will remove the books and contact Jeanne Carey, who will contact the appropriate town official.
4. Empty: If the box is empty of books, the LFN volunteer will fill it with books.
5. Contact information for users to report damage/other problems will be placed inside the box.

Evaluation

It is the desire of the LFN that this project benefit the members and visitors to the Town of Needham. The LFN plans to assess the use and contents of the boxes for the first 6 months of use. At that time, and based on the data gathered, the LFN will make a determination to continue the Little Free Library Boxes project or discontinue the project and remove the boxes. The recommendation shall be shared with town officials Devra Balin and Patty Carey.

*The LFN has retained a contractor who will be on call should any repairs be needed to the boxes.



**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 06/10/2014

Agenda Item	Set Water and Sewer Rates
Presenter(s)	Water and Sewer Rate Structure Committee David Davison, Assistant Town Manager/Finance Richard Merson, Director of Public Works Evelyn Poness, Town Treasurer/Collector

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
The Board held a Public Hearing regarding the Sewer and Water Rates at its June 10, 2014 meeting. The Board was presented with several rate scenarios and was informed that Scenario Three was being recommended by the Water and Sewer Rate Structure Committee. As this was the first time in nine years that the rates would be increased, the Board did not plan to vote that evening, but rather to allow more time for consideration and public input. The Board also asked for some additional information and alternative rate structures, which have been provided. The Board will be asked to adopt a rate structure that will close the structural gap between the rates and the costs.			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	[YES]	NO
Suggested Motion: Move that the Board approve the water and sewer block and rate structure that is identified as Schedule _____; further that the Board approve a Septage Disposal fee of \$85.00 per 1,000 gallons; further that the Board approve a basic service fee of \$_____ per quarter, a second meter fee of \$_____ per quarter, and a basic sewer fee of \$_____ per quarter with bills issued after July 1, 2014; and further that the Board delay the implementation of the new step rates until October 1, 2014. And further move that the Board approve the water and sewer block and rate structure that is identified as Schedule _____ for monthly accounts; further that the Board approve a basic service fee of \$_____ per month, a second meter fee of \$_____ per month, and a basic sewer fee of \$_____ per month with bills issued after July 1, 2014.			
3.	BACK UP INFORMATION	[YES]	NO
(Describe backup below) a. Memo from the Assistant Town Manager/Director of Finance b. Schedules			

dbd 06/20/2014

Memorandum

To: Board of Selectmen
From: David Davison, Assistant Town Manager/Director of Finance
CC: Kate Fitzpatrick, Town Manager; Chris Coleman, Assistant Town Manager/Director of Operations, Richard Merson, Director of Public Works, Robert Lewis, Assistant Director of Public Works, Vincent Roy, Superintendent of Sewer and Water, Evelyn Poness, Treasurer and Collector, Water and Sewer Rate Structure Committee
Date: June 20, 2014
Re: Water and Sewer Rates Update

The Board of Selectmen held its public hearing on proposed rates for water and sewer services on June 10, 2014. The Board heard from the Water and Sewer Rate Structure Committee about the process which led up to presenting six possible rate structures. All but one of the concepts would not generate the estimated billing necessary to fund the water and sewer operations without other funding sources. The Committee members unanimously agreed that Scenario Three provides the broadest approach in sharing the cost impact of the necessary rate increases, with a greater burden placed on discretionary second meter water use. Members of the Board seemed inclined to support Scenario Three as well. The Board provided time for public comment, and reiterated that the Board would not be voting rates until the June 24, 2014 meeting in order to have more time to consider the proposals and to allow the public additional time to comment.

The Board asked for a rate schedule, based on Scenario Three which showed the rates for years two and three. This request was made as the Board was not inclined to eliminate the gap in estimated revenue to estimated expenses in year one. This was also the recommendation of Water and Sewer Rate Structure Committee. In developing the rates for the next phases, we considered both the magnitude of the impact, and the goal of Massachusetts Department of Environmental Protection (DEP) to have residential water use decline. We therefore assume that the volume of billable water will decrease in years two and three, as the effect of the higher rates is felt by ratepayers.

The Board also asked us to reevaluate the irrigation (second meter) rates and determine what changes could be made to further lower the irrigation rates from the option the Water and Sewer Rate Structure Committee recommended. The Board also expressed concern about the \$66.33 minimum sewer bill per quarter and asked whether the minimum sewer bill could be reduced.

The proposed rate structure (Table 1) based on Scenario Three would increase the average household water and sewer (AHWS) bill based on 12,000 cubic feet use over the three years by 15.2%. The table shows both the amount and percent change in each step for each of the years. The first four lines are the step rates for domestic (regular) water use. The fifth line shows the Basic Service fee for domestic water. The next group of steps includes the irrigation (second meter) rates, and the last group of steps includes the sewer rates. Scenario Three includes a minimum charge of \$66.33 for sewer. This minimum charge is inclusive of the first 600 c.f. of sewer charges. Currently there is no minimum charge for sewer, but for comparison purposes, we total and show what the charge is for the first 600 c.f. of sewer at the current rate in order better understand how much the rate would be. The annual bill for the AHWS in year one would be \$87 more than the current bill of \$1,481. This represents an increase of 5.9%. In year two, the increase on the AHWS bill would be \$76 or a 4.9% increase, and in the third year the annual bill would be \$1,705 or \$61 more than the \$1,644 bill in year two, an increase of 3.7%.

Table 1

Description	Current	Phase 1	Change	%	Phase 2	Change	%	Phase 3	Change	%	Overall Change	%
Step 1	\$2.50	\$2.75	\$0.25	10.0%	\$3.00	\$0.25	9.1%	\$3.25	\$0.25	8.3%	\$0.75	30.0%
Step 2	\$3.75	\$3.44	-\$0.31	-8.3%	\$3.75	\$0.31	9.0%	\$4.06	\$0.31	8.3%	\$0.31	8.3%
Step 3	\$4.00	\$4.13	\$0.13	3.3%	\$4.40	\$0.27	6.5%	\$4.47	\$0.07	1.6%	\$0.47	11.8%
Step 4	\$4.40	\$5.09	\$0.69	15.7%	\$5.19	\$0.10	2.0%	\$5.27	\$0.08	1.5%	\$0.87	19.8%
Basic Service	\$15.00	\$18.00	\$3.00	20.0%	\$18.00	\$0.00	0.0%	\$18.00	\$0.00	0.0%	\$3.00	20.0%
Step 1	\$4.85	\$6.11	\$1.26	26.0%	\$6.11	\$0.00	0.0%	\$6.28	\$0.17	2.8%	\$1.43	29.5%
Step 2	\$4.85	\$7.13	\$2.28	47.0%	\$7.13	\$0.00	0.0%	\$7.34	\$0.21	2.9%	\$2.49	51.3%
Step 3	\$4.85	\$8.14	\$3.29	67.8%	\$8.14	\$0.00	0.0%	\$8.38	\$0.24	2.9%	\$3.53	72.8%
Step 4	\$5.34	\$9.16	\$3.82	71.5%	\$9.16	\$0.00	0.0%	\$9.43	\$0.27	2.9%	\$4.09	76.6%
Step 1*	\$46.20	\$66.33	\$20.13	43.6%	\$68.43	\$2.10	3.2%	\$69.03	\$0.60	0.9%	\$22.83	49.4%
Step 2	\$8.40	\$8.50	\$0.10	1.2%	\$8.80	\$0.30	3.5%	\$9.10	\$0.30	3.4%	\$0.70	8.3%
Step 3	\$8.95	\$9.35	\$0.40	4.5%	\$9.95	\$0.60	6.4%	\$10.00	\$0.05	0.5%	\$1.05	11.7%
Step 4	\$9.70	\$10.75	\$1.05	10.8%	\$11.44	\$0.69	6.4%	\$11.50	\$0.06	0.5%	\$1.80	18.6%
AHWS**	\$1,481	\$1,568	\$87	5.9%	\$1,644	\$76	4.9%	\$1,705	\$61	3.7%	\$ 224	15.2%
Needham Average#	\$1,218	\$1,301	\$83	6.8%	\$1,361	\$60	4.6%	\$1,416	\$54	4.0%	\$ 197	16.2%

* For comparable purposes only, current step rate shown as a minimum amount

**Industry average 12,000 CF of annual household use

Average Needham household use 2012 DEP report (9,920)

We have also provided the estimated annual bill based on the average Needham household usage per the 2012 DEP report. The average Needham household used approximately 9,920 c.f of water. It should be noted that based on the average household size in Needham per the US Census data, water usage would need to be approximately 8,626 c.f or less per year to be under the 65 gallons of water use per day per person. This would be a reduction of more than 13%. Nonetheless, a Needham customer with water and sewer service using 9,920 c.f. would have an annual bill of \$1,218. Based on the proposed rate structure, that bill would increase by \$83 in year one (a 6.8% increase), then by another \$60 in year two (a 4.6% increase), and at the end of year three the bill would be \$1,416 or \$54 more than year two, an increase of 4.0%. Over the three year period, the annual bill would increase by 16.2%. This would be \$197 more than the bill under the current rates, but would be \$27 lower than the AHWS or approximately 12% less.

The regular water rate structure would increase the lowest step rate from the present \$2.50 to \$3.25 per hundred cubic feet by the third year. This would still have Needham's water rate well below that of many of the comparison communities (Table 2). The highest regular water step rate at \$5.27 in year three would too be well below that of many other communities. The Town's sewer rates are on the higher end of the group, by year three the top sewer step would be \$11.50 per hundred cubic feet, this compares to an average of \$12.33 today.

Table 2
Water and Sewer
Bottom and Top Step Rates

Community	Bottom Water Step Rate	Top Water Step Rate	Bottom Sewer Step Rate	Top Sewer Step rate
Belmont	\$5.68	\$6.53	\$11.25	\$11.25
Cambridge	\$3.02	\$3.96	\$8.19	\$10.66
Canton	\$3.80	\$13.11	\$6.82	\$12.49
Dedham	\$4.17	\$8.77	\$8.08	\$8.08
Framingham	\$5.25	\$9.67	\$6.02	\$17.35
Lexington	\$3.31	\$6.55	\$7.00	\$18.17
Melrose#	\$5.31	\$7.90	\$8.97	\$11.34
Milton	\$6.27	\$7.39	\$11.06	\$12.99
Natick	\$1.60	\$5.61	\$4.30	\$12.66
Newton	\$5.84	\$8.41	\$8.60	\$12.40
Norwood#	\$3.34	\$4.94	\$6.62	\$12.76
Stoughton	\$3.60	\$7.36	\$9.50	\$9.50
Wakefield	\$5.45	\$5.45	\$10.20	\$10.20
Waltham	\$3.23	\$9.36	\$5.75	\$13.69
Watertown	\$4.00	\$9.82	\$7.73	\$13.38
Wellesley	\$2.99	\$9.18	\$8.28	\$8.28
Westwood	\$4.17	\$8.77	\$5.45	\$14.60
Weymouth	\$4.23	\$7.18	\$7.15	\$12.16
18 Community Average	\$4.18	\$7.78	\$7.83	\$12.33
Needham	\$2.50	\$4.40	\$7.70	\$9.70

sewer rate based on percent of water

Based on the estimated billable volume of water, irrigation, and sewer, the proposed rate structure will meet the revenue target for water by year three, but may still fall short for sewer. The three year plan does assume a further reduction in billable use of water by three percent and two percent in sewer. Water decline is expected to be higher, as second meter use is expected to decline given the higher prices proposed.

The great imbalance in the rate structure that exists today is due to the fact that step one rates are significantly lower than are required to provide the service. Therefore, on a percentage basis, the increases in the lower steps are

much greater, but the cost per unit of use would still be lower than the charge for use in the higher steps.

The Board also requested alternatives to the scenario recommended in order to decrease irrigation rates and/or to have a lower minimum bill for sewer. Attached are three alternatives each for water and sewer. The alternatives are not dependent or grouped, meaning the Board could pick Alternative 1 for water and pick Alternative 3 for sewer, or the Board could stay with the recommended structure for water, but elect Alternative 2 for sewer. Each alternative was built around the revenue target for water and sewer designed for Scenario Three. It should be noted that the revenue target for water was decreased, because, unlike sewer, if water consumption does decrease by the anticipated amount, the Town's reliance on MWRA water would be expected to decline, meaning the Town would be able to meet more of its water demand from its own wells. The Town is able to produce water at a lower cost than the water which is purchased from the MWRA. Operating costs for water would be less as the water assessment from the MWRA would be less.

The alternatives listed below and shown on the attached charts impact the AHWS to varying degrees, some dramatically

Water Alternative One Summary

Basic Service Fee increased by \$3 per quarter; keep step 1 and 2 at current rates; increase current step 3 and 4 rates by 20% and 25%; irrigation rate step 1 same as step 4 regular water; other steps increased by 10% over lower step

Water Alternative Two Summary

Keep current Basic Service Fee; implement a second meter fee \$4.00 per quarter; increase Step 1 to \$3; keep current step 2; increase current step 3 and 4 rates by 15%; set irrigation step 1 at the domestic step 4 rate; increase current irrigation step 2 rate by 12.5%, step 3 rate by 25%, and step 4 rate by 50%

Water Alternative Three Summary

Keep current domestic rates, but increase top step by 8%; increase current irrigation rates by 25%; increase basic service fee by \$6

Sewer Alternative One Summary

Adjust Minimum Bill to \$53.73 which includes first 450 C.F.; step two now includes use between 450 to 2,700 C.F., same step rates as the recommended option.

Sewer Alternative Two Summary

Adjust Minimum Bill to \$41.13 includes first 300 C.F.; step two now includes use between 300 to 2,700 C.F., same step rates as the recommended option.

Sewer Alternative Three Summary

Sewer Basic Service Fee of \$9.00 per quarter; step 1 rate same as current step 2 rate; increase current step 3 and 4 rates by 10%

The Water and Sewer Rate Structure Committee met on Thursday, June 19 to review the alternatives that have been developed for the Board's further consideration. The Committee continues to believe that Scenario Three, now that we have a sense of what the rates may be in year two and three, is still the preferred option. I discussed with the Committee the possibility that the changes to the step rates be delayed until October 1, 2014, in order to give residents extra time to plan, possibly changing use habits before the higher rates go into effect. The Committee agreed this would be good and voted to support this recommendation to the Board. However, the increase in the basic service charge should take effect on July 1 as the amount of usage does not impact the assessment of this charge. The Committee also agreed that any flat fee change should not be delayed. Finally, as in the past, should consumption behavior not change, and billable volumes remain at prior levels, we would recommend a rate credit to the Board at a future meeting. I will be at your meeting along with members of the Water and Sewer Rate Structure Committee to discuss the recommendations and to answer questions you may have. Please do not hesitate to contact me if you have any questions before hand.

SEWER & WATER
Step Rate Calculations

Primary Plan Phase 1	Cubic Feet	Revenue				Total
		Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	
Water						
Water Regular	98,648,805	27,300,000	45,600,000	8,960,000	16,788,805	98,648,805
Rate Per 100 CF		\$2.75	\$3.44	\$4.13	\$5.09	
Billing Estimate		\$750,750	\$1,568,640	\$370,048	\$854,550	\$3,543,988
SCMSP Regular	16,749,800	2,400	8,400	6,000	16,733,000	16,749,800
Rate Per 100 CF		\$2.75	\$3.44	\$4.13	\$5.09	
Billing Estimate		\$66	\$289	\$248	\$851,710	\$852,312
Irrigation	17,922,399	4,700,000	8,800,000	3,400,000	1,022,399	17,922,399
Rate Per 100 CF		\$6.11	\$7.13	\$8.14	\$9.16	
Billing Estimate		\$287,170	\$627,440	\$276,760	\$93,652	\$1,285,022
Basic Service Fee						\$651,600
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	34,544,204	133,321,004
Projected Billing		24%	41%	9%	26%	\$6,332,922
Single Rate Requirement for Consumption Estimate						\$4.46

SEWER & WATER
Step Rate Calculations

Primary Plan Phase 1	Cubic Feet	Revenue				Total
		Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	
Sewer Sewer Regular Rate Per 100 CF	82,216,539	26,000,000 Minimum Charge	43,400,000 \$8.50	4,842,100 \$9.35	7,974,439 \$10.75	82,216,539
Billing Estimate	791828	\$2,468,803	\$3,689,000	\$452,736	\$857,252	\$7,467,791
SCMSP Regular Rate Per 100 CF	7,537,400	2,400 Minimum Charge	8,400 \$8.50	6,000 \$9.35	7,520,600 \$10.75	7,537,400
Billing Estimate		\$265	\$714	\$561	\$808,465	\$810,005
Billable Consumption Estimate Projected Billing		26,002,400 29%	43,408,400 48%	4,848,100 5%	15,495,039 17%	89,753,939 \$8,277,796
Single Rate Requirement for Consumption Estimate						\$10.14

SEWER & WATER
Step Rate Calculations
Revenue

Primary Plan Phase 2	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Water						
Water Regular	96,675,829	27,300,000	45,600,000	8,960,000	14,815,829	96,675,829
Rate Per 100 CF		\$3.00	\$3.75	\$4.40	\$5.19	
Billing Estimate		\$819,000	\$1,710,000	\$394,240	\$768,942	\$3,692,182
SCMSP Regular	16,414,804	2,400	8,400	6,000	16,398,004	16,414,804
Rate Per 100 CF		\$3.00	\$3.75	\$4.40	\$5.19	
Billing Estimate		\$72	\$315	\$264	\$851,056	\$851,707
Irrigation	17,563,951	4,700,000	8,800,000	3,400,000	663,951	17,563,951
Rate Per 100 CF		\$6.11	\$7.13	\$8.14	\$9.16	
Billing Estimate		\$287,170	\$627,440	\$276,760	\$60,818	\$1,252,188
Basic Service Fee						\$651,600
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	31,877,784	130,654,584
Projected Billing		24%	42%	9%	24%	\$6,447,677

SEWER & WATER
Step Rate Calculations
Revenue

Primary Plan Phase 2	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Sewer Sewer Regular Rate Per 100 CF	81,469,748	26,000,000 Minimum Charge	43,400,000 \$8.80	4,842,100 \$9.95	7,227,648 \$11.44	81,469,748
Billing Estimate	791828	\$2,546,965	\$3,819,200	\$481,789	\$826,843	\$7,674,796
SCMSP Regular Rate Per 100 CF	7,386,652	2,400 Minimum Charge	8,400 \$8.80	6,000 \$9.95	7,369,852 \$11.44	7,386,652
Billing Estimate		\$274	\$739	\$597	\$843,111	\$844,721
Billable Consumption Estimate		26,002,400	43,408,400	4,848,100	14,597,500	88,856,400
Projected Billing		29%	49%	5%	16%	\$8,519,517

SEWER & WATER
Step Rate Calculations
Revenue

Primary Plan Phase 3	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Water						
Water Regular	96,047,789	27,300,000	45,600,000	8,960,000	14,187,789	96,047,789
Rate Per 100 CF		\$3.25	\$4.06	\$4.47	\$5.27	
Billing Estimate		\$887,250	\$1,851,360	\$400,512	\$747,696	\$3,886,818
SCMSP Regular	16,247,306	2,400	8,400	6,000	16,230,506	16,247,306
Rate Per 100 CF		\$3.25	\$4.06	\$4.47	\$5.27	
Billing Estimate		\$78	\$341	\$268	\$855,348	\$856,035
Irrigation	17,026,279	4,700,000	8,800,000	3,400,000	126,279	17,026,279
Rate Per 100 CF		\$6.28	\$7.34	\$8.38	\$9.43	
Billing Estimate		\$295,160	\$645,920	\$284,920	\$11,908	\$1,237,908
Basic Service Fee						\$651,600
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	30,544,574	129,321,374
Projected Billing		25%	42%	10%	24%	\$6,632,361

SEWER & WATER
Step Rate Calculations
Revenue

Primary Plan Phase 3	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Sewer						
Sewer Regular	80,647,582	26,000,000	43,400,000	4,842,100	6,405,482	80,647,582
Rate Per 100 CF		Minimum Charge	\$9.10	\$10.00	\$11.50	
Billing Estimate		\$2,569,297	\$3,949,400	\$484,210	\$736,630	\$7,739,537
SCMSP Regular	7,311,278	2,400	8,400	6,000	7,294,478	7,311,278
Rate Per 100 CF		Minimum Charge	\$9.10	\$10.00	\$11.50	
Billing Estimate		\$276	\$764	\$600	\$838,865	\$840,505
Billable Consumption Estimate		26,002,400	43,408,400	4,848,100	13,699,960	87,958,860
Projected Billing		30%	49%	6%	16%	\$8,580,043

SEWER & WATER
Step Rate Calculations
Revenue

Alternative I	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Water						
Water Regular	98,648,805	27,300,000	45,600,000	8,960,000	16,788,805	98,648,805
Rate Per 100 CF		\$2.50	\$3.75	\$4.80	\$5.50	
Billing Estimate		\$682,500	\$1,710,000	\$430,080	\$923,384	\$3,745,964
SCMSP Regular	16,749,800	2,400	8,400	6,000	16,733,000	16,749,800
Rate Per 100 CF		\$2.50	\$3.75	\$4.80	\$5.50	
Billing Estimate		\$60	\$315	\$288	\$920,315	\$920,978
Irrigation	17,922,399	4,700,000	8,800,000	3,400,000	1,022,399	17,922,399
Rate Per 100 CF		\$5.50	\$6.05	\$6.66	\$7.32	
Billing Estimate		\$258,500	\$532,400	\$226,270	\$74,845	\$1,092,015
Basic Service Fee						\$651,600
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	34,544,204	133,321,004
Projected Billing		24%	41%	9%	26%	\$6,410,557

SEWER & WATER
Step Rate Calculations
Revenue

Alternative II	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Water						
Water Regular	98,648,805	27,300,000	45,600,000	8,960,000	16,788,805	98,648,805
Rate Per 100 CF		\$3.00	\$3.75	\$4.60	\$5.06	
Billing Estimate		\$819,000	\$1,710,000	\$412,160	\$849,514	\$3,790,674
SCMSP Regular	16,749,800	2,400	8,400	6,000	16,733,000	16,749,800
Rate Per 100 CF		\$3.00	\$3.75	\$4.60	\$5.06	
Billing Estimate		\$72	\$315	\$276	\$846,690	\$847,353
Irrigation	17,922,399	4,700,000	8,800,000	3,400,000	1,022,399	17,922,399
Rate Per 100 CF		\$5.06	\$5.46	\$6.06	\$8.01	
Billing Estimate		\$237,820	\$480,480	\$206,040	\$81,894	\$1,006,234
Basic Service Fee						\$607,000
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	34,544,204	133,321,004
Projected Billing		24%	41%	9%	26%	\$6,251,260

SEWER & WATER
Step Rate Calculations
Revenue

Alternative III	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Water						
Water Regular	98,648,805	27,300,000	45,600,000	8,960,000	16,788,805	98,648,805
Rate Per 100 CF		\$2.50	\$3.75	\$4.00	\$4.75	
Billing Estimate		\$682,500	\$1,710,000	\$358,400	\$797,468	\$3,548,368
SCMSP Regular	16,749,800	2,400	8,400	6,000	16,733,000	16,749,800
Rate Per 100 CF		\$2.50	\$3.75	\$4.00	\$4.75	
Billing Estimate		\$60	\$315	\$240	\$794,818	\$795,433
Approximate Percent-->		26%	49%	19%	6%	100%
Irrigation	17,922,399	4,700,000	8,800,000	3,400,000	1,022,399	17,922,399
Rate Per 100 CF		\$6.06	\$6.06	\$6.06	\$6.68	
Billing Estimate		\$284,820	\$533,280	\$206,040	\$68,296	\$1,092,436
Basic Service Fee						\$760,200
Billable Consumption Estimate		32,002,400	54,408,400	12,366,000	34,544,204	133,321,004
Projected Billing		24%	41%	9%	26%	\$6,196,437

SEWER & WATER
Step Rate Calculations
Revenue

Alternative I	Cubic Feet	Step 1 Under 450	Step 2 450 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Sewer Sewer Regular Rate Per 100 CF	82,216,539	18,160,200 Minimum Charge	51,239,800 \$8.50	4,842,100 \$9.35	7,974,439 \$10.75	82,216,539
Billing Estimate		\$1,999,831	\$4,355,383	\$452,736	\$857,252	\$7,665,202
SCMSP Regular Rate Per 100 CF	7,537,400	1,800 Minimum Charge	9,000 \$8.50	6,000 \$9.35	7,520,600 \$10.75	7,537,400
Billing Estimate		\$215	\$765	\$561	\$808,465	\$810,005
Billable Consumption Estimate Projected Billing		18,162,000 20%	51,248,800 57%	4,848,100 5%	15,495,039 17%	89,753,939 \$8,475,208

SEWER & WATER
Step Rate Calculations
Revenue

Alternative II	Cubic Feet	Step 1 Under 300	Step 2 300 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Sewer Sewer Regular Rate Per 100 CF	82,216,539	12,106,800 Minimum Charge	57,293,200 \$8.50	4,842,100 \$9.35	7,974,439 \$10.75	82,216,539
Billing Estimate		\$1,530,859	\$4,869,922	\$452,736	\$857,252	\$7,710,769
SCMSP Regular Rate Per 100 CF	7,537,400	1,200 Minimum Charge	9,600 \$8.50	6,000 \$9.35	7,520,600 \$10.75	7,537,400
Billing Estimate		\$165	\$816	\$561	\$808,465	\$810,006
Billable Consumption Estimate Projected Billing		12,108,000 13%	57,302,800 64%	4,848,100 5%	15,495,039 17%	89,753,939 \$8,520,775

SEWER & WATER
Step Rate Calculations
Revenue

Alternative III	Cubic Feet	Step 1 Under 600	Step 2 600 - 2,700	Step 3 2,700 - 4,200	Step 4 Over 4,200	Total
Sewer						89,753,939
Sewer Regular	82,216,539	26,000,000 \$8.40	43,400,000 \$8.40	4,842,100 \$9.85	7,974,439 \$10.67	82,216,539
Rate Per 100 CF						
Billing Estimate	791828	\$2,184,000	\$3,645,600	\$476,705	\$850,873	\$7,157,177
SCMSP Regular	7,537,400	2,400 \$8.40	8,400 \$8.40	6,000 \$9.85	7,520,600 \$10.67	7,537,400
Rate Per 100 CF						
Billing Estimate		\$202	\$706	\$591	\$802,448	\$803,946
Basic Service Fee						\$324,000
Billable Consumption Estimate		26,002,400 29%	43,408,400 48%	4,848,100 5%	15,495,039 17%	89,753,939
Projected Billing						\$8,285,123

**TOWN OF NEEDHAM
Board of Selectmen**

**Water and Sewer
Proposed Rates
Update**

June 24, 2014

Annual Water and Sewer Charges in Selected Communities
Receiving Services from the MWRA
Cost to Average Customer Consuming 12,000 Cubic Feet

Community	Water Rate Structure	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12	Dec-13	Five Year Change
Belmont	(B)	\$1,683	\$1,774	\$1,892	\$1,980	\$2,071	\$2,167	28.8%
Cambridge	*	\$1,158	\$1,231	\$1,360	\$1,360	\$1,360	\$1,401	21.0%
Canton	*	\$1,218	\$1,265	\$1,358	\$1,447	\$1,480	\$1,523	25.0%
Dedham	*	\$1,485	\$1,497	\$1,497	\$1,530	\$1,530	\$1,530	3.0%
Framingham	(B)	\$931	\$1,008	\$1,096	\$1,214	\$1,247	\$1,444	55.1%
Lexington	(B)	\$1,289	\$1,240	\$1,261	\$1,408	\$1,457	\$1,481	14.9%
Melrose	(B)	\$1,468	\$1,558	\$1,587	\$1,640	\$1,759	\$1,809	23.2%
Milton	(B)	\$1,588	\$1,634	\$1,717	\$1,777	\$1,887	\$1,929	21.5%
Natick	**	\$1,069	\$1,175	\$1,267	\$1,267	\$1,267	\$1,311	22.6%
Newton	(B)	\$1,278	\$1,428	\$1,590	\$1,712	\$1,779	\$1,848	44.6%
Norwood	(B)	\$1,132	\$1,190	\$1,246	\$1,246	\$1,214	\$1,226	8.3%
Stoughton	*	\$1,338	\$1,338	\$1,532	\$1,609	\$1,609	\$1,644	22.9%
Wakefield	*	\$1,369	\$1,510	\$1,547	\$1,607	\$1,658	\$1,690	23.5%
Waltham	(B)	\$999	\$999	\$1,021	\$1,165	\$1,182	\$1,182	18.3%
Watertown	(B)	\$1,197	\$1,269	\$1,327	\$1,327	\$1,393	\$1,432	19.6%
Wellesley	*	\$1,144	\$1,244	\$1,307	\$1,386	\$1,386	\$1,457	27.4%
Westwood	*	\$1,285	\$1,275	\$1,275	\$1,328	\$1,340	\$1,360	5.9%
Weymouth	**	\$1,319	\$1,418	\$1,486	\$1,530	\$1,530	\$1,530	16.0%
Group Average		\$1,275	\$1,336	\$1,409	\$1,474	\$1,508	\$1,554	21.8%

Needham	*	(B)	\$1,481	\$1,481	\$1,481	\$1,481	\$1,481	0.0%
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B = Block Rates

S = Single Rate

* = Partial water service from MWRA

** = Sewer service only

Source: MWRA Annual Water and Sewer Retail Rate Surveys

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Q-1

Step	Volume	Rate
Water - Regular		
Step 1	0 - 600	\$2.75
Step 2	600 - 2,700	\$3.44
Step 3	2,700 - 4,200	\$4.13
Step 4	Over 4,200	\$5.09

Water - Irrigation		
Step 1	0 - 600	\$6.11
Step 2	600 - 2,700	\$7.13
Step 3	2,700 - 4,200	\$8.14
Step 4	Over 4,200	\$9.16

Sewer		
Step 1	Minimum Charge (includes 600 c.f.)	\$66.33
Step 2	600 - 2,700	\$8.50
Step 3	2,700 - 4,200	\$9.35
Step 4	Over 4,200	\$10.75

Septage Disposal
Per 1,000 Gallons

\$85.00

Basic Service Fee

\$18.00

Step rates are per 100 CF (cubic feet) except septage which is per 1,000 gallons

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE M-1

Step	Volume	Rate
Water - Regular		
Step 1	0 - 200	\$2.75
Step 2	200 - 900	\$3.44
Step 3	900 - 1,400	\$4.13
Step 4	Over 1,400	\$5.09

Water - Irrigation		
Step 1	0 - 200	\$6.11
Step 2	200 - 900	\$7.13
Step 3	900 - 1,400	\$8.14
Step 4	Over 1,400	\$9.16

Sewer		
Step 1	Minimum Charge (includes 200 c.f.)	\$22.11
Step 2	200 - 900	\$8.50
Step 3	900 - 1,400	\$9.35
Step 4	Over 1,400	\$10.75

Septage Disposal
Per 1,000 Gallons

\$85.00

Basic Service Fee

\$6.00

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Q-1.2

Step	Volume	Rate
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Water - Regular

Step 1	0 - 600	\$3.00
Step 2	600 - 2,700	\$3.75
Step 3	2,700 - 4,200	\$4.40
Step 4	Over 4,200	\$5.19

Water - Irrigation

Step 1	0 - 600	\$6.11
Step 2	600 - 2,700	\$7.13
Step 3	2,700 - 4,200	\$8.14
Step 4	Over 4,200	\$9.16

Sewer

Step 1	Minimum Charge (includes 600 c.f.)	\$68.43
Step 2	600 - 2,700	\$8.80
Step 3	2,700 - 4,200	\$9.95
Step 4	Over 4,200	\$11.44

Septage Disposal

Per 1,000 Gallons

\$85.00

Basic Service Fee

\$18.00

Step rates are per 100 CF (cubic feet) except septage which is per 1,000 gallons

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE M-1.2

Step	Volume	Rate
------	--------	------

Water - Regular

Step 1	0 - 200	\$3.00
Step 2	200 - 900	\$3.75
Step 3	900 - 1,400	\$4.40
Step 4	Over 1,400	\$5.19

Water - Irrigation

Step 1	0 - 200	\$6.11
Step 2	200 - 900	\$7.13
Step 3	900 - 1,400	\$8.14
Step 4	Over 1,400	\$9.16

Sewer

Step 1	Minimum Charge (includes 200 c.f.)	\$22.81
Step 2	200 - 900	\$8.80
Step 3	900 - 1,400	\$9.95
Step 4	Over 1,400	\$11.44

Septage Disposal

Per 1,000 Gallons

\$85.00

Basic Service Fee

\$6.00

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Q-1.3

Step	Volume	Rate
Water - Regular		
Step 1	0 - 600	\$3.25
Step 2	600 - 2,700	\$4.06
Step 3	2,700 - 4,200	\$4.47
Step 4	Over 4,200	\$5.27
Water - Irrigation		
Step 1	0 - 600	\$6.28
Step 2	600 - 2,700	\$7.34
Step 3	2,700 - 4,200	\$8.38
Step 4	Over 4,200	\$9.43
Sewer		
Step 1	Minimum Charge (includes 600 c.f.)	\$69.03
Step 2	600 - 2,700	\$9.10
Step 3	2,700 - 4,200	\$10.00
Step 4	Over 4,200	\$11.50
Septage Disposal		
Per 1,000 Gallons		\$85.00
Basic Service Fee		\$18.00

Step rates are per 100 CF (cubic feet) except septage which is per 1,000 gallons

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE M-1.3

Step	Volume	Rate
Water - Regular		
Step 1	0 - 200	\$3.25
Step 2	200 - 900	\$4.06
Step 3	900 - 1,400	\$4.47
Step 4	Over 1,400	\$5.27
Water - Irrigation		
Step 1	0 - 200	\$6.28
Step 2	200 - 900	\$7.34
Step 3	900 - 1,400	\$8.38
Step 4	Over 1,400	\$9.43
Sewer		
Step 1	Minimum Charge (includes 200 c.f.)	\$23.01
Step 2	200 - 900	\$9.10
Step 3	900 - 1,400	\$10.00
Step 4	Over 1,400	\$11.50
Septage Disposal		
Per 1,000 Gallons		\$85.00
Basic Service Fee		\$6.00

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Alt-1QW		
Step	Volume	Rate

Water - Regular		
Step 1	0 - 600	\$2.50
Step 2	600 - 2,700	\$3.75
Step 3	2,700 - 4,200	\$4.80
Step 4	Over 4,200	\$5.50

Water - Irrigation		
Step 1	0 - 600	\$5.50
Step 2	600 - 2,700	\$6.05
Step 3	2,700 - 4,200	\$6.66
Step 4	Over 4,200	\$7.32

Basic Service Fee

\$18.00

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE Alt-1MW		
Step	Volume	Rate

Water - Regular		
Step 1	0 - 200	\$2.50
Step 2	200 - 900	\$3.75
Step 3	900 - 1,400	\$4.80
Step 4	Over 1,400	\$5.50

Water - Irrigation		
Step 1	0 - 200	\$5.50
Step 2	200 - 900	\$6.05
Step 3	900 - 1,400	\$6.66
Step 4	Over 1,400	\$7.32

Basic Service Fee

\$6.00

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Alt-2QW

Step	Volume	Rate
Water - Regular		
Step 1	0 - 600	\$3.00
Step 2	600 - 2,700	\$3.75
Step 3	2,700 - 4,200	\$4.60
Step 4	Over 4,200	\$5.06

Water - Irrigation		
Step 1	0 - 600	\$5.06
Step 2	600 - 2,700	\$5.46
Step 3	2,700 - 4,200	\$6.06
Step 4	Over 4,200	\$8.01

Basic Service Fee
Second Meter Fee

\$15.00
\$4.00

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE Alt-2MW

Step	Volume	Rate
Water - Regular		
Step 1	0 - 200	\$3.00
Step 2	200 - 900	\$3.75
Step 3	900 - 1,400	\$4.60
Step 4	Over 1,400	\$5.06

Water - Irrigation		
Step 1	0 - 200	\$5.06
Step 2	200 - 900	\$5.46
Step 3	900 - 1,400	\$6.06
Step 4	Over 1,400	\$8.01

Basic Service Fee
Second Meter Fee

\$5.00
\$1.34

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE AIt-3QW

Step	Volume	Rate
Water - Regular		
Step 1	0 - 600	\$2.50
Step 2	600 - 2,700	\$3.75
Step 3	2,700 - 4,200	\$4.00
Step 4	Over 4,200	\$4.75
Water - Irrigation		
Step 1	0 - 600	\$6.06
Step 2	600 - 2,700	\$6.06
Step 3	2,700 - 4,200	\$6.06
Step 4	Over 4,200	\$6.68
Basic Service Fee		\$21.00

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE AIt-3MW

Step	Volume	Rate
Water - Regular		
Step 1	0 - 200	\$2.50
Step 2	200 - 900	\$3.75
Step 3	900 - 1,400	\$4.00
Step 4	Over 1,400	\$4.75
Water - Irrigation		
Step 1	0 - 200	\$6.06
Step 2	200 - 900	\$6.06
Step 3	900 - 1,400	\$6.06
Step 4	Over 1,400	\$6.68
Basic Service Fee		\$7.00

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Alt-1QS		
Step	Volume	Rate
Sewer		
Step 1	Minimum Charge (includes 450 c.f.)	\$53.73
Step 2	450 - 2,700	\$8.50
Step 3	2,700 - 4,200	\$9.35
Step 4	Over 4,200	\$10.75

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE Alt-1MS		
Step	Volume	Rate
Sewer		
Step 1	Minimum Charge (includes 150 c.f.)	\$17.91
Step 2	150 - 900	\$8.50
Step 3	900 - 1,400	\$9.35
Step 4	Over 1,400	\$10.75

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Alt-2QS

Step	Volume	Rate
Sewer		
Step 1	Minimum Charge (includes 300 c.f.)	\$41.13
Step 2	300 - 2,700	\$8.50
Step 3	2,700 - 4,200	\$9.35
Step 4	Over 4,200	\$10.75

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE Alt-2MS

Step	Volume	Rate
Sewer		
Step 1	Minimum Charge (includes 100 c.f.)	\$13.71
Step 2	100 - 900	\$8.50
Step 3	900 - 1,400	\$9.35
Step 4	Over 1,400	\$10.75

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Quarterly**

SCHEDULE Alt-3QS		
Step	Volume	Rate
Sewer		
Step 1	0 - 600	\$8.40
Step 2	600 - 2,700	\$8.40
Step 3	2,700 - 4,200	\$9.85
Step 4	Over 4,200	\$10.67

Basic Sewer Fee

\$9.00

Step rates are per 100 CF (cubic feet)

**Proposed
Water and Sewer Rates
Monthly**

SCHEDULE Alt-3MS		
Step	Volume	Rate
Sewer		
Step 1	0 - 200	\$8.40
Step 2	200 - 900	\$8.40
Step 3	900 - 1,400	\$9.85
Step 4	Over 1,400	\$10.67

Basic Sewer Fee

\$3.00



**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 6/24/2014

Agenda Item	DEP Water Management Act
Presenter(s)	Kate Fitzpatrick, Town Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
The Town Manager will outline proposed changes to the Water Management Act, including potential impact on the Town of Needham, and will request that the Board support the submittal of comments during the comment period, which expires July 10, 2014.			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO
<i>Suggested Motion:</i> That the Board authorize the Town Manger to submit a letter to the Department of Environmental Protection outlining the Town's concerns relative to the proposed regulations.			
3.	BACK UP INFORMATION ATTACHED	YES	NO
a. Notice of Extension of Public Comment Period, Massachusetts Department of Environment Protection, Water Resources Management Program Regulations 310 CMR 36.00 b. Water Management Act Permit Guidance Document			

Extension of Public Comment Period
Massachusetts Department of Environment Protection
Water Resources Management Program Regulations 310 CMR 36.00

The comment period for the Water Resources Management (WMA) regulations revisions has been extended from June 10, 2014 to **July 10, 2014**. Written comments on all proposed revisions will be accepted until 5:00 p.m. on **July 10, 2014**, and may be submitted electronically via email to dep.talks@state.ma.us or by direct mail to:

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Management Regulatory Comment Box
One Winter Street, Fifth Floor
Boston, MA 02108
Attention: Elizabeth McCann

The proposed regulations are available from the MassDEP website at:
www.mass.gov/eea/agencies/massdep/news/comment.

Pursuant to M.G.L. c. 30A, the **MA Department of Environmental Protection** (MassDEP) gives notice of its intent to amend the **Water Resources Management Program Regulations** (310 CRM 36.00) promulgated under the Massachusetts Water Management Act (M.G.L. c. 21G).

Summary:

The proposed revisions to the Water Resources Management (WMA) regulations incorporate a new methodology for calculating “safe yield” and the concept of “streamflow criteria” as developed through the multi-year Executive Office of Energy and Environmental Affairs (EEA) stakeholder process known as the Sustainable Water Management Initiative (SWMI). SWMI was started in 2010 by EEA for the purpose of incorporating the best available science into the management of the Commonwealth’s water resources and involved a wide range of stakeholders and support from EEA, the Department of Environmental Protection, the Department of Fish and Game, and the Department of Conservation and Recreation. The draft regulations reflect a carefully developed balance to protect the health of our waterbodies while meeting the needs of communities for water. The regulatory package also clarifies WMA permitting requirements and processes.

Please contact Beth McCann at elizabeth.mccann@state.ma.us or 617-292-5901 with any questions about the public comment process.

Water Management Act Permit Guidance Document

March 26, 2014

Massachusetts Department of
Environmental Protection

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1. Introduction

This document serves as a companion to the Massachusetts Department of Environmental Protection (the Department) Water Management Act Regulations (310 CMR 36.00) and is intended to provide guidance on Water Management Act (WMA) permit requirements outlined in the regulations, with a specific focus on new and revised requirements incorporated through the Executive Office of Energy and Environmental Affairs (EEA) Sustainable Water Management Initiative (SWMI), summarized in Section 2. Additional general guidance for WMA permits is posted on the Department's website at

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>.

The intended audience for this guidance is WMA permit applicants, WMA permittees, and others assisting with the 20-year permit renewal process for WMA permits.

2. Background on the Sustainable Water Management Initiative

The Sustainable Water Management Initiative (SWMI) was created in 2010 by EEA in partnership with the Department, the Department of Conservation and Recreation (DCR), and the Department of Fish and Game (DFG); together the three Departments are referred to as "the agencies." The initiative established an Advisory Committee and a Technical Subcommittee, comprised of a wide range of stakeholders, to advise EEA and its agencies on sustainable management of water resources that balance human and ecological needs.

The SWMI Advisory Committee adopted an overall principle to help frame the discussion and future decisions: "The Commonwealth's water resources are public resources that require **sustainable management practices** for the well-being and safety of our **citizens**, protection of the **natural environment**, and for **economic growth**." (Emphasis added) The SWMI Framework Summary (the Framework), published in November 2012, summarized the elements developed through SWMI and outlined how the Department will apply these elements to the WMA permitting program. The Framework can be found at <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>.

The Framework also outlined a pilot application of SWMI to evaluate how the Framework would be applied, and thereby inform and guide the incorporation of SWMI into the WMA regulations. The pilot process, which included four public water suppliers (PWSs) representing different system characteristics, spanned approximately nine months and provided very valuable insights on implementation of the SWMI framework, which are summarized in the final reports (<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>) and are reflected in this document and the regulations.

The Framework and pilots, along with ongoing and extensive consultation with stakeholders, have helped to determine how the core SWMI principles of sustainable management practices for the well-being and safety of citizens, protection of the natural environment, and economic growth have been incorporated

into the WMA Regulations. The following is a short summary of how the WMA regulations reflect these three principles.

Sustainable Management Practices

The WMA regulations have been revised to reflect over ten years of scientific investigation developed in partnership with the United States Geological Survey (USGS), which resulted in four major studies that build upon each other and lay the framework for the science that supports SWMI and WMA decision making. These studies have informed the agencies' and public's understanding of sustainable management and are briefly described in Appendix A. The key elements used in SWMI are outlined below:

- Natural streamflow estimates are used as a reference point to help understand the magnitude of changes resulting from water withdrawals and wastewater discharges.
- A cumulative water balance picture was developed to establish a "cumulative condition" and account for the effect of withdrawals and discharges during the time period from 2000-2004.
- Baseline water use was established to approximate use during the 2000-2004 time period and to serve as a reference point from which to measure future increases in water withdrawals.
- Streamflow Criteria, Biological Categories and Groundwater Withdrawal Categories were developed to capture the key insight of these studies—that the more water that is withdrawn from an aquifer, particularly in summer months, the greater the loss of the functions and values of streams and rivers. These include five Biological Categories (1 = least impacted to 5 = most impacted) using fish data as a surrogate for aquatic health, five Groundwater Withdrawal Categories (1 = least withdrawals to 5 = most withdrawals) using withdrawals compared to estimated natural flow, and Seasonal Groundwater Withdrawal Categories using withdrawals compared to estimated natural flow for five bioperiods. The upper boundaries of each category are the Streamflow Criteria for that category. See Appendix A and the Framework for a further description of the categories.

Recognizing the well-being and safety of our citizens and economic growth

The Framework states that existing water supply areas or those subbasins that currently provide public water (approximately 35% of all subbasins) are considered critical areas. Not surprisingly, many of these areas are categorized as a Groundwater Withdrawal Category 4 or 5 because they are serving as significant public water supplies. These areas are also almost exclusively located within the high and medium yield aquifers of the state as those are the areas where it made the most sense (from a water supply perspective) to develop groundwater sources. Ensuring that there is ample water available for the well-being and safety of our citizens and economic growth is addressed in the WMA regulations through:

- The Water Needs Forecasts Methodology applied by DCR to develop 20-year water needs forecasts for the Department's WMA permits for PWSs. Forecasts include economic growth considerations and assume efficient water use, represented by the State Water Conservation Standards of 65 residential gallons per capita per day (RGPCD) and 10% unaccounted for water (UAW).

- Emphasis on the importance of existing withdrawals and legitimate future needs which are acknowledged through the factors outlined in the WMA that the Department must consider in permitting. To meet the goal of protection of the natural environment, PWSs are being required to manage water efficiently to reduce further environmental impact and to improve conditions to the greatest extent feasible, through permit requirements outlined below and further described throughout this document.

Protection of the Natural Environment

Sections 4 through 9 of this document provide detailed information on WMA permit requirements which are intended to protect the natural environment. In summary the requirements include but are not limited to:

- Standard Permit Conditions Implementing Best Management Practices (Section 5): All permittees must implement water conservation and demand management measures and place limits on nonessential outdoor watering.
- Minimization (Section 6): Groundwater permittees in areas where groundwater is depleted must minimize their existing impacts, even if they are not increasing their withdrawals.
- Coldwater Fish Resource (CFR) Protection (Section 7): All permittees with withdrawals that impact streamflow at a CFR must evaluate ways of reducing their impacts. Permittees whose withdrawals are increasing must evaluate ways to mitigate their increased impacts, in consultation with the Department and DFG.
- Alternative Sources (Section 8): Groundwater permittees whose increasing withdrawals will change the biological or groundwater withdrawal category of the subbasin in which they are withdrawing must show they have no feasible alternatives that are less environmentally harmful.
- Mitigation (Sections 4 and 9): Permittees whose withdrawals are increasing must mitigate the increased impacts of their withdrawals.

For more information on SWMI, consult the November 28, 2012 Framework Summary at

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>.

3. Overview of the Permitting Process

The timeline and process for requesting a WMA permit renewal or a WMA permit for a new withdrawal are different and are outlined separately in the tables below. For additional information on application review timelines for all permits, and for permit amendments, refer to 310 CMR 4.00: Timely Action Schedule and Fee Provisions.

For most river basins, the Sustainable Water Management Initiative concepts will be incorporated into WMA permits at the 20-year permit renewal. The schedule for permit renewals by river basin is shown in Appendix C. For permits that have already been renewed in the Hudson, Blackstone, Charles and North

Coastal basins, SWMI-related permit conditions will be developed in consultation with DEP and EEA Agencies and incorporated at the next 5-year review. The WMA permit renewal process begins approximately 18 months prior to the expiration date for existing permits in each basin. Table 1 provides a timeline and summary of activities by DEP and other EEA Agencies to introduce the permit renewal process before permittees submit renewal applications. Table 2 provides a timeline and summary of the permit renewal process for existing WMA permits. Table 3 provides a timeline and summary of the process for new WMA permit applications.

Table 1: Water Management Permit Renewal Roll-out in a River Basin		
DEP and EEA Agency Activities before Renewal Application Submission		
Timeline	Activity	Notes on Deliverables
6 months before application submission date	Water needs forecasts development	DCR Office of Water Resources will contact public water supply permittees to begin development of draft water needs forecasts for permit renewal. Projected water needs and baseline for each applicant will determine the permit tier for its application and will determine the permit conditions in the final permit. Public water supplier (PWS) applicants should see the DCR OWM forecast method at http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html). Non-PWS applicants will develop and document water needs projections as part of their application.
Consultations can be scheduled prior to application submission by applicant request	Consultation meetings with permit applicants to identify possible offsets to withdrawal impacts	Required for applicants requesting withdrawals: • that could impact coldwater fish resources; or • that will be greater than the applicant's baseline
4 months before application submission date	Basin outreach meeting	In river basins with numerous permits, DEP, DCR and DFW will conduct a presentation for all permittees. The presentation will cover the permit renewal process, the SWMI process and new demand management and resource protection conditions that may appear in renewed permits. The basin outreach meeting may serve as a preliminary consultation meeting to identify possible offsets (unless applicants request an earlier consultation).
Application	Applicant submits a	Submit Water Management Act Permit Renewal Application,

Table 1: Water Management Permit Renewal Roll-out in a River Basin**DEP and EEA Agency Activities before Renewal Application Submission**

Timeline	Activity	Notes on Deliverables
submission date – 12 months before permit expiration	renewal application.	available on DEP's website.

Table 2: Permit Renewal Application Timeline
(Renewals cannot be for more than was previously permitted)

Timeline	Activity	Notes on Deliverables
Before Application Submission		
12 months before permit expiration	Applicant submits a renewal application.	Submit Water Management Act Permit Renewal Application, available on DEP's website.
Consultations will be scheduled by DEP as necessary for applicants that have not met with state agencies prior to application submission	Consultation meetings with state agencies to identify possible offsets to withdrawal impacts	Required of applicants requesting withdrawals: - that could impact coldwater fish resources; or - that will be greater than the applicant's baseline
After Application Submission		
1 month	Public notice	- DEP posts notice of all renewal applications in a basin in the Environmental Monitor. - DEP accepts written comments for 30 days
2 ½ months	DEP 72-day technical review period	After the technical review, DEP issues Order to Complete (OTC) requesting any additional information needed to complete the application review, including any required plans to minimize and mitigate the impacts of withdrawals and response to public comment received by DEP
5 ½ months	Applicant has 90 days to respond to the OTC	Response deadline may be extended upon applicant's request
8 months	DEP 72-day supplemental technical review period	After the supplemental technical review, DEP will either: - Deem the application complete; - Extend response deadline at the applicant's request; or - Deny the application. An application is complete if all required information is provided.
9 months	If application is complete,	DEP notifies other users and watershed associations

Table 2: Permit Renewal Application Timeline
(Renewals cannot be for more than was previously permitted)

Timeline	Activity	Notes on Deliverables
	DEP will issue draft permit within 30 days for public comment	and posts notice in the Environmental Monitor that draft permit is available for review DEP accepts written comment for 30 days
12 months	DEP issues final permit	DEP may extend the review for up to 9 months if additional time is necessary to give the application proper consideration.
21 days after permit issuance	Permit appeal period.	

Table 3: New Permit Application Timeline
For withdrawals not previously authorized by registration or permit

Timeline	Activity	Notes on Deliverables
Before Application Submission		
Concurrently with application process	For a new public water supply source, the Source Approval Process must be completed prior to permit issuance	Submit, with application or under separate cover, a copy of the Source Approval for the new source. See Drinking Water Regulations (310 CMR 22.21), Guidelines for Public Water Systems.
An application cannot be deemed complete and a permit cannot be issued without these approvals	Massachusetts Environmental Policy Act (MEPA) review must be completed as part of the application process	Submit, with application or under separate cover: - A determination that the project does not meet MEPA thresholds; or - A certificate stating that no EIR is required; or - A certificated stating that any FEIR is adequate. See MEPA Regulations (301 CMR 11.00)
6 months before application submission date – PWS applicants should contact DCR Office of Water Resources	Water needs forecasts development	Projected water needs and baseline for each applicant will determine the permit tier for its application and will determine the permit conditions in the final permit. Public water supplier (PWS) applicants should see the DCR OWM forecast method at http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html . Non-PWS applicants will develop and document water needs projections as part of their application.
Consultations	Consultation	Required for applicants requesting withdrawals:

Table 3: New Permit Application Timeline**For withdrawals not previously authorized by registration or permit**

Timeline	Activity	Notes on Deliverables
can be scheduled prior to application submission upon request by the applicant	meetings with permit applicants to identify possible offsets to withdrawal impacts	- that could impact coldwater fish resources; or - that will be greater than the applicant's baseline
12 months before applicant anticipates commencing the water withdrawal	Applicant submits a permit application.	Submit Form BRP WM 03, available on DEP's website, and submit applicable fee under separate cover. See Timely Action Schedule and Fee Provisions Regulations (310 CMR 4.10(6)(oo)) Note: Municipal public water supply systems are exempt from permitting fees
After Application Submission		
1 month	Public notice requirements	- Applicant notifies abutters and posts public notice in local newspaper - DEP notifies other users and watershed associations and posts notice in the Environmental Monitor. - DEP accepts written comments for 30 days
2 ½ months	DEP 72-day technical review period	After the technical review, DEP issues Order to Complete (OTC) requesting any additional information needed to complete review of the application, including any required plans to minimize and mitigate the impacts of withdrawals and response to public comment received by DEP
5 ½ months	Applicant has 90 days to respond to the OTC	Response deadline may be extended upon applicant's request
8 months	DEP 72-day supplemental technical review period	After the supplemental technical review, DEP will either: - Deem the application complete; - Extend response deadline at the applicant's request; or - Deny the application. An application is complete if all required information is provided, including any required MEPA determination or certificate, and Source Approval documentation for a new PWS source
9 months	If application is complete, DEP will issue draft permit within 30 days for public comment	- DEP notifies other users and watershed associations and posts notice in the Environmental Monitor that draft permit is available for review - DEP accepts written comment for 30 days
12 months	DEP issues final	DEP may extend the review for up to 9 months if additional time is

Table 3: New Permit Application Timeline
For withdrawals not previously authorized by registration or permit

Timeline	Activity	Notes on Deliverables
	permit	necessary to give the application proper consideration.
21 days after permit issuance	Permit appeal period.	

4. Overview of Permit Requirements

The Department strives to establish and implement permit requirements that protect, and where possible, improve the natural environment. Five major permit requirements are summarized below and in Table 4, and are described in greater detail in Sections 5 through 9.

In this section, we provide a description of the method the Department will use to assess the cumulative impacts of permitted withdrawals to help inform mitigation requirements, and to determine the permit tier for each application. Permit Tiers are based on whether a permittee's requested withdrawal will be more than their baseline water withdrawal, as well as on the impact that the withdrawal will have on the environmental condition in that subbasin.

The following are elements that are part of the permit requirements:

Standard Permit Conditions Implementing Best Management Practices: Permittees must meet (or exceed) standard best management practices for water management outlined in Section 5, including but not limited to:

- Water Conservation requirements including leak detection, metering and education (Section 5, Table 5);
- Performance Standards of 65 residential gallons per capita per day (RGPCD) and 10% unaccounted for water (UAW) (Section 5, Table 6); and
- Limits on non-essential outdoor water use (Section 5, Table 7).

Minimization: All groundwater permittees with withdrawals in subbasins with significant groundwater depletion must minimize the impacts of their withdrawals in those subbasins. These subbasins are defined as having August net groundwater depletion (August NGD) of 25% or greater (<http://www.mass.gov/eea/agencies/massdep/water/watersheds/sustainable-water-management-initiative-swmi.html>). The equation and data used to calculate August NGD and the specific requirements to minimize the impacts of withdrawals for this group are outlined in Section 6.

Coldwater Fishery Resource (CFR) Protection: All permittees with withdrawals that impact streamflow at a CFR (identified on the interactive SWMI maps and in the permitting tool) must evaluate reducing impacts to CFRs through feasible optimization. Tier 2 and Tier 3 applicants whose withdrawals will increase above

their baseline water use must evaluate further protection of their CFRs as part of their required mitigation planning, in consultation with the Department and DFG, Division of Fisheries and Wildlife (DFW).

Alternative Sources: Tier 3 permittees, whose groundwater withdrawals will increase above their baseline water use and cause a change in the biological or groundwater withdrawal category of a subbasin, must show that they have no feasible alternative source that is less environmentally harmful. Section 6 of this document includes the WMA guidance on evaluating optimization of available sources to reduce impact to streamflow and aquatic habitats. Without limitation, technical feasibility and cost should also be evaluated in determining whether a source is a feasible alternative.

Mitigation: Tier 2 and Tier 3 permittees requesting an increase above their baseline withdrawal level must undertake mitigation commensurate with the impact of their increased withdrawals. Permit applicants that cannot avoid changing the biological or groundwater withdrawal category of a subbasin and having no feasible alternative sources that are less environmentally harmful) will be required to implement the highest level of mitigation.

Method for Determining Tiers and Assessing Cumulative Impacts

At the start of the 20-year WMA permit renewal process or soon after the initial filing for a new WMA permit application, the Department will determine an applicant's permit tier based on the rules listed below.

The first threshold that determines a tier is the exceedance of a baseline volume of water, unique to each water system. Baseline water use was established to approximate use during the period where cumulative impacts were assessed. Specifically, baseline water use is the amount of water withdrawn during calendar year 2005 plus 5%, or the average volume withdrawn from 2003 through 2005 plus 5%, whichever is greater, provided that the:

- Baseline cannot be less than registered volume, and
- Baseline cannot be greater than the volume authorized in the permit for 2005.
- PWSs that are in multiple basins will have separate baselines for each basin calculated as outlined above and a total system-wide allocation allowing no more than these two values combined. The above listed qualifiers will continue to apply. If either value is exceeded, the baseline condition would be considered to have been triggered.

Rules for Permit Tier Determination

Tier 1: The permittee's withdrawal request is not above baseline.

Tier 2: The permittee's withdrawal request is above baseline, and the

- Permittee only has surface water sources, or
- Permittee has sources only on Cape Cod, the Islands, or the Plymouth-Carver aquifer region, or
- Permittee has groundwater sources, and their groundwater withdrawals will not change the biological category (BC) or groundwater withdrawal category (GWC) in any of their subbasins.

Tier 3: The permittee's withdrawal request is above baseline, and the

- Permittee has groundwater sources, and withdrawals from these sources will change a BC or GWC in any of their subbasins.

* Note that volumes requested which are greater than those already allocated in an existing WMA permit will require the filing of a *new WMA permit* application.

Permittees with surface water sources only or who are located in groundwater-driven water sources (the southern portion of the South Coastal, Cape Cod, Islands, and portions of the Buzzards Bay), cannot be Tier 3 because there are currently no BCs or GWCs defined for these areas¹.

The method for determining whether groundwater withdrawals are in Tier 3 because they will change a BC or GWC is outlined below.

Impact Assessment for Individual Withdrawal Points

The individual subbasin assessment allows the Department to evaluate whether an applicant's groundwater withdrawal will contribute to one or more subbasins changing BC or GWC categories. For this assessment, the Department will assume that any withdrawal request above baseline could be withdrawn from any one subbasin in which the applicant has permitted groundwater sources, unless the applicant specifies otherwise. For each subbasin within which the applicant has a permitted groundwater source, the Department will evaluate whether the entire withdrawal above baseline will cause a change in BC or GWC in that subbasin. If the withdrawal increase causes a change in BC or GWC in any subbasin within which the applicant has a permitted groundwater source, then the applicant will be subject to Tier 3 requirements. Data and assumptions used in the individual assessment may be refined by the applicant at the start of the permit process. Data refinement options are described in Section 10.

Impact Assessment for the Major Basin

A cumulative impact assessment will be completed for each major basin at the beginning of the WMA permit renewal cycle or upon filing for a new WMA permit. The cumulative impact assessment will consider all new requested WMA permit withdrawals and WMA permit renewal withdrawals above each applicant's baseline. If the Department finds that the cumulative impacts of all withdrawals will result in an adverse change in BC or GWC in any subbasin in the major basin, it will be taken into consideration as part of mitigation planning for Tier 2 and Tier 3 applicants whose withdrawals contribute to that subbasin's change in BC or GWC. In addition, those applicants whose withdrawals are more than 5% of unimpacted August median flow that contribute to a downstream change in BC or GWC may be required to demonstrate there is no feasible alternative source that is less environmentally harmful consistent with the requirements outlined at 310 CMR 36.22(7)(a).

¹ In groundwater-driven areas, the USGS Sustainable Yield Estimator (Archfield et al., 2010) used to develop the BC and GWC for each subbasin is not applicable.

Typical and Non-Typical Seasonal Withdrawal Patterns

Typical Withdrawal Patterns: In order to determine whether an increased individual groundwater withdrawal would contribute to a change in BC or GWC, the Department will assume that: (1) the highest groundwater withdrawal rates occur in the summer months; and (2) impacts to streamflow are greatest during the low flow bioperiod (July to September). The Department will evaluate proposed withdrawals and August streamflow estimates. If there is no change in BC or GWC in any subbasin as a result of the increased individual withdrawal, the streamflow criteria have been met. If proposed withdrawals would meet streamflow criteria in August, the Department will assume that streamflow criteria will be met in all seasons.

Non-Typical Withdrawal Patterns: For withdrawals that will have their greatest impact during the non-summer months, an assessment of the impact of the individual withdrawal on Seasonal Streamflow Criteria for the subbasin will determine whether the groundwater withdrawal is in Tier 3.

Table 4: Permit Requirements of PWS WMA Permits			
Water Conservation (Section 5)	Yes, required for all		
Performance Standards of 65 residential gallons per capita per day (RGPCD) and 10% unaccounted for water (UAW) (Section 5) ²	Yes, required for all		
Limits on nonessential outdoor water use (Section 5)	Yes, required for all		
Minimization of impacts in 25% August Net Groundwater Depleted Subbasins (Section 6)	Required for those permittees with groundwater withdrawal points in subbasins with $\geq 25\%$ August NGD		
Coldwater Fish Resource (CFRs) Optimization Planning (Section 7)	Required for permittees with ground or surface withdrawals in subbasins with CFRs.		
Mitigation Conditions by Tier for Groundwater Withdrawals (Section 9) ³	Tier 1	Tier 2	Tier 3
1. Mitigation Mitigate impacts commensurate with withdrawal above baseline, in consultation with agencies.	Not required	Yes, required for all	Yes, required for all. Tier 3 requires up to twice the level of indirect mitigation as Tier 2.
2. Demonstrate no feasible alternative source that is less environmentally harmful. (Section 8)	Not required	Not required	Yes, required for all

² PWS permittees on the Cape and Islands and other season communities are not required to meet the RGPCD standard because of seasonal population shifts that make calculating an accurate value difficult.

³ Groundwater withdrawals in groundwater-driven water sources (the southern portion of South Coastal, Cape Cod, Island, and portions of Buzzards Bay) will be assigned to Tier 1 or Tier 2 based on their baseline and 20-year withdrawal projections.

Table 4: Permit Requirements of PWS WMA Permits

Mitigation Conditions by Tier for Surface Water Withdrawals (Section 9)	Tier 1	Tier 2
1. Summer Management Plan with Environmental Considerations Develop summer management plan that ties nonessential outdoor water use restrictions to environmental triggers that can include: reservoir elevations, streamflow triggers, fisheries management plans, reservoir releases, etc.	Not required, unless permittee seeks alternative triggers for nonessential outdoor water use restrictions	
2. Mitigation Mitigate impacts commensurate with withdrawal	Not required	Yes, required for all

5. Standard Permit Conditions for Water Conservation and Demand Management

Performance Standards and Nonessential Outdoor Watering Restrictions

Water Conservation Requirements

At a minimum, permittees are required to implement conditions that reflect those standards outlined in the Massachusetts Water Resources Commission's *Water Conservation Standards* (July 2006 or subsequent updates, <http://www.mass.gov/eea/waste-mgmt-recycling/water-resources/preserving-water-resources/partners-and-agencies/water-resources-commission/water-policies/>) that are incorporated into all WMA permits, as summarized in Tables 5 and 6. Permits for non-public water supply withdrawals also include requirements for water conservation, but this document focuses primarily on public water supply withdrawals. Permittees must be in compliance with these measures on or before a date specified in the permit. Specific conditions may vary by permit.

Table 5: Water Conservation Requirements in PWS WMA Permits

System Water Audits and Leak Detection

1. Conduct a full leak detection survey at least every three years in accordance with American Water Works Association (AWWA) standards. More frequent detection is required for those not meeting the 10% UAW Standard.
2. Full leak detection survey whenever unaccounted for water increases by 5% or more over the percentage reported on the Annual Statistical Report (ASR) for the prior calendar year. Submit a report detailing the leak detection survey, dates of leak repairs, and estimated water savings.
3. Have repair reports available for inspection by the Department.
4. A schedule shall be established for repairing leaks based on guidance provided by the Department.

Table 5: Water Conservation Requirements in PWS WMA Permits**Metering**

1. Ensure that the system is 100% metered.
2. Calibrate all source and finished master water meters at least annually.
3. Properly size service lines and meters for all water users. Meters must meet AWWA calibration and accuracy standards.
4. Ongoing program to inspect service meters : a) for accuracy; b) for the need to repair or replace; and c) to check for tampering to identify and correct illegal connections.

Pricing

1. Establish a water revenue structure that covers the full cost of the PWS including operations, maintenance, capital improvements, water conservation activities, and indirect costs (such as environmental impacts and watershed protection). Evaluate revenues every three to five years and adjust rates as needed.
2. Decreasing block rates are not allowed by M.G.L. Chapter 40, Section 39L. Increasing block rates are strongly recommended.

Residential and Public Sector Conservation

1. Meet the standards of the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2. Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.
3. Municipal buildings
 - Submit a report of municipally owned public buildings retrofitted with water saving devices
 - Submit a schedule for retrofitting remaining buildings within two years or as agreed upon with the Department
 - Water Districts and Water Companies must demonstrate "Best Effort" to work with the Town and complete retrofits.
 - Municipally owned public buildings scheduled for rehab or demolition may be exempted from this condition.

Industrial and Commercial Water Conservation

1. Review the use records for industrial, commercial and institutional water users and develop an inventory of the largest water users.
2. Develop and implement an outreach program designed to inform and (where appropriate) work with industrial, commercial and institutional water users on ways to reduce water use.
3. Upon request by the Department, submit a report on conservation results.

Lawn and Landscape

1. Permittees must have a water use restriction bylaw, ordinance or regulation providing authority to implement and enforce required restrictions on outdoor water use.

Education and Outreach

1. Develop and implement a Water Conservation Education Plan to educate customers on ways to conserve water. Permit lists the outreach techniques included in the WRC Conservation Standards.

Table 6: Performance Standards in PWS WMA Permits

Performance Standard for Residential Gallons Per Capita Per Day Water Use (RGPCD)

- The RGPCD performance standard for PWS permittees is 65 gallons*.
- If the permittee fails to document compliance within two full calendar years, then it must implement either an Individual RGPCD Compliance Plan of its own creation designed to bring the system into compliance within three additional years, or adopt the Department's RGPCD Functional Equivalence Plan (FEP) that includes BMPs.
 - An Individual RGPCD Compliance Plan must, at a minimum, include at least one of the following:
 - Program that provides water savings devices at cost;
 - Program that provides rebates or other incentives for purchase of low water use appliances; and/or
 - Adopt and enforce an ordinance, bylaw, or regulation requiring moisture sensors or similar climate technology on automatic irrigation systems.
 - The Department's RGPCD FEP requires:
 - Permittee be in compliance with conditions of their permit including the limits on nonessential outdoor water use;
 - Adopt all three items from the Individual RGPCD Compliance Plan above;
 - Use of increasing block rates or a seasonal water rate structure; and
 - Implement bi-monthly or quarterly billing.
- A permittee that has been unable to meet the standard within five years must implement the Department's RGPCD FEP.

* PWS permittees on the Cape and Islands and other season communities are not required to meet the RGPCD standard because of seasonal population shifts that make calculating an accurate value difficult.

Table 6: Performance Standards in PWS WMA Permits

Performance Standard for Unaccounted-for-Water (UAW)

- The UAW performance standard for all PWS permittees is 10% of total water withdrawal.
- If the permittee fails to document compliance within two full calendar years, then they must implement either an Individual UAW Compliance Plan of their own creation designed to bring the system into compliance within three additional years, or they may adopt the Department's UAW FEP that includes BMPs.
 - The Department's UAW FEP requires:
 - Permittee must complete a water audit and leak detection survey of the entire system within one year;
 - Within one year of conducting the audit/survey, make sufficient repairs to reduce leaks by 75% (by water volume) of all leaks detected in the survey;
 - If UAW remains above 10%, repeat above steps;
 - Repair, replace, and calibrate meters as follows:
 - Large Meters (2" or greater) within one year,
 - Medium Meters (1" - 2") within two years,
 - Small meters (<1") within three years;
 - Implement bi-monthly or quarterly billing within three years; and
 - Within one year of filing the UAW FEP, implement water pricing that is sufficient to pay the full cost of operating the system including: repairs resulting from any leak detection survey(s); meter repair, replacement and calibration; employee and equipment costs; and ongoing maintenance and capital costs.

A permittee that has been unable to meet the 10% UAW performance standard within 5 years must implement the Department's UAW FEP.

Hardship Provision for Performance Standards

Both RGPCD and UAW FEP Plans include a hardship provision that allows a permittee to present an analysis of the cost effectiveness of conservation measures included in the Department's plans and to present alternatives. The analysis must consider environmental impacts and alternatives must produce equal or greater environmental benefits.

Limits on Nonessential Outdoor Water Use

Table 7 outlines standard outdoor water use restrictions for public water suppliers. Permits for non-public water supply withdrawals will also include limits on nonessential outdoor water use tailored to the permittee's particular water use needs. Table 8 outlines specific restrictions for permittees required to minimize their withdrawals and implement restrictions that go beyond the standard restrictions as explained in Section 6c of this guidance. Table 8 is included here so applicants can easily compare the requirements.

Table 7: Standard Calendar and Streamflow Options for Nonessential Outdoor Watering Restrictions

Standard Outdoor Water Use Restrictions*	Calendar Option		Streamflow Option	
	All Season	When 7-day low-flow trigger occurs	When flow is below ABF	When 7-day low-flow trigger occurs
Below 65 RGPCD	7 days, no 9 am to 5 pm	1 day, no 9 am to 5pm	7 days, no 9 am to 5 pm	1 day, no 9 am to 5 pm
Above 65 RGPCD	2 days, no 9 am to 5 pm	1 day, no 9 am to 5 pm	2 days, no 9 am to 5 pm	1 day, no 9 am to 5 pm

* Permittees with withdrawals in groundwater-driven basins (i.e., the southern portion of South Coastal, Cape Cod, Islands, and portions of the Buzzards Bay Basin) may be required to implement an alternative approach to nonessential outdoor watering restrictions, which may include groundwater triggers for implementation.

Table 8: Calendar and Streamflow Options for Nonessential Outdoor Watering Restrictions for Withdrawal Minimization

Outdoor Water Use Restrictions for Minimization Plans**	Calendar Option		Streamflow Option	
	All Season	When 7-day low-flow trigger occurs	When flow is below ABF	When 7-day low-flow trigger occurs
Below 65 RGPCD	2 days, no 9 am to 5 pm	1 day, no 9 am to 5 pm	2 days, no 9 am to 5 pm	1 day, no 9 am to 5 pm
Above 65 RGPCD	1 day, no 9 am to 5 pm	1 day, no 9 am to 5 pm	1 day, no 9 am to 5 pm	1 day, no 9 am to 5 pm

**Permittees required to minimize withdrawals in subbasins with an August net groundwater depletion of 25% or more will be required to adopt these restriction or propose an equivalent action. Permittees required to mitigate (i.e., Tiers 2 and 3) may select these Nonessential Outdoor Watering Restrictions as a component of their Mitigation Plan or propose an equivalent action.

The permittee can choose one of two options to implement nonessential outdoor watering restrictions for its community. The first option is based on a calendar year which runs from May through September. The second option is based on Aquatic Base Flow streamflow triggers. Aquatic Base Flow (ABF) is a statistical method of determining the natural flows necessary for the protection and propagation of aquatic life. It is expressed as the median of monthly mean flows, and is calculated for each month using estimated near-

natural daily flow values. The ABFs for June and August are the streamflow triggers for outdoor water use restrictions: the June ABF is the May through June trigger and the August ABF is the July through September trigger. These ABF trigger flows for June and August are specified in the outdoor water use restriction condition in WMA permits. Restrictions for both the Calendar and Streamflow Option are summarized in Tables 7 and 8.

Both the Calendar and Streamflow Option also include a low flow trigger at which restrictions increase. Prior to SWMI, the low flow trigger was tied to a drought advisory declaration. To more accurately relate nonessential outdoor watering restrictions to more local streamflow impacts and to be more responsive to changing conditions, a low-flow statistic was chosen to replace the drought advisory declaration to trigger increasing restrictions. The median value of annual 7-day low flows for the period of record for a local USGS gage (7-day low-flow), was chosen to replace the drought advisory trigger. Once the 7-day low-flow is triggered at the USGS gage that is associated with a permit, the permittee will be required to impose more stringent restrictions as outlined in Tables 7 and 8.

Each WMA permit will identify a specific USGS gage to be used for the analysis, with corresponding ABF and the 7-day low flow trigger values included in the permit. Permittees will be responsible for monitoring flows as necessary to ensure compliance.

Surface water suppliers seeking to implement conditions different from those outlined above will be required to develop a Summer Management Plan that ties outdoor watering restrictions to reservoir elevation and environmental considerations and must receive approval by the Department. Environmental considerations may include alternative downstream flow augmentation, releases that do not impact the PWS's ability to meet demand, fishery or other habitat management plans, or other measures developed in consultation with the Department.

6. Minimization

Applicants with groundwater sources in subbasins with an August net groundwater depletion of 25% or more⁴, as identified in the Department's WMA permitting tool (see Section 11) and map (both tools are available at <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>) are required to develop and implement a plan to minimize impacts. All components of the minimization plan must be approved by the Department. The plan should reflect the following three

⁴ August net groundwater depletion is the estimated unimpacted streamflow in a subbasin, less groundwater withdrawals, plus returns to groundwater via septic systems and groundwater discharges for the month of August (withdrawals and returns are either reported or estimated for the years 2000 to 2004, representing the existing condition). The equation to describe it is:

$$100 - ((\text{Aug Unaffected Flow} - 2000\text{-}2004 \text{ GW Withdrawals} + 2000\text{-}2004 \text{ GW Returns}) / \text{Aug Unaffected Flow}) \times 100$$

analyses, taking into consideration cost, level of improvement expected to result from minimization actions, available technology and the applicant's authority to implement the actions.

- a. **Desktop Optimization:** Conduct a desktop optimization analysis, evaluating whether the applicant's existing sources, or any available alternative sources (including interconnections), could be utilized or operated at prescribed rates or times in a way that could reduce environmental impacts while still meeting water demands.
- b. **Water Releases and Returns:** Evaluate releases from surface water supply impoundments and measures that could return water to the subbasin or basin to improve flow.
- c. **Additional Conservation Measures:** Evaluate reasonable and cost-effective indoor and outdoor conservation measures consistent with public health and safety that go beyond standard WMA permit conditions.

If an applicant wishes to propose alternative measures to minimize the impact of its withdrawals – in addition to, or in place of the above requirements, the Department will consider those measures on a case-by-case basis. In considering alternative measures, the New England Water Works Association (NEWWA Toolbox <http://www.newwa.org/Resources/UtilityResources/NEWWABMPsandAdvisories.aspx>) is a useful reference which provides many best management practices PWSs can evaluate for the potential to minimize withdrawal impacts.

6a Desktop Optimization

Desktop Optimization is a screening process to help evaluate the feasibility of operational changes aimed at minimizing impacts to streamflow from groundwater withdrawals. The permittee should use this process to assess whether the impact of the withdrawals on streamflow in the subbasin can be decreased, without significantly altering the permittee's ability to meet demands, by: 1) modifying well withdrawal operations, including timing of withdrawals from various sources; or 2) using potential alternative sources, such as water from an adjacent system (interconnection), where availability exists.⁵ In addition to environmental concerns, a Desktop Optimization must consider existing system constraints including, but not limited to, infrastructure, pressure, water quality, operations, costs, regulatory matters, and societal needs. Optimization shall ensure that environmental concerns are part of the decision making process. What constitutes an optimized water supply system is a decision that will be made by the water supplier following full review of all relevant factors. The results of a Desktop Optimization should include the locations and withdrawal schedules of sources that will be utilized to meet system demand while minimizing ecological impacts of withdrawals.

⁵ Applicants should be aware of the requirements and exemptions under the Interbasin Transfer Act when reviewing potential alternative sources. If any alternative sources are located outside of the major basin in which the water will be used by customers or disposed of through a wastewater treatment facility, review under the Interbasin Transfer Act may be required.

Table 9 provides a list of questions that can help an applicant assess which sources/subbasins might be less impacted during pumping in the low flow periods (summer/fall) and which sources/subbasins may cause a greater impact.

Instructions: For questions 1 through 4, use the Department's permitting tool (Section 11) (<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>) to look up each subbasin in which you have groundwater sources and record answers. Questions 5 and 6 can be answered through knowledge of the community's water supply system.

Table 9: Source Optimization – for use in Coldwater Fish Resource (CFR) Protection Planning, Minimization Planning, and Alternative Source Review	
Optimization Parameter	Guidance
1) Is there a CFR present? ⁶	Withdrawals with no known impact or least impact to a CFR are preferred.
2) What is the Mass Water Indicators (MWI) August affected streamflow in cubic feet per second per square mile (cfs/m)? MWI affected flow is (unaffected streamflow – groundwater withdrawals + all returns)/drainage area	Withdrawals in subbasins with a higher cfs/m are preferred.
3) Does the increase over baseline cause a change in BC or GWC? (This step is applicable to Tier 2 and 3 applicants only and is not used for minimization.)	Withdrawals that do not result in a subbasin changing BC or GWC are preferred.
4) What is the groundwater withdrawal percentage (withdrawals/unaffected streamflow)?	Withdrawals in subbasins with lower percentages are preferred (as long as there is no change in BC or GWC).
5) Is there an available surface water supply with a release plan approved by the Department?	Shifting pumping from groundwater to surface water sources with approved release plans during low-flow periods is generally preferred. Surface water sources without ability to be released may be preferred based on a case-by-case evaluation.
6) Are other sensitive resources present such as vernal pools?	Withdrawals with no known impact or least impact to sensitive resources are preferred.

An optimization review should include, but is not limited to, the parameters outlined above. Those who wish to go beyond the simple desktop optimization method outlined above can apply more sophisticated modeling tools. These modeling tools may include: MODFLOW, MODOPTIM, and the Web-Based STRMDEPL08.

⁶ If a CFR is present, optimization should focus on reducing potential impact to CFR (Section 7).

6b Water Releases and Returns

Releases

If a permittee has surface water supply impoundments located in or upstream of the subbasin(s) in which their wells are located, and these impoundments have the capacity for releases, the permittee should determine if releases can be made to improve the timing, magnitude, and duration of downstream flows to more closely mimic natural conditions without compromising other in-lake uses (for example, significant impacts to water supply, recreation, or ecology). If releases are possible, the permittee should develop and implement a release plan subject to the Department's approval.

Returns

Evaluate whether there are or could be feasible opportunities to return water. Returns include stormwater recharge, infiltration/inflow (I/I) improvements, and wastewater discharges that would result in improvements to the quantity and timing of streamflow. Potential returns should be evaluated in the following order: to the same subbasin, same major basin, and finally another major basin.

6c Additional Conservation Measures

Nonessential Outdoor Watering Restrictions

The nonessential outdoor watering restrictions required in all permits are described in Section 5, Table 8. These include specific restrictions for permittees required to minimize their withdrawals and implement restrictions that go beyond the standard nonessential outdoor water use restrictions. For those below 65 RGPCD, either limit watering to no more than 2 days per week (1 day per week when the 7-day low-flow trigger occurs) or propose an equivalent action. For permittees above 65 RGPCD, either limit watering to no more than 1 day per week or propose an equivalent action.

Additional Reasonable Conservation

Table 10 includes a list of possible activities, drawn largely from the recommendations section of the Massachusetts *Water Conservation Standards*, to help applicants meet the minimization requirement and to evaluate additional reasonable conservation measures that are consistent with public health and safety. These recommendations, along with the NEWWA Toolbox, are suggested as references for developing a Minimization Plan. Minimization Plans for those permittees not meeting the Performance Standards of 65 RGPCD or 10% UAW, should focus first and foremost on activities that will provide the greatest progress towards achieving these two Performance Standards. During the first five years of the permit, the permittee has discretion over which measures will work best for it to achieve the Performance Standards.

Some permittees may not be able to meet the Performance Standards, or they may need more time beyond the first five years, in spite of their best efforts. In recognition of this, the Department has developed Functional Equivalence Plan (FEP) requirements for those permittees. Each FEP includes best management practices that establish a level of effort that a permittee who has not met the Standard(s) must demonstrate. Permittees implementing the FEP will be considered to be in compliance with the Performance Standard(s). Permittees subject to the minimization requirements that are also

implementing a FEP for not meeting the Performance Standard(s) are still required to evaluate additional reasonable conservation measures.

Table 10: Example Conservation Measures		
Conservation Measure	Standard or Recommended in MA Water Conservation Standards	Functional Equivalence Plan (FEP) Requirement
Additional Measures to Reduce RGPCD		
Implement a rebate program for residential customers for high-efficiency WaterSense-labeled products (toilets, lavatory faucets, showerheads, and irrigation controllers) and Energy Star-labeled clothes washers.	✓	✓
Offer incentives for those seeking municipal approvals to install high-efficiency WaterSense-labeled products and Energy Star-labeled appliances in new construction and renovations. Document numbers of products installed in annual report.	✓	✓
Evaluate rate structure every two years and increase rates for the highest rate block.	✓	
Implement a seasonal rate structure that sets higher rates from May 1 to September 30.	✓	✓
Increase billing frequency to at least quarterly.	✓	
On water bills, provide customers with water consumption information in gallons and show consumption history.	✓	
Additional Measures to Reduce UAW		
Conduct comprehensive water audit of water system every five years.	✓	✓
Develop and implement a meter replacement program to ensure that all nonresidential water use is properly accounted for.	✓	
Establish penalties and fines for stealing water.	✓	
Install an automated, remote meter reading system.	✓	
Install an automated, remote leak detection system.	✓	

Table 10: Example Conservation Measures

Conservation Measure	Standard or Recommended in MA Water Conservation Standards	Functional Equivalence Plan (FEP) Requirement
Additional Measures to Reduce Nonessential Outdoor Watering		
Include some or all of the following provisions in an outdoor water use bylaw or ordinance to ensure proper installation and efficient operation of automatic sprinkler systems: • require registration of automatic irrigation systems; • minimize installation of high water use landscape areas; • restrict land clearing and lawn size in new developments and require a minimum 6-inch depth of topsoil on all cleared areas to help retain moisture; and, • prohibit topsoil stripping.	✓	
Provide incentives to improve efficiency of automatic irrigation systems.	✓	
On municipal properties with automatic irrigation systems, install WaterSense-labeled weather-based controllers.		
Identify highest water users. Target with monthly mailing about their use from May 1 through Sept. 30. Provide information comparing their use with most efficient customers.		
Extend seasonal limits on nonessential outdoor water use to private well users.		
Provide incentives for customers to infiltrate rainwater; infiltrate rainwater on municipal properties.	✓	
Provide incentives for customers to enhance soil health; enhance soil health on municipal properties.	✓	

7. Protection of Coldwater Fish Resources

Coldwater Fish Resources (CFRs) are critical resources that require special consideration within the WMA permitting process. There has been a significant loss in CFR habitat over time, partially because these temperature-dependent habitats are strongly influenced by groundwater and particularly vulnerable to impacts from groundwater withdrawals. All WMA permit applicants with a CFR in any of their permitted subbasins (per the Department's interactive map showing DFW designated CFRs <http://www.mass.gov/dep/water/resources/swmi.htm>) will be required to conduct a desktop optimization (described in Section 6, Table 9). This desktop optimization should focus specifically on reducing impacts to the CFRs. At the basin outreach meeting, applicants with CFRs will have an opportunity to consult with DFW staff. DFW will also provide general guidance on minimizing CFR impacts in the subbasin.

Tier 2 and Tier 3 WMA permit applicants with CFRs will consult with agencies to ensure that impacts to their CFRs are adequately addressed as part of their mitigation planning.

8. Alternative Source Analysis

Tier 3 sets a higher bar for permittees and requires applicants whose withdrawal will result in a change in BC or GWC to show that they do not have an alternative source that can be used instead. Tier 3 review requires that applicants demonstrate that there is no feasible alternative source that is less environmentally harmful than the option they have proposed. To evaluate potential environmental harm, applicants should refer to the parameters and preferences outlined in the optimization guidance (see Section 6) and use the questions outlined in Table 9 to compare their existing sources to available alternatives to determine which are environmentally preferable. In addition to assessing the environmental impact of each potential source, the applicant must consider the feasibility of utilizing an alternative source⁷.

9. Mitigation

Overview

The WMA regulations specify that all Tier 2 and 3 permittees must mitigate any increases in withdrawals above baseline, commensurate with impact. The impact is quantified volumetrically as the authorized withdrawal volume above baseline. This volume approximates the reduction in groundwater or surface water contribution to streamflow from the increased withdrawals. For groundwater WMA permittees (excluding the Cape, Islands and Plymouth Carver Aquifer Area), impact is further characterized by whether the increase in withdrawals over baseline causes a change in a biological or groundwater category (BC and GWC). Permittees who cause a change in BC or GWC in a subbasin in which they withdraw will be assigned a Tier 3 designation. The presumed volumetric impact to streamflow (the authorized withdrawal volume minus baseline) may be reduced by eligible wastewater adjustments (described in this Section) and commitments to conduct additional demand management (described in Sections 5 and 6). Demand management should result in the WMA permittee not needing to withdraw their entire authorized volume under the permit or in a delay in exceeding baseline.

Any remaining authorized volume above baseline, following calculations of savings from a demand management plan and accounting for any wastewater, will need to be mitigated commensurate with impact. Tier 2 and 3 permittees will need to develop a mitigation plan at the start of the 20-year WMA permit period. This plan should estimate the required volume of mitigation, identify feasible mitigation options, and include a timeline for the implementation of the mitigation options. The process and components of mitigation planning are outlined below followed by a description of each component.

⁷ Feasible means suitable for implementation taking into consideration the anticipated environmental improvement, cost, available technology and the permittee's legal authority to implement the alternative or action.

- a) Mitigation Hierarchy
- b) Location Adjustment Factor
- c) Wastewater Adjustments
 - i. Groundwater Returns
 - ii. Surcharged Reach
- d) Calculation of Mitigation Volume
- e) Direct Mitigation
- f) Indirect Mitigation
- g) Mitigation Plan Implementation Timeline
- h) Mitigation and Cost Feasibility Guidance

9a Mitigation Hierarchy

Prior to beginning any mitigation planning, priority should be given to exhausting all feasible options for demand management that can reasonably be expected to reduce demand and therefore reduce the amount withdrawn. Prioritizing demand management may help to avoid or delay the need to increase withdrawals above baseline and implement mitigation. When demand management opportunities have been exhausted, the mitigation plan should prioritize direct mitigation (i.e., actions that are volumetrically quantifiable) over indirect mitigation (i.e., actions that cannot be quantified volumetrically) measures to the fullest extent practicable. Additionally, applicants should prioritize mitigation actions in the following order: 1) in the same subbasin as the withdrawals (with relevant considerations for water quality), 2) in the same major basin, and lastly, 3) in a different major basin.

NOTE: Surface water suppliers with reservoirs that could be used to supplement downstream flow conditions should evaluate the feasibility of reservoir releases first when considering direct mitigation options.

9b Location Adjustment Factor

Direct mitigation and wastewater adjustments shall be subject to a location adjustment factor (LAF). The LAF accommodates the reduced environmental benefit of returning water outside of the major basin from which it is withdrawn. Application of the LAF is summarized in Table 11 and further described below.

LAF for Direct Mitigation

Surface or groundwater that is returned through eligible direct mitigation activities (described in section 9e) will receive 100% credit for returns within the major basin and 50%* credit for returns outside the major basin.

LAF for Wastewater Adjustments

Water that is returned to groundwater via septic systems or groundwater discharges (further described in section 9c) will receive 85% credit (equivalent to 100% of eligible withdrawals less a 15% consumption factor⁸) if it is

⁸ Consistent with the Massachusetts Water Indicator Project report, the volume of water disposed of via septic systems is estimated to be 85% of the water withdrawn.

returned within the same major basin and 50%* of that credit (43% of eligible withdrawals) if it is returned outside the major basin.

*Returns outside the major basin may receive an additional 25% credit (for a total of 75%) if they can show the direct mitigation or wastewater return is to a more depleted subbasin (measured as August net ground water depleted) than the subbasin from which the water is withdrawn. If withdrawals and returns are from multiple subbasins with varying August NGD conditions, the applicant can receive 75% credit if they can show that, on the whole, the August NGD condition is worse (i.e., more net depleted) where they are returning the water than where they are taking it from.

Table 11: Summary of Location Adjustment Factors (LAF) for Direct Mitigation and Wastewater Adjustment		
Activity	Location of Returned Withdrawal Volumes	Credit
Direct Mitigation to Surface Water and Groundwater	In Major Basin	100%
	Outside of Major Basin	50% (75% if returned to an area with greater net groundwater depletion)
Wastewater Adjustment for Groundwater returns	In Major Basin	85% wastewater return adjustment (15% consumption factor applied to 100% credit)
	Outside of Major Basin	43% (15% consumption factor applied to 50% credit)
		Or, if return is to an area with greater net groundwater depletion 64% (15% consumption factor applied to 75% credit)

9c Wastewater Adjustments

Groundwater Returns

The volume of water that an applicant must mitigate can be reduced if some of the water withdrawn above baseline will be returned to groundwater through septic systems or permitted groundwater discharges. The reduction in total mitigation resulting from wastewater returns to groundwater is called a wastewater adjustment. The calculation used to determine an applicant's wastewater adjustment is described below.

Within Major Basin Adjustment

Steps 1 through 3 apply to all water withdrawn from and returned to the same major basin. For any portion of an applicant's water withdrawal that is returned to a different major basin, see steps 4 through 7.

Step 1: Determine the percent of annual water demand returned, to the major basin from which the water was withdrawn through septic systems and permitted groundwater.

Step 2: Multiply the percentage calculated in Step 1 by the anticipated withdrawal rate (in million gallons per day, mgd) above baseline.

Step 3: Multiply the volume of water calculated in Step 2 by 85%, to account for a 15% consumptive loss.

Out of Major Basin Adjustment

Steps 4 through 7 apply to all water withdrawals which are returned to a different major basin.

Step 4: Determine the percent of existing annual water demand returned to a different major basin from which the water is withdrawn, through septic systems and permitted groundwater discharges.

Step 5: Multiply the out of major basin percentage calculated in Step 4 by the anticipated withdrawal rate (in mgd) above baseline.

Step 6: Multiply the volume of water calculated in Step 5 by 85%, to account for a 15% consumptive loss.

Step 7: Multiply the amount of water calculated in Step 6 by 50%. This reflects the location adjustment factor. The location adjustment factor provides an accommodation for the environmental impact of returning water out of the major basin from which it was withdrawn.

Note: In the case where water withdrawals are returned to a different major basin, applicants able to demonstrate that the subbasin(s) to which the wastewater is being returned through septic or groundwater discharges has a more depleted August NGD condition than the subbasin from which the water is withdrawn may receive an additional 25% percent credit. In this case, the 50% multiplier used in Step 7 should be replaced with a 75% multiplier.

Step 8: An applicant should calculate their wastewater adjustment for groundwater returns by adding the total volumes calculated in Steps 3 and 7.

Surcharged Reach

Some subbasins that receive large treated wastewater returns (i.e., NPDES discharges) are estimated to be surcharged⁹ by the Massachusetts Water Indicator Project (MWI) Report, but these surcharges are not considered when determining the GWC for a subbasin. In certain situations, outlined below, withdrawals above baseline from significantly surcharged subbasins may qualify for an adjustment, which could offset the mitigation required for the increased withdrawal.

If an applicant can show that the entire requested withdrawal above baseline will come from wells that are hydrologically connected to surcharged stream reaches, then the applicant is eligible for a surcharge offset adjustment.

The determination is made as follows:

⁹ The term surcharge describes subbasins where affected flows (taking into account withdrawals and returns) are estimated to be higher than the unaffected flows because more wastewater is returned than the amount of water withdrawn for water supply.

- 1) The well must be located in a significantly surcharged subbasin. The surcharge must be more than 10% above the annual average unaffected flow, as determined through the annual surcharge index $((\text{MWI affected annual flow} / \text{MWI unaffected annual flow} \times 100) - 100)$, and the surcharge must be more than 1.0 MGD.

An initial screening by the Department indicates that five major basins contain surcharged reaches with eligible subbasins: the Blackstone, Concord, South Coastal, Ten Mile, and Taunton (see Appendix B for a list of subbasins with surcharged reaches).

- 2) Wells eligible for a surcharge offset adjustment must be hydrologically connected to the surcharged stream reach, that is, the well must be able to induce infiltration from the surcharged reach.

Factors that determine whether a well is hydrologically connected to the adjacent stream include:

- a. distance from the stream;
- b. type of well (unconfined overburden, confined overburden, or bedrock);
- c. aquifer characteristics (hydraulic conductivity and transmissivity);
- d. streambed hydraulic conductivity; and
- e. well pumping rate.

If a well's wellhead protection area (Zone II) includes a portion of the surcharged stream reach, it is presumed that the well is hydrologically connected. If the wellhead protection area does not include a portion of the surcharged stream reach, but the well is located within the surcharged subbasin, the applicant may provide an analysis of the hydrology of the well or provide the results of pumping tests to demonstrate that the well is under the influence of an adjacent surcharged stream reach and is therefore eligible for the surcharge offset adjustment.

- 3) If the criteria in 1) and 2) above are met, the surcharge offset adjustment will be the lesser of:
 - a. The applicant's withdrawal above baseline; or
 - b. The amount of surcharge in the subbasin for August, less a 1 mgd buffer.
- 4) If multiple applicants are seeking a surcharge offset in the same surcharged stream reach, and the combined requests are greater than the total surcharge amount available, the Department will apportion the adjustment among the applicants.

The total surcharge offset adjustments in an eligible subbasin shall not exceed the maximum August surcharge of the applicable stream reach.

- 5) Subsequent applicants for increases in the subbasin will not be eligible for a surcharge offset adjustment if the entire surcharge has been apportioned.

Note: If an applicant cannot show that the entire increased withdrawal will come from eligible wells, the applicant can develop an optimization plan to show what portion of the withdrawals will be taken from the eligible wells, and thereby obtain indirect mitigation credits.

9d Calculation of Mitigation Requirement

Mitigation commensurate with impact is required for the volume of all water withdrawn over baseline, to the extent feasible. An applicant's mitigation volume is calculated as follows:

1) Determine Volume over Baseline

Establish the requested permit withdrawal volume. For PWSs, this is, under most circumstances, expected to be based on the Water Needs Forecast (WNF) developed in accordance with the methodology adopted by the Massachusetts Water Resources Commission (<http://www.mass.gov/eea/waste-mgmt-recycling/water-resources/preserving-water-resources/partners-and-agencies/water-resources-commission/water-policies/>). If the requested volume is less than the applicant's baseline, no mitigation is required. If the request exceeds the applicant's baseline, proceed to the next step.

2) Estimate Savings through Additional Demand Management

Evaluate the potential to reduce demand over the life of the WMA permit, by meeting and achieving higher levels of water efficiency than the state Performance Standards of 65 RGPCD and 10% UAW. The state Performance Standards for RGPCD and UAW are used in nearly every DCR WNF projection on which the Department bases the WMA permit volumes. If an applicant is already achieving a higher level of efficiency in RGPCD and UAW than the state Performance Standards at the time the forecast is developed, these efficiencies will be reflected in a "current trends forecast," also prepared by DCR. In cases where a current trends forecast is developed based on values lower than those used in their 65/10 WNF projection, the applicant may request that its (lower) current trends rate be utilized for the WMA permit, thereby avoiding the need to mitigate the difference between the two projections. Alternatively or additionally, the applicant could estimate demand reductions anticipated to be achieved by implementing specific additional conservation measures listed in Table 10 to further reduce the anticipated withdrawal volume above baseline.

3) Determine Any Applicable Wastewater Adjustments

If a portion of an applicant's withdrawal is returned via septic systems or permitted groundwater discharge, determine the adjustment volume as described in the Wastewater Adjustment – Groundwater Return Section. If all of the applicant's withdrawal volumes above baseline will be withdrawn from sources meeting the criteria described previously in the Wastewater Adjustment - Surcharged Reach Section, determine the surcharge offset, as described in that section.

4) Calculate Mitigation Amount

The amount the applicant must attempt to mitigate is equal to:

(Requested rate over baseline) – (Savings through enhanced demand management) – (all applicable wastewater adjustments)

If the answer to the above equation is less than or equal to zero, no mitigation is required. Figures 1a and 1b provide an example of this calculation.

Figure 1a: Example of mitigation calculation

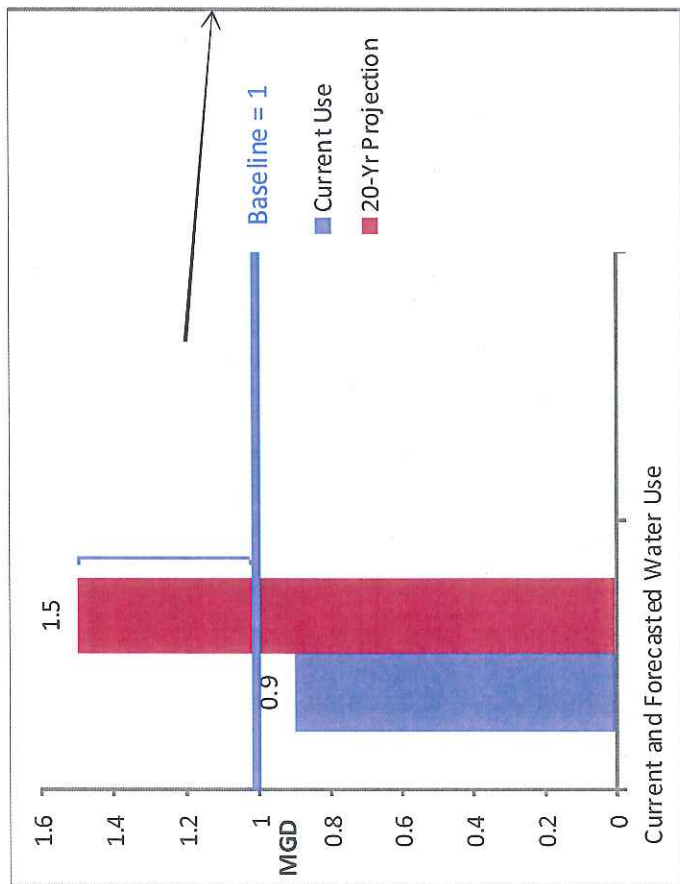
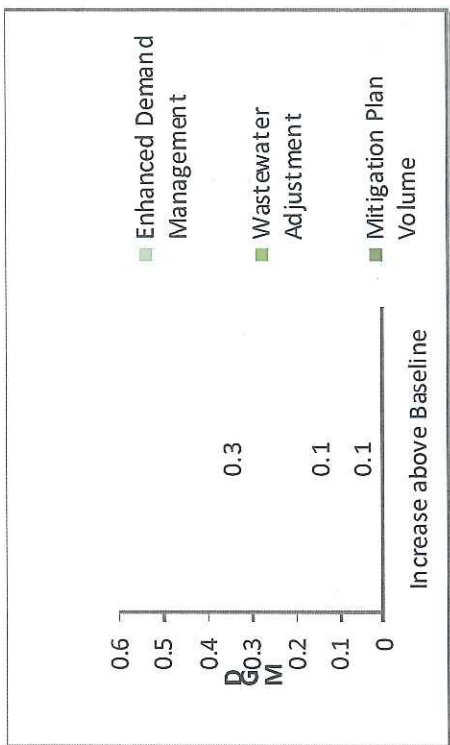


Figure 1b: Detail on increase above baseline from Figure 1a



- A. Current Use = 0.9 MGD
- B. Baseline = 1.0 MGD
- C. 20-year projection = 1.5 MGD
- D. Increase above Baseline (C minus B) = 0.5 MGD

- E. Enhanced Demand Management Estimate = 0.3 MGD
- F. Wastewater Adjustment for Groundwater Returns = 0.1 MGD
 - a. The groundwater return adjustment could have ranged from zero, if the service area were entirely sewerred and discharged through a NPDES discharge, to a maximum of 0.17 MGD (the increase above baseline minus the enhanced demand management, multiplied by 85% (taking 15% consumptive loss into account). [See Section 9.](#)
- G. Mitigation Plan Volume (D minus E minus F) = 0.1

Items A through F are all either known or estimated at the start of the WMA permitting process. Item G, the Mitigation Plan, must be developed and submitted as part of the WMA permit application review process.

Direct and Indirect Mitigation

This section specifies eligible mitigation activities and discusses the difference between direct and indirect mitigation. The section also outlines the method for calculating mitigation credits necessary to meet an applicant's total mitigation requirement. There are two types of mitigation and therefore mitigation credits:

1. **Direct Mitigation** – Direct mitigation will directly result in enhanced streamflow, as a result of enhanced groundwater contribution, streamflow contributions, or surface water releases. The credit is based on a calculated rate of water returned within the basin and is calculated volumetrically, as described in the following sections.
2. **Indirect Mitigation** – Indirect mitigation are environmental improvements that will help to compensate for streamflow impacts resulting from withdrawals. Examples of indirect mitigation include habitat improvements and water supply protection. The relative “value” of the indirect mitigation activity is determined by a credit system, described below. The credits required for a given rate of withdrawal to be mitigated are shown in Table 12.

Post-2005 activities qualifying as direct or indirect mitigation that continue to provide environmental benefit may be considered as part of an initial mitigation plan pending Department review and approval.

Certain activities could be considered for either direct or indirect mitigation credits. Regardless of which type of mitigation credit is chosen, an activity can only be given credit once.

9e Direct Mitigation

The following actions can be considered for direct mitigation credit:

Surface Water Releases

A permittee may have control over an impoundment that could be used to supplement downstream flow conditions, through controlled releases. Such opportunities will be informed by factors such as a reservoir's firm yield; ecological, infrastructure and recreation considerations for the impoundment, and structural limitations of the dam. Potential releases should be evaluated for their ability to improve the timing, magnitude, and duration of downstream flows to more closely mimic natural conditions and improve habitat or fish passage, without compromising other in-lake uses. The implementation plan for such surface water releases would need to be determined on a case-by-case basis, along with the equivalent volume of credit awarded toward the permittee's required mitigation. A consultation with the appropriate state agencies will be required for permittees who would like to include surface water releases as part of their mitigation plan.

NOTE: In consultation sessions with surface water suppliers, if the supplier identifies releases as a mitigation option, then further evaluation of the feasibility of reservoir releases should be the first priority before evaluating other direct mitigation options.

Stormwater Recharge

Direct mitigation credit will be awarded in cases where areas of directly connected impervious surface are redeveloped, or disconnected, so that stormwater has an opportunity to infiltrate into the soil and recharge the underlying aquifer. Directly connected impervious surfaces are those that drain to a stormwater collection system that subsequently discharges directly to a waterway. Soils in areas proposed for stormwater recharge must have sufficient infiltration capacity and calculated annual recharge volumes must be approved by the Department. This type of mitigation could involve the removal of impervious surfaces and replacement with vegetation, porous asphalt or porous pavers, allowing runoff to infiltrate into the ground over these surfaces. Increases in annual recharge volumes resulting from any redevelopment projects that are approved by the Department will be awarded direct mitigation credit on a gallon-for-gallon basis. Creditable projects will also require operation and maintenance plans approved by the Department.

Infiltration and Inflow (I/I) Removal

Infiltration

Infiltration, in the context of wastewater collection system maintenance, is groundwater that enters collection systems through sources such as defective pipes, pipe joints, and manhole walls. Typical I/I studies quantify seasonal, high groundwater infiltration rates for areas within a wastewater collection system.

Mitigation credit for removal of infiltration is based on a calculated total removable infiltration volume determined in accordance with the Department's most current version of *Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation*. Generally, it is assumed that I/I projects result in a maximum of 50% infiltration removal. This percentage may be adjusted depending on the specifics of the infiltration removal process. Credit for infiltration removal will be awarded following an assessment that includes a discussion of the basis for the infiltration rates and outlines the infiltration removal project(s) proposed or completed for which the applicant would like to receive mitigation credit.

Inflow

Inflow, in the context of wastewater collection system maintenance, is water that enters the collection system through direct sources such as: catch basins, manhole covers, cross connections with storm drains, sump pumps, foundation drains, and downspouts. Typical I/I studies will quantify inflow rates measured during various storms for areas within a wastewater collection system using the Department's *Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation*. An Inflow reduction project typically results in the removal of 100% of the inflow to the collection system from the identified sources. Inflow may be redirected to the ground, to a dry well, or to a stormwater collection system. Only that portion of inflow that is directed to recharge will be awarded direct mitigation credit. Credit for inflow removal will be awarded following an assessment that includes a discussion of the basis for

the inflow rates and outlines the inflow removal project(s) proposed or completed for which the applicant would like to receive mitigation credit.

9f Indirect Mitigation

Indirect mitigation activities are activities undertaken to offset the impacts of a withdrawal. Indirect mitigation activities are generally not amenable to volumetric calculation; the Department will utilize a qualitative credit system for the benefits of a particular action. The credit system reflects the effectiveness of a particular action in augmenting base flow (e.g., by promoting stormwater recharge during storms), improving habitat conditions, improving watershed protection, or providing other benefits that could offset the impacts of a withdrawal.

Indirect Mitigation Credit System

The indirect mitigation credit system is a qualitative assessment converted to a score represented as credits. In order to determine how many indirect mitigation credits an applicant may need, the applicant should subtract their direct mitigation plan volume from the total volume the applicant is required to mitigate (commensurate with impact). Table 12 translates indirect mitigation volumes (this would be an applicant's remaining mitigation volume requirement assuming the implementation of their direct mitigation plan) into credits for Tier 2 and Tier 3 applicants. Please note that the credit structure is different for Tiers 2 and 3.

Table 12: Credits Required for Indirect Mitigation		
Indirect Mitigation Amount (MGD)	Credits required for Tier 2	Credits required for Tier 3
> 0 to 0.1	Up to 10	Up to 20
>0.1 to 0.2	Up to 20	Up to 40
>0.2 to 0.3	Up to 30	Up to 60
>0.3 to 0.4	Up to 40	Up to 80
>0.4 to 0.5	Up to 50	Up to 100
>0.5 to 0.6	Up to 60	Up to 120
>0.6 to 0.7	Up to 70	Up to 140
>0.7 to 0.8	Up to 80	Up to 160
>0.8 to 0.9	Up to 90	Up to 180
>0.9 to 1	Up to 100	Up to 200
1.0 or more	case by case	case by case

Activities that will be considered for indirect mitigation credit and their associated credit amounts are included in Table 13. Indirect mitigation activities have been assigned credits based on baseflow augmentation (e.g., by promoting stormwater recharge during storms), habitat improvement,

watershed protection improvements, or other benefits that could offset the impacts of a withdrawal. Credits were assigned as follows:

1. The activity will not benefit the improvement category = 0 credits
2. The activity will have a partial benefit to the improvement category = 5 credits
3. The activity will benefit the improvement category = 10 credits

The credit values for specific activities displayed in Table 13 are based on best professional judgment and are intended to provide a starting point for discussion with the applicant. All indirect mitigation projects will be reviewed on a case by case basis during the agency consultation process and the total score may be adjusted based on site specific information such as the location or scale of the activity.

Table 13: Indirect Mitigation Activities and Potential

Category	Mitigation Action	Instream Flow Improvement (max 10)	Aquatic Habitat ¹ Improvement (max 30)			Water Supply Protection (max 10)	Generic Total Score
			Water Quality ² Improvement (max 10)	Habitat Improvement (max 10)	Stream Continuity Improvement (max 10)		
Habitat Improvement	Remove a dam or other flow barrier ³	5	5	5	10		25
Habitat Improvement	Culvert replacement to meet stream crossing standards		5	5	10		20
Habitat Improvement	Streambank restoration		5	10			15
Habitat Improvement	Stream channel restoration			10	5		15
Habitat Improvement	Stream buffer restoration		5	10			15
Habitat Improvement	Other habitat restoration project			10			10
Habitat Improvement	Install and maintain a fish ladder ³				10		10
Habitat Protection	Acquire property in Zone I or II					10	10
Stormwater	Stormwater bylaw with recharge requirements	5	5				10
Stormwater	Stormwater utility meeting environmental requirement ⁴	5	5				10
Stormwater	Implement MS4 requirements ⁴		10				10
Habitat Improvement	Establish/contribute to aquatic habitat restoration fund			5			5
Habitat Protection	Acquire property for other natural resource protection		5				5
Wastewater	Infiltration/Inflow removal program	5					5
Optimization	Surcharged Reach	10					10
Demand Controls	Private Well Bylaw	10					10
TBD	Other project proposed by applicant	TBD	TBD	TBD	TBD	TBD	TBD
		40	45	55	35	10	185

1) Aquatic habitat improvement can include instream water quality improvement, stream corridor habitat improvement, stream continuity improvement and cold water fishery improvement.

2) Water quality improvement can include reduction in cultural-source sediments, reduction in other pollutants, or - for CFR - mitigation of thermal impacts

3) More credits can be considered if on a coldwater fishery resource

4) Must result in increased recharge to get credit

9g Mitigation Plan Implementation Timeline

An applicant's mitigation plan, if applicable, must be submitted as part of its permit application and must include an implementation timeline. The implementation timeline may be phased provided that any volumes withdrawn over baseline are mitigated prior to when those volumes are withdrawn.¹⁰ The permittee may delay implementation of the mitigation plan for as long as withdrawals remain below baseline. All WMA permits in a basin are reviewed every five years, with the permits reviewed at year 5, year 10, and year 15 based on the permit expiration date for that basin. At the beginning of the first 5-year period in which demand (i.e., withdrawals) is expected to exceed baseline, the permittee must implement mitigation activities to offset the anticipated withdrawal volume over baseline for that 5-year period.

Mitigation Plan Adjustments

Under certain circumstances a permittee's mitigation plan will need to be adjusted during the course of the 20-year permit. Circumstances that could result in the Department requiring that a permittee adjust or revise the mitigation plan may include, but are not limited to, the following:

1. If water savings from enhanced demand management do not reduce demand to the extent anticipated in the mitigation plan, or if for any other reason demand over baseline is higher than was anticipated when the mitigation plan was approved by the Department, the permittee will need to propose how they intend to mitigate the additional volumes. Alternatively, if demand management strategies are more successful than anticipated, portions of the mitigation plan may not need to be implemented.
2. If, during the 20-year WMA permit period, significant wastewater adjustment volumes (volume returned to groundwater through septic systems and permitted groundwater discharges) are instead sewerer, the permittee's wastewater adjustment volumes will need to be recalculated. Once the wastewater adjustment volume has been recalculated, the mitigation volume will also need to be recalculated. Any mitigation volumes not addressed in the permittee's initial mitigation plan will need to be addressed in a revised mitigation plan that must be approved by the Department.

9h Mitigation and Cost Feasibility Guidance

The regulations require mitigation to the greatest extent feasible, and the term feasible includes consideration of cost. Upon the completion of a mitigation plan, an applicant may request that the Department review the ability of the applicant to afford their mitigation plan as proposed (i.e., review the cost feasibility). Applicants who do NOT wish to request that the Department review their ability to finance their mitigation plan as proposed should skip to Section 10 of this document.

¹⁰ DEP will make reasonable allowances, as necessary, for the first few years of the permit period for suppliers whose withdrawals are already above baseline at the time a permit is issued or renewed.

Cost Feasibility Assessment

This cost feasibility assessment is optional and will be initiated at the request of the applicant. The following assessment will assist the Department in determining if the applicant has proposed a plan to meet the conditions of its WMA permit that is feasible for the applicant to finance over the term of its permit. This assessment is intended to capture both the applicant's ability to finance proposed capital projects and any increased operating costs necessary to meet the conditions of its WMA permit. The assessment is based on a series of review thresholds. These thresholds will be used by the Department as guidance to determine if the applicant has shown that implementing its mitigation plan will likely result in financial hardship for the community. The applicant's mitigation plan and 10-year budget, as described below, will be reviewed by the Department and discussed during consultation(s) with the agencies.

10-Year Budget

Applicants requesting a cost feasibility assessment by the Department should include a 10-year budget (template, *EPA's Asset Management and Debt Capacity Tool*, is provided on the Department's website, <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>) along with their mitigation plan. The Department or the permittee may ask for a review of this 10-year budget in preparation of a 5-year permit review or upon alterations to the permittee's mitigation plan. The budget should serve as both a capital improvement plan and an operations and maintenance forecast. The minimum types of information that need to be included in the budget in order for the Department to complete an assessment include:

- Operating costs (salaries and wages, fringe benefits, and other personnel costs),
- Non-capital maintenance costs,
- Revenue (including proposed rate increases and grant funding for projects),
- Ongoing replacement or rehabilitation of infrastructure,
- Planned capital improvement projects (both those projects proposed to meet the conditions of the WMA permit and other planned capital projects and upgrades),
- Applicant reserves and special funds,
- Existing debt service, and
- Proposed additional debt service to cover planned expenses.

For any capital improvement projects included in the budget, the applicant should clearly identify those projects that are included in the applicant's mitigation plan and address conditions in its WMA permit. See previous topics in Section 9 for additional information regarding mitigation and mitigation planning.

WMA Project Costs should include any costs associated with projects identified in the applicant's mitigation plan. Examples of WMA projects that may be included in the applicant's mitigation plan include, but are not limited to:

- Developing a new source or interconnection,
- Aquifer storage and recharge,
- The entire cost of a dam removal project proposed as part of the applicant's mitigation plan,
- Enhanced or continued implementation of a pipe replacement program,
- Enhanced or continued implementation of an existing I/I program with minimal changes, and
- Activities required as part of other, non-WMA state or federal requirements (e.g., municipal separated storm sewer (MS4) permit requirements, or Safe Drinking Water Act requirements).

Applicants may submit a budget for just the PWS, or they may also include the operations and maintenance and capital improvement budgets for the wastewater utility. Applicants that provide budgets that incorporate the wastewater utility will be evaluated using different threshold values (as described in the next Section) than those applicants who submit a budget for only the PWS.

Applicants can use the budget template (*EPA's Asset Management and Debt Capacity Tool*) provided by the Department (additional directions for its use are included within the template), or the applicant can provide a more detailed 10-year budget for the assessment. The applicant can submit its budget in an alternative format, if, at a minimum, the components listed above are included in the applicant's analysis. Along with the mitigation plan and 10-year budget, the applicant should include a discussion of potential sources of funding for the proposed WMA activities (e.g., rates, town revenues, grants, borrowed funds [whether through a SRF loan or other source]). Applicants should also provide the Department with approved budgets for the previous 5 years (the budgets should be comparable in scope to the 10-year budget provided by the applicant. For example, if the 10-year budget only covers the PWS, the historic budgets should only be for the PWS).

Cost Feasibility Thresholds

The Massachusetts Water Infrastructure Finance Commission (WIFC) assessed a range of costs, with benchmarks at 1.00%, 1.25%, 1.5%, 2.0%, and 2.5%. The WIFC's final report, *Massachusetts Water Infrastructure: Toward Financial Sustainability, February 7, 2012* concludes that "... a [Median Household Income] MHI ratio of 1.25 is a reasonable number to use as a measure of local commitment and contribution for each water and sewer rates."

The WIFC further estimated that the statewide average water bill is 0.52% of MHI and the statewide average sewer bill is 0.75% of MHI. These estimates were based on the 2010 state-wide average MHI of \$64,081 and the average water rates taken from the 2010 Tighe and Bond water rates survey assuming an adjusted typical household water use of 70,000 gallons per year.

The Department has identified several thresholds against which to determine cost feasibility of a proposed mitigation plan for an applicant. While their use is described in more detail in the following section, these thresholds include:

- **Threshold 1:** The average water bill as a percentage of MHI based on the Tighe and Bond rate survey adjusted for a typical household water use of 70,000 gallons per year. This threshold will be adjusted bi-annually based on the most recent Tighe and Bond rate study. For example, in 2010, Threshold 1 was 0.52%. If the wastewater utility is included in the budget provided to the department, Threshold 1 would be a sum of the statewide average water and sewer bills as a percentage of MHI, or 1.27% for 2010. If the Tighe and Bond rate study is not available, the applicant may recommend a comparable substitute.
- **Threshold 2:** *WMA Project Costs* will independently result in an annual rate increase of 2% or more.
- **Threshold 3:** WIFC's MHI to water rate ratio of 1.25%. If the wastewater utility is included in the budget provided to the department, Threshold 3 would be 2.5%.

Assessment

The mitigation plans, financial information, and supporting documentation submitted to the Department by the applicant will be evaluated according to the following three-step process. If at any point the Department determines that the proposed mitigation plan may cause the applicant financial hardship, the Department will work with the applicant to identify additional funding sources or alternative mitigation projects.

Step 1:

If the applicant's cost feasibility assessment submittal meets all of the following criteria, the mitigation plan is presumed to be financially feasible for the applicant and no further review will be conducted by the Department. If any of the three criteria identified are not met, the applicant will proceed to Step 2 of the assessment.

Table 14: Schematic of Step 1 of the Cost Feasibility Assessment Review

1. In the year the application is received, the applicant's average residential annual bill is less than the value for Threshold 1 for the most recent year that the Tighe and Bond rate survey was completed.	No→	Move to Step 2
Yes ↓		
2. WMA Project Costs can be spread out over some portion of the 20-year WMA permit period.	No→	
Yes ↓		
3. The applicant's average residential annual bill is less than the value for Threshold 1 throughout the 10-year budget provided by the applicant.	No→	
Yes ↓		
The proposed plan is considered financially feasible and the cost assessment is complete.		

Step 2:

If the applicant's cost feasibility assessment submittal meets all four of the following criteria, the mitigation plan is presumed to be financially feasible for the applicant and no further review will be conducted by the Department. If any of the four criteria identified below are not met, the applicant will proceed to Step 3.

Table 15: Schematic of Step 2 of the Cost Feasibility Assessment Review		
1. In the year the application is received, the applicant's average annual bill as a percentage of MHI is less than Threshold 3 .	No→	Move to Step 3
Yes↓		
2. WMA Project Costs can be spread out over some portion of the 20-year WMA permit period.	No→	
Yes↓		
3. WMA Project Costs will not independently result in an annual rate increase of more than 2.0% of the previous year's rates (Threshold 2).	No→	
Yes↓		
4. Rates, as a percentage of MHI, at the end of the 10-year budget provided by the applicant will not exceed Threshold 3 .	No→	
Yes↓		
The proposed plan is considered financially feasible and the cost assessment is complete.		

Step 3:

The Department will work with the applicant to identify additional potential funding sources and alternative mitigation projects. The Department will also work with the applicant to revise the timeline for implementing the mitigation plan where necessary. Revised mitigation plans will be subject to review and approval by the Department.

10. Data Refinement and Site Specific Study

Data Refinement Options

Any applicant may submit refinements to the data used to develop the BC and GWC for the subbasin(s) in which its withdrawal(s) is located, and to the data/assumptions used for the assessment of cumulative impacts. If the applicant's refinements are approved by the Department, they will be included in the WMA permit requirements.

Applicants and interested parties may submit, for review and approval by the Department, refinements to the data used to develop the BC and GWC for any subbasin, including but not limited to:

- (a) Calculation of the August groundwater pumping volume during the 2000 to 2004 study period.
Information used to refine this calculation include:
 - 1. Wells assumed to be in use were not in use;
 - 2. Wells were pumping at significantly different rates than assumed; or
 - 3. Significant reductions in groundwater withdrawals since the 2000-2004 study period due to:
 - a. Wells that have been abandoned; or
 - b. A public water supply that has transferred withdrawals from its own withdrawal points to a different source(s).
- (b) Information used to make an adjustment to the delineated subbasin boundaries include:
 - 1. Subbasin drainage boundaries do not coincide with documented groundwater boundaries;
or
 - 2. Subbasin boundaries occur within water bodies rather than at outlet points.
- (c) Hydrologic/geologic considerations:
 - 1. Confined aquifers; or
 - 2. Pumping that causes documented groundwater impacts across subbasin boundaries.
- (d) Refinements, demonstrated through groundwater modeling, to the assumed 1:1 August Pumping to August Stream Depletion ratio. The modeling must demonstrate that the impacts from ground water withdrawals to August streamflow are less than 1:1, assuming the year-round pumping pattern of the groundwater sources.
- (e) WMA permit applicants may refine the Department's assessment of cumulative impacts to the subbasin (described in Section 4) by demonstrating that the entire permitted groundwater withdrawal request above baseline cannot be withdrawn from one subbasin either by documenting the system's constraints (i.e., pumping capacity limit), or by agreeing to conditions that limit pumping from sources in that subbasin. The applicant must provide the Department with a breakdown of its total request above baseline by subbasin and this would become a permit condition that the specified amounts would not be exceeded on a subbasin basis.

To ensure that the data refinements are incorporated into the cumulative impact analysis at the beginning of the permit period, specific deadlines are established in 310 CMR 26.20(2) for submitting this information. The Department will make changes to the BC and GWC maps as appropriate based on any approved data refinements. Applications for new WMA permits filed subsequent to the first expiration date in a basin may include proposed data refinements for the subbasin(s) in which the proposed withdrawals are located.

Site Specific Fish Community Assessment

A Tier 1 applicant with a withdrawal point(s) in a subbasin(s) that is more than 25% August net groundwater depleted may conduct a site-specific fish community assessment during the first 5-year permit period to demonstrate that the observed fish population in the subbasin(s) exceeds the expected number of fish for the applicant's GWC. The applicant's assessment must be designed, in consultation with EEA Agencies, to examine the fish community downstream of a well or well field. The geographically referenced point at which the impact of the withdrawal point(s) will be assessed will be determined in consultation with EEA Agencies. In order to calculate the GWC for the well or well field location, the applicant will calculate the percent alteration of August median flow from groundwater withdrawals in accordance with the methods used in USGS SIR 2011-5193.

The applicant will then conduct the site-specific fish community assessment using protocols based on those used to collect fish community data for the USGS study and approved by DFW. The fish sampling and collection protocol shall, at a minimum, require that fish community sampling be conducted by the applicant once per year for 5 years at 3 locations and include the methods, times of year, and effort requirements for the sampling. The applicant must first obtain a fish collection permit from DFW, which will include the fish sampling and collection protocol. During the assessment period, the applicants will be required to submit annual monitoring reports to DFW and DEP.

At the conclusion of the 5-year monitoring period, DEP, in consultation with the EEA Agencies, will compare the average fluvial fish relative abundance at that location over the 5-year monitoring period to the fluvial fish relative abundance found at all fish community sampling sites within the same GWC. If the average at the applicant's location is greater than the 75th percentile for fish sampling locations within the same GWC, then the applicant will not be required to implement minimization measures typically required of permittees in subbasins with groundwater depletion greater than 25% in August.

11. Permitting Tools and Resources

WMA Permitting Tool

The WMA permitting tool is an Access database that provides the data necessary to determine potential WMA permitting requirements. Permittees, consultants, watershed groups, government agencies and

others can use the permitting tool to assess potential impacts due to increases in withdrawals from new or existing supply wells. The permitting tool contains the data and equations to determine BC, GWC and August NGD. The user can enter the rate of increased water use and output the resulting changes in streamflow, and potential changes to BC, GWC and August NGD. The WMA permitting tool is used in conjunction with the Department's interactive map, both of which are available at (<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>).

The WMA permitting tool is organized into two main views, PWS and subbasins. The PWS view contains data for each of the approximately 240 PWS systems regulated under the WMA: 20-Year Water needs forecast volumes from DCR, baseline rate, WMA authorized rates, actual annual use since 2006, and 5-year block permitted rates for those PWS permits that have been renewed for 20 years. The PWS view also lists the PWS wells, surface water sources, and other water use points (e.g., NPDES discharge points, groundwater discharge points, wells of non-PWS entities such as golf courses, and wells of non-WMA PWS entities such as restaurants) for each subbasin in which the PWS has one or more sources.

The subbasin view displays data for the 1400-scale subbasins of the MWI Report (USGS report SIR-2009-5272). The MWI data are "nested," meaning that data for a subbasin includes the cumulative area of the subbasin and all upstream subbasins contributing to it. Likewise, the percentage of impervious cover (IC) of a subbasin represents the percent IC of the subbasin and all upstream subbasins. For example, the streamflow of the subbasin containing the Charles River dam in Boston (the outlet of the Charles River to Boston Harbor) represents the basin's entire streamflow.

The subbasin view displays data from the USGS MWI Report: estimated unaffected August median streamflow; August groundwater pumping rates; impervious cover percentage; area in square miles; and wastewater discharge rates. The estimated streamflow was simulated by USGS using actual 1961 to 2004 daily stream gage data at index gages.

The subbasin view also displays existing GWC, BC and August NGD, and calculates potential changes in GWC, BC and NGD based on user-input increases or decreases in groundwater pumping.

GWC is a statistical category calculated from the percent of August estimated unaffected streamflow that is pumped from all wells in or upstream of the subbasin. For example, if a subbasin's estimated August unaffected streamflow is 2 million gallons per day (mgd) and the total August groundwater pumping in and upstream of the subbasin is 1 mgd, then August well pumping is 50% of the August streamflow. This subbasin is therefore a GWC-4, which has a range of 25-55% of August well pumping as a percentage of unaffected streamflow.

Biologic Category (BC) is a statistical category of the health of the riverine fish community in the subbasin. BC is calculated using a regression equation with the following variables: impervious cover,

channel slope, percent wetland in the buffer zone of the river, and the percent of August streamflow that is pumped as groundwater.

Net Groundwater Depletion (NGD) is a measure of the influence of all groundwater withdrawals and discharges on streamflow. It is calculated by comparing a subbasin's unaffected August streamflow to all groundwater discharges (septic systems plus DEP-regulated groundwater discharge facilities) and groundwater withdrawals (public water supply wells, non-PWS wells such as industrial wells, and private domestic wells). NGD is expressed as a percent change in the unaffected August streamflow due to all groundwater withdrawals and discharges. For example if a subbasin has an August unaffected stream flow of 8 mgd, total groundwater withdrawals of 4 mgd and total groundwater discharges of 2 mgd, then the NGD is 25%: $8 - (8 - 4 + 2) = 2$; $(2/8) \times 100 = 25\%$. This subbasin is 25% Net Groundwater Depleted because the net rates of groundwater withdrawals and discharges is 25% of the unaffected August streamflow.

The user can change the groundwater pumping rate by inputting a positive rate (increased pumping) or negative rate (decreased pumping). The resulting change in NGD, BC, and GWC is calculated and displayed. It is important to note that the user-input rates are not calculated for downstream subbasins, even though changing pumping rates impacts downstream subbasins. To determine the effect on NGD, BC, and GWC in downstream subbasins from changes in groundwater pumping, the user must input the changes in pumping rate to each downstream subbasin of interest. The downstream subbasins can be identified using the SWMI interactive map at

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/sustainable-water-management-initiative-swmi.html>.

DATA SUMMARY:

Data for the PWSs regulated under the WMA:

- Baseline rate, defined as the larger of the 2003-2005 average rate plus 5% or the 2005 volume plus 5%. Baseline cannot be (1) less than the registered rate, (2) more than the authorized rate allocated in 2005. The database identifies the methodology for the baseline rate of each PWS.
- Authorized rates (registered plus permitted).
- 20-year WNF, if available.
- Actual annual water use from 2006 onward.
- The unique subbasin ID numbers in which the PWS has sources.
- All reported water use points in the subbasins in which the PWS has sources: PWS groundwater and surface water sources (both WMA-regulated and non-WMA regulated), non-PWS groundwater and surface water sources (golf courses, industries, etc.), surface water discharge (NPDES permits), and permitted groundwater discharges.

Data for the 1400-scale subbasins:

- Identification of the water use points listed above for each subbasin.
- Cumulative area (the subbasin and all upstream subbasins).
- Cumulative percent impervious cover.
- Cumulative August groundwater pumping rates:
 - 2000-2004 average for PWS wells and commercial wells;
 - private wells estimated from U.S. Census data.
- Cumulative 2000-2004 August groundwater discharge rate:
 - cumulative 2000-2004 August surface water discharge rate;
 - cumulative August septic system discharge rate estimated from U.S. Census data August NGD percentage.
- Presence/absence of CFR (not including upstream subbasins).
- Presence/absence of surface water withdrawals (including upstream subbasins).
- BC.
- GWC.
- Net groundwater depletion percentage.

Massachusetts Department of Environmental Protection's Website

Interactive Map

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/sustainable-water-management-initiative-swmi.html>

This interactive geographic information systems (GIS) map presents a graphic display of BC and GWC developed through the SWMI process for the MWI 1400-scale subbasins. The webpage also includes links to the relevant USGS scientific investigation reports and supporting documents presented and summarized in the maps. The webpage and the map are works in progress, which will evolve to support stakeholders.

Links to relevant reports

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>

The Department's website also includes an extensive set of links to relevant studies and databases.

Appendix A: USGS Background Studies

Summary of USGS scientific studies used to develop the Biological Category (BC) and Groundwater Withdrawal Category (GWC) in Water Management Act permitting

The following is a brief summary of four U.S. Geological Survey Scientific Investigations Reports (USGS SIR) that form the scientific basis for the Water Management Act permit requirements. Each report builds upon the results of the previous one, and collectively they form the basis for the categorization of Massachusetts streams and rivers according to the predicted condition of riverine fish populations. The term describing near-natural streamflow varies in the reports; it is referred to as unimpacted streamflow, unaffected streamflow, unregulated streamflow and least altered streamflow.

Index Gage Report (USGS SIR 2007-5291)

The USGS operates hundreds of streamflow gages in New England, some of which have more than 50 years of daily stream flow records. The USGS "Index Gage Report" analyzed streamflow records to determine which gages represented the "least altered" streams in Massachusetts. Although all streams in Massachusetts have likely been altered to at least a small degree due to human activity, streamflow conditions at gages range from near-natural ("least altered") to highly altered. The Index Gage Report identified those gages ("index gage") located on streams having least-altered conditions. Based on statistical analysis of 1960 to 2004 daily stream flow records at 61 index gages, four types of rivers were identified: high-gradient runoff-dominated rivers, northern runoff-dominated rivers, southern runoff-dominated rivers, and baseflow-dominated rivers. The daily streamflow data from the index gages were used to develop the Sustainable Yield Estimator (described below).

Armstrong, D.S., Parker, G.W., and Richards, T.A., 2008, Characteristics and Classification of Least Altered Streamflows in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2007-5291, 113 pp.

<http://pubs.usgs.gov/sir/2007/5291/>

Sustainable Yield Estimator (USGS SIR 2009-5227)

The Sustainable Yield Estimator (SYE) is a software package developed by the USGS to simulate streamflow at any point on a stream or river in Massachusetts except for: the mainstems of the Connecticut and Merrimack rivers, small coastal tidally-influenced rivers, and groundwater-dominated streams of the Plymouth-Carver and Cape Cod aquifers. The SYE converts actual daily streamflow measured at a USGS index gage from 1960 to 2004 into simulated daily streamflow for any point on a stream without a gage ("ungaged stream"). To generate the simulated daily flows for an ungaged stream, the SYE selects the index gage with basin characteristics most similar to the ungaged stream's basin. SYE then adjusts the daily flows from the selected index gage to generate daily flows for the ungaged stream, based on differences in basin characteristics such as drainage area, percent sand and gravel, percent wetlands, and average annual precipitation.

SYE simulates unimpacted ("unaffected") and impacted ("affected") daily flows from October 1, 1960 to September 30, 2004 (44 hydrologic years) and calculates median average monthly streamflow, annual 7-day minimum flow, and August median flow. The SYE package contains water withdrawal and wastewater discharge volumes reported to the Department or USEPA from 2000 to 2004. To obtain affected streamflow, the SYE adjusts the simulated unaffected daily flows downward by the average amount of water pumped from the drainage area of the stream and/or upward by the amount of wastewater discharged to the drainage area of the stream. Both the affected and unaffected SYE-generated daily flows can be imported into widely available software such as The Nature Conservancy's Indicators of Hydrologic Alteration (IHA), to calculate additional flow statistics, beyond those generated by SYE.

Archfield, S.A., Vogel, R.M., Steeves, P.A., Brandt, S.L., Weiskel, P.K., and Garabedian, S.P., 2010, The Massachusetts Sustainable Yield Estimator: A Decision Support Tool to Assess Water Availability at Ungaged Sites in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2009-5227, 41 pp.

<http://pubs.usgs.gov/sir/2009/5227/>

Massachusetts Water Indicators (USGS SIR 2009-5272)

The USGS "Mass. Water Indicators" (MWI) study used the SYE to simulate unaffected and affected streamflow at the outlet of 1,395 pre-delineated subbasins in Massachusetts. An important feature of the subbasins is that they are "nested" so that the drainage area of a subbasin includes the area (and withdrawal and discharge volumes) of all the subbasins that drain to it. The MWI estimated the affected flow at each subbasin outlet by taking into account the reported water supply withdrawals and wastewater discharges from 2000 to 2004 included in the SYE, estimated private well withdrawals, and estimated septic system discharge. It is important to note that MWI included estimated private well and septic system volumes estimated from U.S. Census data, in addition to the reported water and wastewater volumes in the SYE. The MWI also estimated the percent of impervious cover in each (nested) subbasin, which in the USGS "Fish and Habitat" study (described below) was determined to have significant negative correlation with the health of river fish populations.

For each of the 1,395 subbasins, the MWI report includes unaffected and affected flow values, the withdrawal and discharge rates used to calculate affected flow, and percent impervious cover. The daily streamflow values are provided as an annual average value and as January, April, August and October medians (representing seasonal flow variation needed for healthy riverine fish habitat in Massachusetts). The annual values of altered flow account for surface water and groundwater withdrawals, but the monthly values only include groundwater withdrawals. Surface water withdrawals were excluded from the monthly affected flow calculations because the impacts of monthly reservoir withdrawals on monthly subbasin outflows is reservoir-specific and could not be accurately characterized in this study. Both annual and monthly affected flow values include wastewater

discharges, because discharges immediately affect streamflow and therefore could be added to the monthly unaffected flow.

Weiskel, P.K., Brandt, S.L., DeSimone, L.A., Ostiguy, L.J., and Archfield, S.A., 2010, Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins: U.S. Geological Survey Scientific Investigations Report 2009-5272, 70 pp.

<http://pubs.usgs.gov/sir/2009/5272/>

Fish and Habitat Study (USGS SIR 2011-5193)

The USGS “Fish and Habitat” study used SYE analyses and fish sampling data from the MA Division of Fisheries and Wildlife (DFW) to determine the response of riverine or fluvial fish communities to human activities (water and land use) and natural conditions (e.g., basin slope and wetlands) in Massachusetts. Riverine fish are fish that depend on flowing water for part or all of their life cycle and were used in the Fish and Habitat study as an indicator of the overall health of a river’s aquatic ecosystem. The study compared fish community data collected by DFW under a variety of streamflow and land use variables to determine which were most closely related to changes in riverine fish characteristics. The results indicate that of all the factors tested, the two human activities that have the most impact on fish populations are percent impervious cover within the watershed and the rate of groundwater withdrawal (expressed as a percent of unaffected August streamflow). Impervious cover includes roadways, sidewalks, parking lots and building roofs. Higher amounts of impervious surface and groundwater withdrawal were both associated with declines in riverine species and numbers.

The Fish and Habitat study produced an equation that can be used to show the response of riverine fish population at any point in a stream to increases in impervious cover and groundwater withdrawal. The equation was used to show the difference in fish community characteristics under two scenarios: (1) no groundwater pumping in August and impervious cover at 1% (representing near-natural conditions) and; (2) at the MWI 2000 to 2004 average August groundwater pumping rate and actual percent impervious cover (representing existing conditions). 1% impervious cover was chosen for the “unaffected” condition because there are essentially no subbasins completely absent of impervious cover. Zero groundwater pumping was used for the “unaffected” condition because many MWI subbasins have no groundwater withdrawals.

Armstrong, D.S., Richards, T.A., and Levin, S.B., 2011, Factors Influencing Riverine Fish Assemblages in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2011-5193, 59 pp.

<http://pubs.usgs.gov/sir/2011/5193/>

Categorization of Massachusetts Streams and Rivers

Subsequent to the Fish and Habitat study, nested MWI subbasins were classified two ways based on the predicted decline in riverine fish population due to groundwater pumping and percent impervious cover: Biological Category (BC) and Groundwater Withdrawal Category (GWC). The Biological Category considers both August pumping and impervious cover and ranges from the healthiest predicted fish populations (BC-1, 0% to 5% decline in the range of riverine fish, and a disproportionate loss of sensitive species or life stages) to the least healthy (BC-5, more than 65% decline in the range of riverine fish, loss in species, and marked decline in sensitive species or life stages). The Groundwater Withdrawal Category (GWC) holds impervious cover at a constant (1%) in order to isolate the effects of pumping groundwater on the fish population. Each GWC corresponds to the percent of groundwater withdrawal that, in the absence of increases in impervious cover, would result in a change in BC. GWC ranges from GWC-1 (0% to 3% August groundwater pumping as a percent of unaffected August streamflow) to GWC-5 (more than 55% August groundwater pumping as a percent of unaffected August streamflow).

Appendix B: Surcharged Subbasins

In certain situations, withdrawals above baseline from significantly surcharged subbasins may qualify for an adjustment, which could offset the mitigation required for the increased withdrawal. An initial screening by the Department indicates that the following major basins contain surcharged reaches with subbasins that could be eligible for an adjustment: the Blackstone, Concord, South Coastal, Taunton, and Ten Mile. The table below provides additional information about the eligible subbasins and associated volumes. Surcharge offset adjustments will be made at the discretion of the Department.

Table 16. Subbasins with Surcharged Reaches		
Major Basin	Subbasin unique ID	Municipalities with land area in these subbasins
Blackstone	23038	Millbury
Blackstone	23043	Millbury
Blackstone	23040	Millbury
Blackstone	23049	Millbury, Sutton
Blackstone	23046	Sutton, Grafton
Blackstone	23048	Grafton
Blackstone	23053	Grafton
Blackstone	23071	Northbridge, Uxbridge
Concord	12007	Sudbury
Concord	12035	Marlborough, Sudbury
Concord	12009	Northborough
Concord	12014	Northborough, Westborough
Concord	12020	Westborough
South Coastal	22017	Rockland, Hanover
Taunton	24011	West Bridgewater, East Bridgewater
Taunton	24012	East Bridgewater
Taunton	24020	East Bridgewater
Taunton	24034	Bridgewater
Taunton	24106	East Bridgewater, Bridgewater
Ten Mile	24046	Attleboro

Appendix C: Permit Renewal Schedule

	Initial Permits Issued	Renewal Date
Hudson Basin	August 31, 1988	August 31, 2008
Blackstone Basin	February 28, 1989	February 28, 2009
Charles Basin	February 28, 1989	February 28, 2009
Ipswich Basin	August 31, 1989	January-March 2015*
North Coastal Basin	August 31, 1989	August 31, 2009
Boston Harbor Basin	February 28, 1990	February 28, 2015*
Taunton Basin	February 28, 1990	February 28, 2015*
South Coastal Basin	August 31, 1990	August 31, 2015*
Cape Cod Basin	November 30, 1990	November 30, 2014*
Islands Basin	February 28, 1991	February 28, 2015*
Buzzards Bay Basin	May 31, 1991	May 31, 2015*
Concord Basin	August 31, 1991	August 31, 2015*
Ten Mile Basin	November 30, 1991	November 30, 2015*
Deerfield Basin	February 29, 1992	February 29, 2016*
Housatonic Basin	May 31, 1992	May 31, 2016*
Farmington Basin	August 31, 1992	August 31, 2016*
Westfield Basin	November 30, 1992	November 30, 2016*
Millers Basin	February 28, 1993	February 28, 2017*
Chicopee Basin	May 31, 1993	May 31, 2017*
Quinnebaug Basin	August 31, 1993	August 31, 2017*
Connecticut Basin	November 30, 1993	November 30, 2017*
Nashua Basin	February 28, 1994	February 28, 2018*
French Basin	May 31, 1994	May 31, 2018*
Shawsheen Basin	August 31, 1994	August 31, 2018*
Merrimack Basin	November 30, 1994	November 30, 2018*
Parker Basin	February 28, 1995	February 28, 2019*
Narragansett Basin	May 31, 1995	May 31, 2019*

*Expiration date extended by 4 years by Chapter 240 of the Acts of 2010, as amended by Chapter 238 of the Acts of 2012, collectively known as the Permit Extension Act.

Glossary

The following glossary is intended to provide a quick reference section for readers to avoid the need to go back through the text in search of a definition or an acronym. It includes both:

- key concepts from the SWMI Framework and a brief background on how the concept was developed and/or a description of how the concept is used in Water Management Act permitting; and
- a simple listing of common terms that appear and are then abbreviated in the text of this guidance.

Aquatic Base Flow (ABF) is a statistical method of determining the natural flows necessary for the protection and propagation of aquatic life. It is expressed as the median of monthly mean flows, and is calculated for each month using estimated near-natural daily flow values.

August median flow means the median of the August median flows for the period of record described by the U.S. Geological Survey in Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins (Weiskel et al., 2010, USGS SIR 2009-5272).

August net groundwater depletion means the unimpacted median monthly flow for August minus 2000-2004 groundwater withdrawals plus 2000-2004 groundwater returns described by the U.S. Geological Survey in Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins (Weiskel et al., 2010, USGS SIR 2009-5272).

Authorized withdrawal means:

- (a) that volume of water that is registered, permitted or both; or
- (b) that volume of water for which a nonconsumptive use statement has been accepted by the Department.

The volume of an authorized withdrawal in a registration statement or permit is expressed as an annual average daily volume calculated by dividing the total annual withdrawal by the number of days of operation during the year.

Baseline means the volume of water withdrawn during calendar year 2005 plus 5%, or the average volume withdrawn from 2003 through 2005 plus 5%, whichever is greater, provided that:

- (a) baseline cannot be less than a permittee's registered volume;

- (b) baseline cannot be greater than the permittee's authorized volume for 2005; and
- (c) if, during the period from 2003 to 2005, the permittee's withdrawals from the water source were interrupted due to contamination of the source or construction of a treatment plant, the Department will use best available data to establish a baseline volume from the water source.

Biological Category (BC) for each subbasin is based on the simulated 2000-2004 existing condition of aquatic habitat using fluvial fish community characteristics as the surrogate variable. Each biological category represents the percent alteration within the range of these fluvial fish community characteristics as a function of the following subbasin parameters: 1) impervious cover; 2) cumulative groundwater withdrawal as a portion of the unimpacted August median flow; 3) stream channel slope; and 4) percent wetland within the stream buffer area.

Simulated Alteration of Fluvial Fish Community Characteristics

Biological Category 1: 0% to 5%

Biological Category 2: >5% to 15%

Biological Category 3: >15% to 35%

Biological Category 4: >35% to 65%

Biological Category 5: >65%

Bioperiod means specified periods during the year that correspond to fish life stages or critical biological processes (e.g., spawning, incubation, rearing, growth, migration, overwintering) based on Characteristics and Classifications of Least Altered Streamflows in Massachusetts (Armstrong et al., 2008, USGS SIR 2007-5291).

Coldwater fish resources (CFR) means waters that the MA Division of Fisheries and Wildlife has identified support cold water fish in accordance with 321 CMR 5.00 (once promulgated).

Department of Conservation and Recreation, Office of Water Resources (DCR OWM)

Department of Environmental Protection (DEP)

Department of Fish and Wildlife (DFW)

Executive Office of Energy and Environmental Affairs (EEA)

Feasible means suitable for implementation taking into consideration the anticipated environmental improvement, cost, available technology and the permittee's legal authority to implement the alternative or action.

Firm yield means a simulated estimate of the water volume available in a reservoir or reservoir system during drought conditions, as approved by the Department. Firm yield is determined using the response of the reservoir to the drought of record. If the applicant has a drought management plan that details specific steps to be taken in response to droughts and the means to measure results, the Department will consider the response of the source(s) to the best approximation of a 1-in-20 year drought. The reservoir system's firm yield derived from this analysis will then become the basis for permitting maximum annual withdrawals from the reservoir(s).

Fluvial fish means fish living in a stream or river that are dependent upon flow during one or more stages in their life cycle.

Functional Equivalence Plan (FEP) means a plan prepared by a permittee who has been unable to meet the RGPCD or UAW Performance Standards within the timeframes outlined in their permit. A FEP includes a timetable for implementing required best management practices for meeting the Performance Standard(s).

Groundwater Withdrawal Category (GWC) for each subbasin is based on the ratio of the 2000-2004 groundwater withdrawal volume to the unimpacted median monthly flow for August and represents conditions during the late summer bioperiod (July-September). Each groundwater withdrawal category represents the range of this ratio that would result in the biological category of the same number under conditions of low (1%) impervious cover.

Simulated Groundwater Withdrawal Ratio for the Late Summer Bio-Period

Groundwater Withdrawal Category 1: 0% to 3%

Groundwater Withdrawal Category 2: >3% to 10%

Groundwater Withdrawal Category 3: >10% to 25%

Groundwater Withdrawal Category 4: >25% to 55%

Groundwater Withdrawal Category 5: >55%

Location Adjustment Factor (LAF) accounts for the reduced environmental benefit of returning water outside of the major basin from which it was withdrawn.

Million gallons per day (MGD)

Minimization means measures that reduce withdrawals from, or return groundwater to, the subbasin or river basin from which a withdrawal is made, or other management measures intended to improve streamflow.

Mitigation means activities undertaken that offset the impacts of ground or surface water withdrawals by improving streamflow or aquatic habitat.

Net Groundwater Depletion (NGD)

Permit tier means a tier to which a permit application is assigned based on the size of the requested withdrawal volume relative to the applicant's baseline, and the potential for any increase in withdrawal above the applicant's baseline to contribute to a change in the biological category or groundwater withdrawal category of the subbasin(s) from which the withdrawal is made.

For groundwater withdrawals:

- Tier 1 - The applicant requests no withdrawal greater than baseline;
- Tier 2 - The applicant requests a withdrawal greater than baseline, but the requested withdrawal will not result in a change in the biological category, groundwater withdrawal category or seasonal groundwater withdrawal category of the subbasin(s) from which it is made;
- Tier 3 - The applicant requests a withdrawal greater than baseline, and the requested withdrawal will result in a change in the biological category, groundwater withdrawal category or seasonal groundwater withdrawal category of the subbasin(s) from which it is made.

For surface water withdrawals:

- Tier 1 - The applicant requests no withdrawal greater than baseline;
- Tier 2 - The applicant requests a withdrawal greater than baseline.

For withdrawals in the groundwater-driven basins (i.e.: the southern portion of South Coastal, Cape Cod, Islands, and portions of Buzzards Bay):

- Tier 1 - The applicant requests no withdrawal greater than baseline;
- Tier 2 - The applicant requests a withdrawal greater than baseline.

Public water supplier (PWS)

Residential gallons per capita day (rgpcd) is a measure of residential water use, both indoor and outdoor, per person.

Safe yield means the maximum dependable withdrawals that can be made continuously from a water source including ground or surface water during a period of years in which the probable driest period or period of greatest water deficiency is likely to occur; provided, however, that such dependability is relative and is a function of storage and drought probability. The Department's method for calculating and applying safe yield is described at 310 CMR 36.13.

Seasonal Groundwater Withdrawal Categories (SGWC) for each subbasin are based on the ratio of the 2000-2004 groundwater withdrawal volume to the unimpacted median monthly flow for the 4 bioperiods listed below.

	Oct-Nov	Dec-Feb	March-April	May-June
Seasonal Category 1:	0% to 3%	0% to 3%	0% to 3%	0% to 3%
Seasonal Category 2:	>3% to 5%	0% to 3%	0% to 3%	>3% to 5%
Seasonal Category 3:	>5% to 15%	>3% to 10%	>3% to 10%	>5% to 15%
Seasonal Category 4:	no numeric criteria			
Seasonal Category 5:	no numeric criteria			

Streamflow criteria are established by the biological, groundwater withdrawal and seasonal groundwater withdrawal categories for each subbasin. Withdrawals that contribute to a subbasin changing to a more altered category do not meet streamflow criteria and will only be permitted if the permittee demonstrates that there is no feasible alternative available to meet demonstrated water needs, and the permittee undertakes mitigation commensurate with the impacts of the withdrawal to the greatest extent feasible.

Subbasin means the 1,395 subbasins delineated by the U.S. Geological Survey in Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins (Weiskel et al., 2010, USGS SIR 2009-5272), unless otherwise specifically provided.

Sustainable Water Management Initiative (SWMI), which was created in 2010, established an Advisory Committee and a Technical Subcommittee comprised of a wide range of stakeholders to advise EEA and its agencies on sustainable management of water resources that balance human, economic and ecological needs. See Section 2 of this document for a more detailed description.

Unaccounted for water (UAW) is defined as the residual resulting from the total amount of water supplied to a distribution system as measured by master meters, minus the sum of all amounts of water measured by consumption meters in the distribution system, and minus confidently estimated and documented amounts used for certain necessary purposes.

Unimpacted median monthly flow means the estimated near natural median monthly streamflow over a simulated 44-year period generated by The Massachusetts Sustainable Yield Estimator: A Decision Support Tool to Assess Water Availability at Ungaged Stream Locations in Massachusetts (Archfield et al., 2009, USGS SIR 2009-5227).

Water Management Act (WMA) means the Massachusetts Water Management Act, M.G.L. c. 21G.



**Board of Selectmen
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 06/24/2014

Agenda Item	Committee Reports
Presenter(s)	Board Discussion

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED		
<i>Board members will report on the progress and / or activities of their Committee assignments.</i>			
2.	VOTE REQUIRED BY BOARD OF SELECTMEN	YES	NO
3.	BACK UP INFORMATION ATTACHED	YES	NO
(Describe backup below)			
None			

Town of Needham

FISCAL YEAR 2015

SCHEDULE A

Effective July 1, 2014

Full-time, part-time and seasonal position classifications with corresponding compensation schedules

CLASS TITLE	GRADE/SCHEDULE	FLSA exempt status
Activity Instructor	Schedule C	exempt
Administrative Analyst	NR3	exempt
Administrative Assistant	TS-3	non-exempt
Administrative Coordinator	TS-4	non-exempt
Administrative Specialist	TS-4	non-exempt
Animal Control Officer	UR-2	non-exempt
Animal Inspector	Schedule C	Stipend
Applications Administrator	PT-5	exempt
Assistant Administrative Assessor	PT-4	non-exempt
Assistant Building Commissioner	NR-6	exempt
Assistant Cataloger	SS-3	non-exempt
Assistant Children's Librarian	SS-4	non-exempt
Assistant Director of Assessing	NR-5	exempt
Assistant Director of Emergency Management	Schedule C	Stipend
Assistant Director of Public Library	NR-6	exempt
Assistant Director of Public Works	N-4	exempt
Assistant Director, Park & Recreation	PT-4	exempt
Assistant Executive Director, Council on Aging	NR-5	exempt
Assistant Program Coordinator	NR-1	non-exempt
Assistant Program Coordinator (PT)	Schedule C	non-exempt
Assistant Purchasing Agent/Office Mgr. DPW	NR-4	exempt
Assistant Superintendent	UR-5	exempt
Assistant to Planning Director	NR-3	exempt
Assistant to Town Manager	NR-4	exempt
Assistant Town Accountant	NR-5	exempt
Assistant Town Clerk	NR-3	exempt
Assistant Town Engineer	UR-6	exempt
Assistant Town Manager/Director of Finance	M-5	exempt
Assistant Town Manager/Director of Operations	M-5	exempt
Assistant Town Planner	NR-4	exempt
Assistant Treasurer/Collector	NR-5	exempt
Assistant, Council on Aging	Schedule C	non-exempt
Associate Director, Council on Aging	PT-4	exempt
Autocad Technician	UR-2	non-exempt
Building Commissioner	M-2	exempt

effective July 1, 2013
updated December 12, 2013
June, 2014

Town of Needham

Building Inspector, Substitute	NR-5	non-exempt
Building Monitor	Schedule C	non-exempt
Canvasser	Schedule C	non-exempt
Care/Veterans Graves & Coordinator of Ceremonies	Schedule C	Stipend
Carpenter	BT-2	non-exempt
Children's Librarian	NR-3	exempt
Chief Pumping Station Operator	W-7	non-exempt
Civil Engineer	UR-4	exempt
Clerk	Schedule C	non-exempt
Committee Secretary	SS-3	non-exempt
Community Housing Specialist	NR-4	non-exempt
Computer Operator	PT-1	non-exempt
Contract Administrator	UR-6	exempt
Council on Aging, Executive Director	M-2	exempt
Craftsworker	BT-2	non-exempt
Custodian	BC-1	non-exempt
Data Collector	PT-1	non-exempt
Department Assistant 1	TS-1	non-exempt
Department Assistant 2	TS-2	non-exempt
Department Specialist	TS-3	non-exempt
Deputy Fire Chief	F-4	non-exempt
Deputy Fire Chief, Operations	F-4	non-exempt
Director of Assessing	M-2	exempt
Director of Conservation	M-1	exempt
Director of Design and Construction	M-4	exempt
Director of Economic Development	M-1	exempt
Director of Emergency Management	Schedule C	Stipend
Director of Facilities Operations	N-4	exempt
Director of Human Resources	M-3	exempt
Director of Management Information Systems	M-3	exempt
Director of Park and Recreation	M-2	exempt
Director of Planning and Community Development	M-3	exempt
Director of Public Health	M-3	exempt
Director of Public Library	M-3	exempt
Director of Public Works	N-5	exempt
Director of Veterans' Services	M-1	exempt
Director of Youth Services	M-2	exempt
Division Superintendent, Highway	N-2	exempt
Division Superintendent, Parks and Forestry	N-2	exempt
Division Superintendent, Solid Waste/Recycling	N-2	exempt
Division Superintendent, Water/Sewer	N-3	exempt
Election Clerk	Schedule C	non-exempt
Election Inspector	Schedule C	non-exempt
Election Warden	Schedule C	non-exempt

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Electrician	BT-3	non-exempt
Enforcement Agent	Schedule C	non-exempt
Engineering Aide	UR-1	non-exempt
Environmental Health Agent	PT-5	non-exempt
Equipment Mechanic	W-5	non-exempt
Facility Operations Shift Supervisor	UR-5	exempt
Field Assessor	PT-3	non-exempt
Finance and Procurement Coordinator	NR-6	exempt
Finance Committee, Executive Secretary	NR-4	exempt
Financial System Application Manager	PT-6	exempt
Fire Captain	F-3	non-exempt
Fire Chief	N-5 *	exempt
Fire Director of Administrative Services	PT-5	exempt
Fire Lieutenant	F-2	non-exempt
Firefighter	F-1	non-exempt
Fleet Supervisor	N-1	exempt
GIS/Database Administrator	PT-5	exempt
Glazer/Craftsperson	BT-2	non-exempt
Heavy Motor Equipment Operator	W-4	non-exempt
Human Resources Administrator	NR-3	non-exempt
HVAC Technician	BT-3	non-exempt
Inspector of Buildings	M-2	exempt
Inspector of Plumbing & Gas	NR-4	non-exempt
Inspector of Wires	NR-4	non-exempt
Laborer 2	W-2	non-exempt
Laborer 3	W-3	non-exempt
Library Assistant	SS-2	non-exempt
Library Assistant - Technical Services PT	SS-1	non-exempt
Library Assistant PT	SS-1	non-exempt
Library Children's Supervisor	NR-4	exempt
Library Circulation Supervisor	SS-5	exempt
Library Page	Schedule C	non-exempt
Library Reference Supervisor	NR-4	exempt
Library Technical Services Supervisor	NR-4	exempt
Library Technology Specialist/Archivist	NR-4	exempt
Lineman	FA-1	non-exempt
Local Building Inspector	NR-5	non-exempt
Management Analyst	PT-5	exempt
Marketing Program Assistant	Schedule C	non-exempt
Master Mechanic	W-7	non-exempt
Network Administrator	PT-4	exempt
Network Manager	PT-6	exempt
New Year's Needham Coordinator	Schedule C	Stipend
Outreach Worker, Council on Aging	PT-2	exempt

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Parking Clerk	NR-1	non-exempt
Parking Enforcement Attendant	SS-2	non-exempt
Personal Computer Specialist	Schedule C	non-exempt
Playground Maintenance Specialist	Schedule C	non-exempt
Plumber	BT-3	non-exempt
Plumbing & Gas Inspector Substitute	NR-4	non-exempt
Police Chief	N-5 *	exempt
Police Lieutenant	P-3	non-exempt
Police Maintenance Assistant	NR-1	non-exempt
Police Matron	Schedule C	non-exempt
Police Officer	P-1	non-exempt
Police Sergeant	P-2	non-exempt
Program Coordinator	NR-2	non-exempt
Program Coordinator (PT)	Schedule C	non-exempt
Program Manager	M-1	exempt
Project Manager	M-1	exempt
Public Health Nurse	PT-5	exempt
Public Safety Dispatch Supervisor	UR-4	non-exempt
Public Safety Dispatcher	UR-1	non-exempt
Public Works Craftsworker	W-4	non-exempt
Public Works Inspector	W-6	non-exempt
Public Works Specialist 1	W-4	non-exempt
Public Works Specialist 2	W-5	non-exempt
Public Works Technician	W-5	non-exempt
Pumping Station Operator	W-5	non-exempt
Recording Secretary	Schedule C	non-exempt
Recreation Specialist 1-5	Schedule C	exempt
Recreation Supervisor	PT-2	non-exempt
Reference Librarian PT	NR-2	exempt
Reference Librarian/Audio Visual Specialist	NR-3	exempt
Reference Librarian/Program Specialist	NR-3	exempt
Registrar of Voters	Schedule C	Stipend
Resident Site Manager	NR-6	exempt
Retirement Specialist	PT-4	non-exempt
Ridge Hill Ranger	Schedule C	non-exempt
Sealer of Weights & Measures	NR-4	non-exempt
Seasonal Packers/Drivers	Schedule C	non-exempt
Senior Administrative Coordinator	TS-5	non-exempt
Senior Corps Participant	Schedule C	non-exempt
Senior Custodian 1	BC-2	non-exempt
Senior Custodian 2	BC-3	non-exempt
Senior Program Coordinator	NR-5	non-exempt
Senior Program Manager	N-3	exempt
Senior Trip Coordinator	Schedule C	non-exempt

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Social Worker	PT-3	exempt
Special Detail Worker	Schedule C	non-exempt
Student Draftsman and Rodman	Schedule C	non-exempt
Student Intern 1 - 4	Schedule C	non-exempt
Superintendent, Fire Alarm	FA-2	non-exempt
Supervisor of Administration/DPW	M-1	exempt
Support Services Manager	M-1	exempt
Survey Party Chief	UR-3	non-exempt
Systems Analyst	PT-3	exempt
Technology Support Technician	PT-5	exempt
Temporary Laborer/Trades Assistant	Schedule C	exempt
Town Accountant	M-2	exempt
Town Counsel	Schedule C	exempt
Town Engineer	N-4	exempt
Town Manager	Contract	exempt
Town Treasurer and Tax Collector	M-2	exempt
Traffic Supervisor	Schedule C	non-exempt
Traveling Meals Coordinator	NR-2	non-exempt
Tree Climber	W-4	non-exempt
Van Driver - COA	Schedule C	non-exempt
Warehouse Person	BT-1	non-exempt
Water Treatment Facility Manager	UR-6	exempt
Wiring Inspector Substitute	Schedule C	non-exempt
Working Foreman	W-6	non-exempt
Youth Center Worker 1 - 5	Schedule C	non-exempt
<u>SCHEDULE A STIPENDS</u>		
All Stipends must be approved by the Town Manager prior to payment.		
(Additional compensation for specific assignments)		
(1) Said Director shall be the Superintendent of Public Works within the meaning of Section 20 to 30, inclusive of the Needham Special Home Rule Charter Act (Acts of 1971, c. 403), and shall be appointed in the manner and shall exercise the powers and duties of such Superintendent, specified in said act.		
(2) Additional \$75.00 per month when assigned to and performing the duties of Deputy Tree Warden.		
(3) Additional \$600.00 per year when assigned to and performing the duties of Workers' Compensation Agent		
(4) Additional \$1,500 per year when performing the duties of Assistant Parking Clerk		
(5) Additional \$1,200 when assigned to and performing the duties of Registered Land Surveyor as designated by the Director of Public Works.		
(6) Additional \$1,200 when an employee other than the Assistant Town Manager/Finance Director is designated as the Chief Procurement Officer.		
(7) Designated Wiring Inspector in accordance with M.G.L. c. 166 s 32.		
(*) Compensation set by employment agreement in accordance with M.G.L. c. 41 s. 108O		
Replaces Administrative Assessor - exempt		
new position		

Management Salary Schedule**Effective July 1, 2014****2.5% increase**

Grade	Step 1	Step 2	Step 3	Performance Range*
M-5	101,197	104,854	108,632	126,821
M-4	91,283	94,581	97,979	114,388
M-3	78,231	81,049	83,948	98,019
M-2	73,314	75,953	78,691	91,803
M-1	61,542	63,760	66,039	77,112

* Subject to a maximum increase of 10% in accordance with Merit Program

Management Salary Schedule Expressed Hourly**Group N-1 - Non-Represented 37.5 Hours Per Week****Effective July 1, 2014****2.5% increase**

Grade	Step 1	Step 2	Step 3	Performance Range*
M-5	51.90	53.77	55.71	65.04
M-4	46.81	48.50	50.25	58.66
M-3	40.12	41.56	43.05	50.27
M-2	37.60	38.95	40.35	47.08
M-1	31.56	32.70	33.87	39.54

Group N2 - Non-Represented 40 Hours per Week**Effective July 1, 2014****2.5% increase**

Grade	Step 1	Step 2	Step 3	Performance Range*
N-5	48.65	50.41	52.23	60.97
N-4	43.89	45.47	47.11	54.99
N-3	37.61	38.97	40.36	47.12
N-2	35.25	36.52	37.83	44.14
N-1	29.59	30.65	31.75	37.07

Administrative/Support Salary Schedule/Non-Represented**Group N-1 - Non Represented 37.5 Hours per week****Effective July 1, 2014 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
SS-5	45,312	46,671	48,070	49,509	50,988	52,527	54,106	55,725	57,384
SS-4	41,454	42,693	43,973	45,292	46,651	48,050	49,489	50,968	52,507
SS-3	37,017	38,136	39,275	40,455	41,654	42,913	44,212	45,532	46,911
SS-2	34,418	35,438	36,497	37,596	38,736	39,895	41,094	42,314	43,593
SS-1	30,501	31,400	32,360	33,319	34,319	35,358	36,417	37,497	38,616

Administrative/Support Salary Schedule/Non-Represented**Group N-1 - Non Represented 37.5 Hours per week****Effective July 1, 2014 expressed hourly 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
SS-5	23.24	23.93	24.65	25.39	26.15	26.94	27.75	28.58	29.43
SS-4	21.26	21.89	22.55	23.23	23.92	24.64	25.38	26.14	26.93
SS-3	18.98	19.56	20.14	20.75	21.36	22.01	22.67	23.35	24.06
SS-2	17.65	18.17	18.72	19.28	19.86	20.46	21.07	21.70	22.36
SS-1	15.64	16.10	16.59	17.09	17.60	18.13	18.68	19.23	19.80

Administrative/Support Salary Schedule/ITWA**Group TH 37.5 Hours per Week****Effective July 1, 2013**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
TS-5	44,207	45,533	46,898	48,302	49,745	51,246	52,787	54,366	55,985
TS-4	40,443	41,652	42,900	44,187	45,513	46,878	48,282	49,725	51,227
TS-3	36,114	37,206	38,318	39,468	40,638	41,867	43,134	44,421	45,767
TS-2	33,579	34,574	35,607	36,680	37,791	38,922	40,092	41,282	42,530
TS-1	29,757	30,635	31,571	32,507	33,482	34,496	35,529	36,582	37,674

Administrative/Support Salary Schedule/ITWA**Group TH 37.5 Hours per Week expressed hourly****Effective July 1, 2013**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
TS-5	22.67	23.35	24.05	24.77	25.51	26.28	27.07	27.88	28.71
TS-4	20.74	21.36	22.00	22.66	23.34	24.04	24.76	25.50	26.27
TS-3	18.52	19.08	19.65	20.24	20.84	21.47	22.12	22.78	23.47
TS-2	17.22	17.73	18.26	18.81	19.38	19.96	20.56	21.17	21.81
TS-1	15.26	15.71	16.19	16.67	17.17	17.69	18.22	18.76	19.32

Professional and Technical Salary Schedule/Non-Represented**Group N1 - Non Represented 37.5 Hours per Week****Effective July 1, 2014****2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
NR-8	65,319	67,658	70,096	72,615	75,233	77,931	80,750	83,648	85,327
NR-7	61,002	63,200	65,479	67,838	70,276	72,794	75,413	78,131	79,690
NR-6	56,984	59,043	61,162	63,360	65,639	68,017	70,456	72,994	74,453
NR-5	54,686	56,645	58,683	60,802	62,981	65,239	67,598	68,957	70,336
NR-4	48,869	50,628	52,447	54,326	56,285	58,304	60,402	62,581	63,840
NR-3	43,673	45,232	46,871	48,550	50,309	52,107	53,986	55,925	58,224
NR-2	41,914	43,413	44,972	46,591	48,270	50,009	51,808	53,686	54,746
NR-1	36,397	37,676	39,016	40,395	41,814	43,293	44,812	46,391	48,130

Professional and Technical Salary Schedule/Non-Represented**Group N1 - Non Represented 37.5 Hours per Week****Effective July 1, 2014****expressed hourly 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
NR-8	33.50	34.70	35.95	37.24	38.58	39.96	41.41	42.90	43.76
NR-7	31.28	32.41	33.58	34.79	36.04	37.33	38.67	40.07	40.87
NR-6	29.22	30.28	31.37	32.49	33.66	34.88	36.13	37.43	38.18
NR-5	28.04	29.05	30.09	31.18	32.30	33.46	34.67	35.36	36.07
NR-4	25.06	25.96	26.90	27.86	28.86	29.90	30.98	32.09	32.74
NR-3	22.40	23.20	24.04	24.90	25.80	26.72	27.69	28.68	29.86
NR-2	21.49	22.26	23.06	23.89	24.75	25.65	26.57	27.53	28.07
NR-1	18.67	19.32	20.01	20.72	21.44	22.20	22.98	23.79	24.68

Professional and Technical Salary Schedule/ITWA**Group TH - 37.5 Hours per Week****Effective July 1, 2013**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
PT-8	63,726	66,008	68,387	70,844	73,398	76,031	78,780	81,608	83,246
PT-7	59,514	61,659	63,882	66,183	68,562	71,019	73,574	76,226	77,747
PT-6	55,595	57,603	59,670	61,815	64,038	66,359	68,738	71,214	72,638
PT-5	53,352	55,263	57,252	59,319	61,445	63,648	65,949	67,275	68,621
PT-4	47,678	49,394	51,168	53,001	54,912	56,882	58,929	61,055	62,283
PT-3	42,608	44,129	45,728	47,366	49,082	50,837	52,670	54,561	56,804
PT-2	40,892	42,354	43,875	45,455	47,093	48,789	50,544	52,377	53,411
PT-1	35,510	36,758	38,064	39,410	40,794	42,237	43,719	45,260	46,956

Professional and Technical Salary Schedule/ITWA**Group TH - 37.5 Hours per Week****Effective July 1, 2013 expressed hourly**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
PT-8	32.68	33.85	35.07	36.33	37.64	38.99	40.40	41.85	42.69
PT-7	30.52	31.62	32.76	33.94	35.16	36.42	37.73	39.09	39.87
PT-6	28.51	29.54	30.60	31.70	32.84	34.03	35.25	36.52	37.25
PT-5	27.36	28.34	29.36	30.42	31.51	32.64	33.82	34.50	35.19
PT-4	24.45	25.33	26.24	27.18	28.16	29.17	30.22	31.31	31.94
PT-3	21.85	22.63	23.45	24.29	25.17	26.07	27.01	27.98	29.13
PT-2	20.97	21.72	22.50	23.31	24.15	25.02	25.92	26.86	27.39
PT-1	18.21	18.85	19.52	20.21	20.92	21.66	22.42	23.21	24.08

Professional and Technical Salary Schedule/Non-Represented**Group N2 - Non-Represented 40 Hours per Week****Effective July 1, 2014 2.5%increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
UR-8	65,319	67,658	70,096	72,615	75,233	77,931	80,750	83,648	85,237
UR-7	61,002	63,200	65,479	67,838	70,276	72,794	75,413	78,131	79,690
UR-6	56,984	59,043	61,162	63,360	65,639	68,017	70,456	72,994	74,453
UR-5	54,686	56,645	58,683	60,802	62,981	65,239	67,598	68,957	70,336
UR-4	48,869	50,628	52,447	54,236	56,285	58,304	60,402	62,581	63,840
UR-3	43,673	45,232	46,871	48,550	50,309	52,107	53,986	55,925	58,224
UR-2	41,914	43,413	44,972	46,591	48,270	50,009	51,808	53,686	54,746
UR-1	36,397	37,676	39,016	40,395	41,814	43,293	44,812	46,391	48,130

Professional and Technical Salary Schedule/Non-Represented**Group N2 - Non-Represented 40 Hours per Week****Effective July 1, 2014 expressed hourly 2.5%increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
UR-8	31.40	32.53	33.70	34.91	36.17	37.47	38.82	40.22	40.98
UR-7	29.33	30.38	31.48	32.61	33.79	35.00	36.26	37.56	38.31
UR-6	27.40	28.39	29.40	30.46	31.56	32.70	33.87	35.09	35.79
UR-5	26.29	27.23	28.21	29.23	30.28	31.36	32.50	33.15	33.82
UR-4	23.49	24.34	25.21	26.08	27.06	28.03	29.04	30.09	30.69
UR-3	21.00	21.75	22.53	23.34	24.19	25.05	25.95	26.89	27.99
UR-2	20.15	20.87	21.62	22.40	23.21	24.04	24.91	25.81	26.32
UR-1	17.50	18.11	18.76	19.42	20.10	20.81	21.54	22.30	23.14

NIPEA/Public Works Salary Schedule**NIPEA - 40 hours per Week****Effective July 1, 2014**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
W7			54,517	56,139	57,803	59,093	60,965	62,899	64,750
W6		49,754	51,230	52,749	54,309	55,931	57,200	58,386	59,592
W5		46,114	47,466	48,859	50,315	51,792	52,957	54,059	55,182
W4		42,973	44,262	45,552	46,904	48,298	49,546	50,586	51,626
W3		40,394	41,600	42,806	44,075	45,386	46,779	47,570	48,402
W2			37,710	39,083	40,581	42,141	43,888	44,637	45,406

NIPEA/Public Works Salary Schedule**NIPEA - 40 Hours per Week****expressed hourly****Effective July 1, 2014**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
W7			26.21	26.99	27.79	28.41	29.31	30.24	31.13
W6		23.92	24.63	25.36	26.11	26.89	27.50	28.07	28.65
W5		22.17	22.82	23.49	24.19	24.90	25.46	25.99	26.53
W4		20.66	21.28	21.90	22.55	23.22	23.82	24.32	24.82
W3		19.42	20.00	20.58	21.19	21.82	22.49	22.87	23.27
W2			18.13	18.79	19.51	20.26	21.10	21.46	21.83

Public Facilities--Custodians Schedule**BCTIA - 40 Hours per Week****Effective July 1, 2014****2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
BC3	43,621	44,879	46,158	47,501	48,652	49,825	51,040	52,277
BC2	41,531	42,725	43,962	45,241	46,328	47,458	48,610	49,782
BC1	37,033	38,099	39,186	40,337	41,297	42,299	43,322	44,367

Public Facilities--Custodians Schedule**BCTIA - 40 Hours per Week****Effective July 1, 2014****expressed hourly 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
BC3	20.97	21.58	22.19	22.84	23.39	23.95	24.54	25.13
BC2	19.97	20.54	21.14	21.75	22.27	22.82	23.37	23.93
BC1	17.80	18.32	18.84	19.39	19.85	20.34	20.83	21.33

Public Facilities--Trades Schedule**BCTIA - 40 Hours per Week****Effective July 1, 2014 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
BT4	57,543	59,270	61,039	62,873	64,450	66,049	67,712	69,397
BT3	50,379	51,893	53,449	55,048	56,434	57,841	59,291	60,762
BT2	45,795	47,160	48,588	50,038	51,296	52,575	53,876	55,240
BT1	41,638	42,875	44,175	45,497	46,627	47,799	48,993	50,209

Public Facilities--Trades Schedule**BCTIA - 40 Hours per Week****Effective July 1, 2014 expressed hourly 2.5% increase**

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
BT4	27.66	28.50	29.35	30.23	30.99	31.75	32.55	33.36
BT3	24.22	24.95	25.70	26.47	27.13	27.81	28.51	29.21
BT2	22.02	22.67	23.36	24.06	24.66	25.28	25.90	26.56
BT1	20.02	20.61	21.24	21.87	22.42	22.98	23.55	24.14

Police Unit A Salary Schedule**Effective July 1, 2014 2.5% increase**

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	MAX
P-2			62,654	64,966	67,565	70,267	71,672
P-1	43,291	45,456	47,728	50,115	52,621	55,252	58,014

Police Unit A Salary Schedule**Effective July 1, 2014 expressed hourly 2.5% increase**

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	MAX
P-2			30.12	31.23	32.48	33.78	34.46
P-1	20.81	21.85	22.95	24.09	25.30	26.56	27.89

Police Superior Officers Association Salary Schedule**Effective July 1, 2014 2.5% increase**

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	MAX
P-3				74,998	77,327	79,645	82,830	86,145	87,868

Police Superior Officers Association Salary Schedule**Effective July 1, 2014 expressed hourly 2.5% increase**

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	MAX
P-3				36.06	37.18	38.29	39.82	41.42	42.24

Police Superior Officers Association Salary Schedule

Effective January 1, 2015

1% to maximum step

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	MAX
P-3				74,998	77,327	79,645	82,830	86,145	88,747

Police Superior Officers Association Salary Schedule

Effective January 1, 2015

expressed hourly

1% to maximum step

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	MAX
P-3				36.06	37.18	38.29	39.82	41.42	42.67

Fire Fighters Unit A Salary Schedule

Effective July 1, 2014

2.5% increase

GRADE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
F-3						71,153	74,711
F-2				60,343	62,876	65,462	68,735
F-1	43,291	45,456	47,728	50,115	52,621	55,252	58,014

Fire Fighters Unit A Salary Schedule

Expressed Hourly

2.5% increase

Effective July 1, 2014

GRADE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
F-3						32.58	34.21
F-2				27.63	28.79	29.97	31.47
F-1	19.82	20.81	21.85	22.95	24.09	25.30	26.56

Fire Fighters Unit B Salary Schedule

Fire Alarm

2.5% increase

Effective July 1, 2014

GRADE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
FA-2		53,491	56,194	59,040	62,008	65,108	68,364
FA-1	44,107	46,312	48,628	51,059	53,612	56,293	59,107

Fire Fighters Unit B Salary Schedule

Fire Alarm - Expressed Hourly

2.5% increase

Effective July 1, 2014

GRADE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
FA-2		25.72	27.02	28.38	29.81	31.30	32.87
FA-1	21.21	22.27	23.38	24.55	25.78	27.06	28.42

Fire Fighters Unit C Salary Schedule

(Deputy Fire Chiefs)

Effective July 1, 2014

2.5% increase

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
F-4				74,861	78,184	81,402	85,472

Fire Fighters Unit C Salary Schedule (Deputy Fire Chiefs)
expressed hourly 2.5% increase
Effective July 1, 2014

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
F-4				34.28	35.80	37.27	39.14

Fire Fighters Unit C Salary Schedule Deputy Fire Chief of Operations
Effective July 1, 2014 2.5% increase

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8
F-5							89,414	93,983

Fire Fighters Unit C Salary Schedule Deputy Fire Chief of Operations
expressed hourly 2.5% increase
Effective July 1, 2014

GRADE	MIN	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8
F-5							42.99	45.18

Town of Needham

JULY 1, 2014--FY15

Schedule C

Rates for part-time and seasonal positions (rates are hourly unless specifically noted)

Title		Rate	Title		Rate
#	Activity Instructor (per session) [6000]			Recreation Specialist 4 First Year	13.88
	Group A	8.00		Second Year	14.38
	Group B	10.00		Recreation Specialist 5 First Year	16.38
	Group C	12.00		Second Year	16.95
	Group D	15.00	#	Registrar of Voters (per year) [6060]	545.00
	Group E	18.00	#	Ridge Hill Ranger [6082]	
	Group F	21.00		Per Hour	25.00
	Group G	25.00		Per Event	200.00
	Group H	28.00		Seasonal Driver Traveling Meals -- 1st year [6035]	14.28
	Group I	30.00		Seasonal Driver Traveling Meals -- 2nd year	16.48
	Group J	32.00		Seasonal Packer/Driver [6033]	13.97
	Group K	35.00		Senior Building Monitor/AV Tech	
	Group L	50.00		First Year	17.80
	Group M	75.00		Second Year	18.32
#	Animal Inspector (per year) [6055]	2,500.00		Third Year	18.84
	Assistant, Council on Aging [6010]	14.90	#	Senior Corps Participant [6076]	8.41
#	Asst. Dir. Of Emergency Management (per year)	1,500.00	#	Senior Trip Coordinator (per trip)	150.00
	Assistant Program Coordinator (PT) [6073]	17.21	#	Special Detail Worker [6079]	35.00
	Building Inspector Substitute [6011]	27.76		Student Draftsman and Rodman [6034]	
	Building Monitor [6012]	11.59		First Year	14.81
	First Year	11.58		Second Year	15.51
	Second Year	11.91		Third Year	15.72
	Third Year	12.24		Fourth Year	16.19
	Canvasser [6013]	9.33		Fifth Year	17.57
#	Care of Graves Veterans/Coord of Ceremonies (/yr) ^	2,500.00		Student Intern 1 [6039]	10.27
#	Director of Emergency Management (per year)	2,000.00		Student Intern 2	13.71
*	Election Clerk (per election) [6074]	150.00		Student Intern 3	17.12
*	Election Inspector (per election)	120.00		Student Intern 4	20.55
*	Election Warden (per election)	150.00		Temporary Laborer/Trades Assistant [6077]	
	Enforcement Agent [6081]	20.17		First Year	12.02
	Library Page [6021]			Second Year	12.45
	First Year	9.01		Third Year	12.88
	Second Year	9.25		Fourth Year	13.32
	Third Year	9.57		Town Counsel (per year) [6062]	73,301
#	Marketing/Program Assistant [6078]	100.00		Traffic Supervisor [6049]	20.16
#	New Year's Needham Coordinator (per year)	5,000.00		Van Driver - COA [6040]	14.28
	Personal Computer Specialist [6075]	39.17		Wiring Inspector Substitute [6064]	24.80
#	Playground Maintenance Specialist	17.00	#	Youth Center Worker 1 [6050]	20.00
	Plumbing and Gas Inspector Substitute [6063]	24.80	#	Youth Center Worker 2	50.00
	Police Matron [6024]	20.16			
	Program Coordinator (PT) [6025]	19.65			
	Recording Secretary [6026]	18.92			
	Recreation Specialist 1 First Year [6027]	9.70			
	Second Year	10.03			
	Recreation Specialist 2 First Year	11.04			
	Second Year	11.40		#Titles not included in general wage increases	
	Recreation Specialist 3 First Year	11.92		*Rates set by Board of Selectmen	
	Second Year	12.34		^ position number [6083]	
	Effective July 1, 2014				

**ONE DAY SPECIAL LICENSE
TOWN OF NEEDHAM BOARD OF SELECTMEN
EVENT INFORMATION SHEET**
(Please complete and attach event flyer or other information.)

Event Manager Name (Name that will appear on license)	Steve Volante		
Event Manager Address	292 Forest St. Needham, MA 02492		
Event Manager Phone Number	781-964-1821		
Organization Representing (if applicable)	Volante Farms		
Is the organization (if applicable) you are representing non-profit? If so, please attach proof of non-profit status.	☐ Non-profit ☒ For profit ☐ Proof of non-profit status is attached Form of Proof: _____		
Name of Event	Dinner in the Field		
Date of Event	7/10/14		
License is for Sale of: ☒ Wines & Malt Beverages Only ☐ All Alcoholic Beverages (for non-profit groups only)			
Requested Time for Liquor License	FROM: 6pm	TO: 10pm	
Are tickets being sold in advance for this event?	☒ YES	\$ 125 /per ticket	☐ NO
Is there an admission fee for this event?	☐ YES	\$ /per ticket	☒ NO
Are you using dues collected to purchase alcohol for this event?	☐ YES	☒ NO	
How many people are you expecting at this event?	96 - 100		
Name & address of event location. Please attach proof of permission to use this facility.			
292 Forest St., Needham MA Volante Farms			
Who will be serving the alcohol to your guests?			
4 TIPS Certified Servers headed by Steve Volante			
Bartenders and/or servers of alcohol, beer and/or wine must have completed in the past three years an appropriate Massachusetts alcoholic beverages server-training program. Please state below who will be serving alcohol, beer and/or wine and attach proof of their training (certificate).			
* Attached			
Please use the space below to describe the manner in which alcohol will be served to your guests. (For example, will guests be served alcohol or will they need to purchase it from the bar?) Please attach floorplan (can be hand drawn) of the event facility with liquor delivery plan.			
Guests will be served pre-portioned glasses while they sit at their tables.			
☒ I understand that the alcohol purchased for this event must be purchased from a licensed wholesaler/importer, manufacturer, farmer-winery, farmer-brewery or special permit holder and that I have received a current list of wholesalers. (A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. (MGL Ch. 138, Sec 14, 23; 204 CMR 7.04))			
Event Manager Signature: <i>Steve</i>			Date: 6/10/14

RECEIVED
 TOWN OF NEEDHAM
 BOARD OF SELECTMEN
 2014 JUN 10 P 3:52

**ONE DAY SPECIAL LICENSE
TOWN OF NEEDHAM BOARD OF SELECTMEN
EVENT INFORMATION SHEET**

(Please complete and attach event flyer or other information.)

Event Manager Name (Name that will appear on license)	Steve Volante		
Event Manager Address	292 Forest St. Needham, MA 01945		
Event Manager Phone Number	781-964-1821		
Organization Representing (if applicable)	Volante Farms		
Is the organization (if applicable) you are representing non-profit? If so, please attach proof of non-profit status.	☐ Non-profit ☒ For profit ☐ Proof of non-profit status is attached Form of Proof: _____		
Name of Event	Dinner in the Field		
Date of Event	7/31/14		
License is for Sale of:			
☒ Wines & Malt Beverages Only ☐ All Alcoholic Beverages (for non-profit groups only)			
Requested Time for Liquor License	FROM:	Gpm	TO: 10pm
Are tickets being sold in advance for this event?	☒ YES	\$ 125 /per ticket	☐ NO
Is there an admission fee for this event?	☐ YES	\$ /per ticket	☒ NO
Are you using dues collected to purchase alcohol for this event?	☐ YES	☒ NO	
How many people are you expecting at this event?	96 - 100		
Name & address of event location. Please attach proof of permission to use this facility.			
292 Forest St., Needham MA Volante Farms			
Who will be serving the alcohol to your guests?			
4 TIPS Certified Servers headed by Steve Volante			
Bartenders and/or servers of alcohol, beer and/or wine must have completed in the past three years an appropriate Massachusetts alcoholic beverages server-training program. Please state below who will be serving alcohol, beer and/or wine and attach proof of their training (certificate).			
* Attached			
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Guests will be served pre-portioned glasses while they sit at their tables.			
☒ I understand that the alcohol purchased for this event must be purchased from a licensed wholesaler/importer, manufacturer, farmer-winery, farmer-brewery or special permit holder and that I have received a current list of wholesalers. (A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. (MGL Ch. 138, Sec 14, 23; 204 CMR 7.04))			
Event Manager Signature: 			Date: 6/10/14

ONE DAY SPECIAL LICENSE
TOWN OF NEEDHAM BOARD OF SELECTMEN
EVENT INFORMATION SHEET
(Please complete and attach event flyer or other information.)

Event Manager Name (Name that will appear on license)	Steve Volante		
Event Manager Address	292 Forest St. Needham, MA 02492		
Event Manager Phone Number	781-964-1821		
Organization Representing (if applicable)	Volante Farms		
Is the organization (if applicable) you are representing non-profit? If so, please attach proof of non-profit status.	☐ Non-profit ☒ For profit ☐ Proof of non-profit status is attached Form of Proof: _____		
Name of Event	Dinner in the Field		
Date of Event	8/23/14		
License is for Sale of: ☒ Wines & Malt Beverages Only ☐ All Alcoholic Beverages (for non-profit groups only)			
Requested Time for Liquor License	FROM:	6pm	TO: 10pm
Are tickets being sold in advance for this event?	☒ YES	\$ 125 /per ticket	☐ NO
Is there an admission fee for this event?	☐ YES	\$ /per ticket	☒ NO
Are you using dues collected to purchase alcohol for this event?	☐ YES	☒ NO	
How many people are you expecting at this event?	96-100		
Name & address of event location. Please attach proof of permission to use this facility. 292 Forest St., Needham MA Volante Farms			
Who will be serving the alcohol to your guests? 4 TIPS Certified Servers headed by Steve Volante			
Bartenders and/or servers of alcohol, beer and/or wine must have completed in the past three years an appropriate Massachusetts alcoholic beverages server-training program. Please state below who will be serving alcohol, beer and/or wine and attach proof of their training (certificate). * Attached			
Please use the space below to describe the manner in which alcohol will be served to your guests. (For example, will guests be served alcohol or will they need to purchase it from the bar?) Please attach floorplan (can be hand drawn) of the event facility with liquor delivery plan. Guests will be served pre-portioned glasses while they sit at their tables.			
☒ I understand that the alcohol purchased for this event must be purchased from a licensed wholesaler/importer, manufacturer, farmer-winery, farmer-brewery or special permit holder and that I have received a current list of wholesalers. (A person holding a Section 14 license cannot purchase alcoholic beverages from a package store. (MGL Ch. 138, Sec 14, 23; 204 CMR 7.04))			
Event Manager Signature: <i>Steve</i>			Date: 6/10/14

Field → Bar Setup tables / pouring
Stations



↑ Guest Tables ↑

Drinks to be pre-portioned and
Served to tables



TIPS On Premise 2.0 SSN: XXX-XX-XXXX
Issued: 7/31/2012 Expires: 7/31/2015
ID#: 3285670 D.O.B.: XX/XX/XXXX

Steven Volante
Volante Farms
799 Central Ave
Needham, MA 02492-2013

For service visit us online at www.gettips.com



TOWN OF NEEDHAM

For Calendar Year: ~~2013~~ 2014

APPLICATION/ RENEWAL FOR A COMMON VICTUALLER LICENSE

The undersigned hereby applies for a Common Victualler License in accordance with the provisions of the Statutes relating thereto:

RECEIVED
TOWN OF NEEDHAM
BOARD OF SELECTMEN
2014 JUN 13 P 4:37

Name of Corporation: ROWDEN, LLC.

Name of Establishment (d/b/a): ORANGE LEAF

If business is a Corporation / Corporate Name and Officers: _____

If business is not a Corporation, Name of Owner: Aaron Krug

Email Address: Aaron@35squaresneedham.com

Address of Establishment: 1185 Highland Ave Needham MA 02494

Contact Person (name who will receive notices under this license): Aaron Krug

Mailing Address (of contact person), if different from Establishment: 11 Pythias Circle
Needham, MA 02494

Establishment's Days of Operation: Sun-Thu Fri-Sun

Establishment's Hours of Operation: 11-10 11-11

Manager: Claudia Lazo # of Staff: 10 # of Seats: _____

Telephone Number: (781) 444-0200 Fax Number: _____

Signature of Owner: [Signature] Date: 06/13/14

(If corporation, signature of a duly authorized agent of the corporation)

A certificate of insurance showing evidence that the applicant has workers' compensation insurance must be included with this completed application.

If you currently hold an alcoholic beverages license, you must provide a copy of a certificate of liquor liability insurance in the minimum amount of \$100,000/person/\$1,000,000 aggregate for personal injury and \$100,000 per occurrence for property damage before your alcoholic beverages license will be renewed.

Pursuant to MGL Ch. 62C, Sec. 49A:

I certify under the penalties of perjury that I, to my best knowledge and belief, have read and am in compliance with the contents of M.G.L. Chapter 62C, Section 49A (on reverse side of this application).

[Signature]
Signature of Applicant (Mandatory)

By Corporate Officer (if applicable)

46-5675964
Either a Social Security Number or Federal ID
Number must be Supplied

Date (required)

This License will not be issued unless this certification clause is signed by the applicant.



The Commonwealth of Massachusetts
Department of Industrial Accidents
Office of Investigations
600 Washington Street
Boston, MA 02111
www.mass.gov/dia

Workers' Compensation Insurance Affidavit: General Businesses

Applicant Information

Please Print Legibly

Business/Organization Name: Rowden LLC d/b/a Orange Leaf

Address: 11 Pothias Circle

City/State/Zip: Needham, MA 02494 Phone #: (781) 608-6660

Are you an employer? Check the appropriate box:

1. ☒ I am an employer with 13 employees (full and/or part-time).*
2. ☐ I am a sole proprietor or partnership and have no employees working for me in any capacity.
[No workers' comp. insurance required]
3. ☐ We are a corporation and its officers have exercised their right of exemption per c. 152, §1(4), and we have no employees. [No workers' comp. insurance required]**
4. ☐ We are a non-profit organization, staffed by volunteers, with no employees. [No workers' comp. insurance req.]

Business Type (required):

5. ☐ Retail
6. ☒ Restaurant/Bar/Eating Establishment
7. ☐ Office and/or Sales (incl. real estate, auto, etc.)
8. ☐ Non-profit
9. ☐ Entertainment
10. ☐ Manufacturing
11. ☐ Health Care
12. ☐ Other _____

*Any applicant that checks box #1 must also fill out the section below showing their workers' compensation policy information.

**If the corporate officers have exempted themselves, but the corporation has other employees, a workers' compensation policy is required and such an organization should check box #1.

I am an employer that is providing workers' compensation insurance for my employees. Below is the policy information.

Insurance Company Name: Hartford Insurance Company/Boylston Ins.

Insurer's Address: 72 River Park St

City/State/Zip: Needham, MA 02494

Policy # or Self-ins. Lic. # 08wece 7012-001 Expiration Date: 06/13/15

Attach a copy of the workers' compensation policy declaration page (showing the policy number and expiration date).

Failure to secure coverage as required under Section 25A of MGL c. 152 can lead to the imposition of criminal penalties of a fine up to \$1,500.00 and/or one-year imprisonment, as well as civil penalties in the form of a STOP WORK ORDER and a fine of up to \$250.00 a day against the violator. Be advised that a copy of this statement may be forwarded to the Office of Investigations of the DIA for insurance coverage verification.

I do hereby certify, under the pains and penalties of perjury that the information provided above is true and correct.

Signature: [Signature] Date: 06/13/14

Phone #: (781) 608-6660

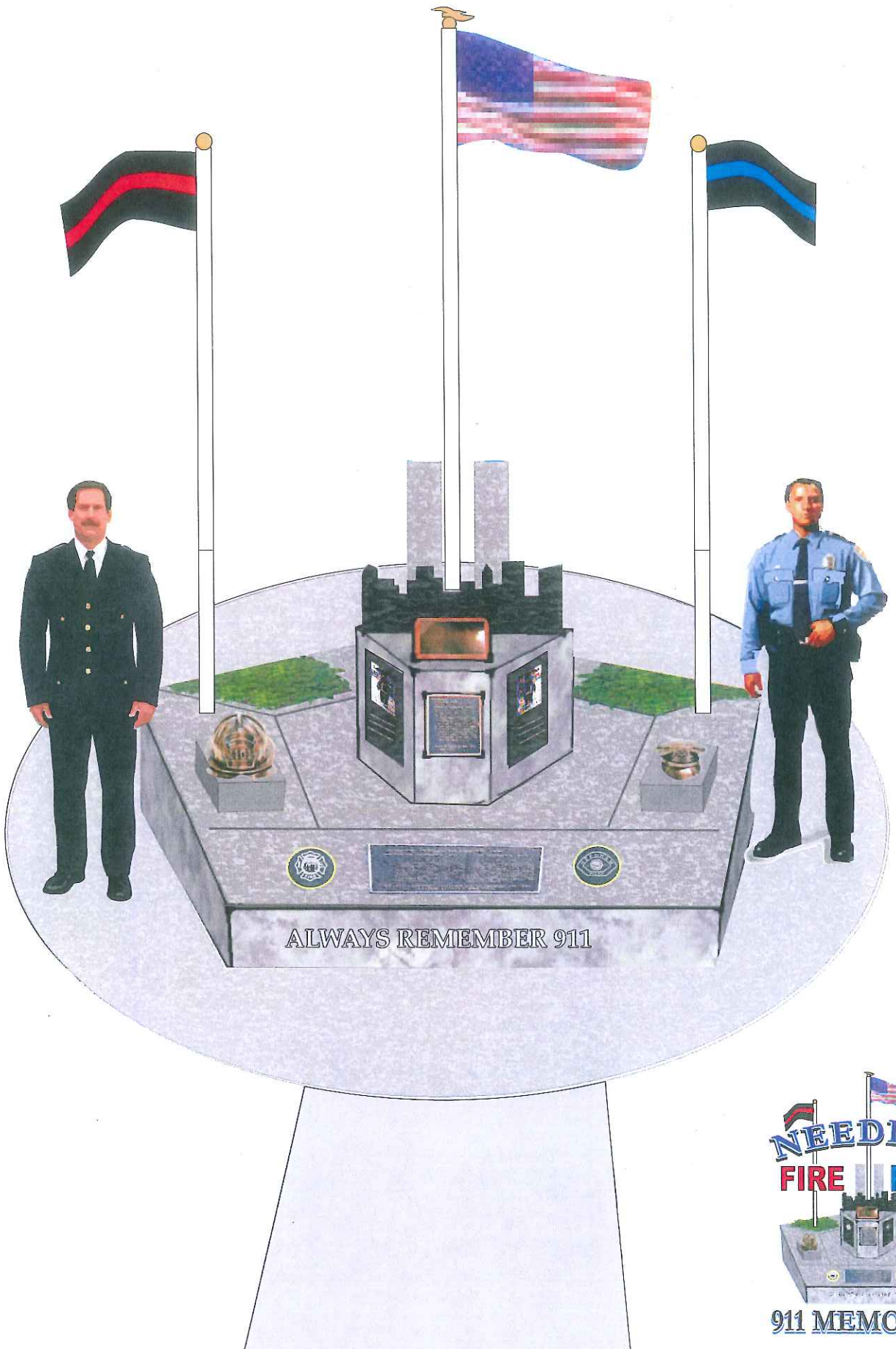
Official use only. Do not write in this area, to be completed by city or town official.

City or Town: _____ Permit/License # _____

Issuing Authority (circle one):

1. Board of Health 2. Building Department 3. City/Town Clerk 4. Licensing Board 5. Selectmen's Office
6. Other _____

Contact Person: _____ Phone #: _____



ON SEPTEMBER 11, 2001,
THE WORLD TRADE CENTER
IN NEW YORK CITY AND THE
PENTAGON IN WASHINGTON, D.C.
WERE ATTACKED BY TERRORISTS
USING HIJACKED AIRCRAFT.

A FOURTH AIRCRAFT WAS
HIJACKED AND CRASHED IN
SHANKSVILLE, PENNSYLVANIA

THIS SECTION OF A STEEL BEAM
WAS RETRIEVED FROM THE
RUBBLE OF ONE OF THE TOWERS
OF THE WORLD TRADE CENTER

THE TOWN OF NEEDHAM PAYS
TRIBUTE TO THOSE FIRST
RESPONDERS WHO ANSWERED
THE CALL TO ACTION AND TO
THOSE WHO LOST THEIR LIVES
ON SEPTEMBER 11, 2001

~ Artistic Bronze Rendering ~

IN REMEMBRANCE AND GRATITUDE FOR
THE FIRST RESPONDERS
WHO LOST THEIR LIVES ON SEPTEMBER 11, 2001.



MAY WE ALWAYS REMEMBER
THEIR COURAGE AND DEDICATION IN SERVICE.

THEIR COURAGE AND DEDICATION IN SERVICE
MAY WE ALWAYS REMEMBER



WHO LOST THEIR LIVES ON SEPTEMBER 11, 2001.

ARTISTIC BRONZE RENDERING

THIS LIMESTONE ROCK
IS FROM SHANKSVILLE, PA
TO PAY TRIBUTE TO THE
PASSENGERS AND CREW
ABOARD FLIGHT 93.

Town of Needham
Water Sewer Billing System
Adjustment Form

DEPARTMENT OF PUBLIC WORKS

TO: TOWN TREASURER AND COLLECTOR
cc: TOWN ACCOUNTANT, WATER AND SEWER SUPERINTENDENT

WHEREAS the appropriate divisions of the Department of Public Works have submitted to you the following commitment(s) on the dates listed below for the collection of water, sewer revenue and

WHEREAS certain inadvertent error(s) were made in said commitment(s), it is hereby requested that you abate these particular account(s) in the amount(s) stated below.

Water Sales:	-\$184.45
Water Irrigation:	\$0.00
Water Admin Fees	\$0.00
Sewer Sales:	-\$2,696.60
Transfer Station Charges:	\$0.00
Total Abatement:	-\$2,881.05

Order #: 1182

Read and Approved:

Anthony F. DelGaudio for
Assistant Director of Public Works

R.P. Mescon
Director of Public Works

For the Board of Selectmen

Date: 6/24/14

**Town of Needham
Water Sewer Billing System
Adjustment Form**

Prepared By:	Last Name	First Name	Customer ID#	Location ID#	Street Number	Street Name	Irrigation Water	Domestic Water	Sewer	Total	Reason	Corrected Last Read Y/N
DB	Silver	Jonathan	34667	1184	153	Livingston Circle	\$0.00	-\$184.45	-\$2,696.60	-\$2,881.05	ACC	N

Total: -\$2,881.05

ALSO, LET THIS SERVE AS AUTHORIZATION TO ABATE ANY PENALTY OR INTEREST WHICH HAS ACCRUED DUE TO THE NON-PAYMENT OF AMOUNTS AS STATED ABOVE.

Legend:

O.I. = O.I. reading slower than inside meter causing large bill when inside meter is read.
 TWN = Town Project caused damage to private property
 EC = Extenuating Circumstances
 Equip = Equipment Malfunction
 UEW = Unexplained water loss
 ACC = Accidental Water Loss
 BP = Billing Period beyond 100 days
 COA = Council on Aging

**Town of Needham
Board of Selectmen
Minutes for June 10, 2014
Selectmen's Chamber
Needham Town Hall**

6:30 p.m. Informal Meeting with Citizens: No activity.

7:00 p.m. Call to Order:
A meeting of the Board of Selectmen was convened by Chairman John A. Bulian. Those present were Maurice P. Handel, Matthew D. Borrelli, Marianne B. Cooley, Daniel P. Matthews, Assistant Town Manager/Personnel Christopher Coleman, and Recording Secretary Mary Hunt. Town Manager Kate Fitzpatrick was not present.

7:00 p.m. Public Hearing - NSTAR Petition for Clarke Road:
Chris Cosby, NSTAR representative appeared before the Board requesting permission to install approximately 141 feet of conduit at manhole #16853 on Clarke Road, Needham. Ms. Cosby said this work is necessary to provide underground electric service for a new house at 18 Clarke Road.

Mr. Bulian invited public comment. No comments were made.

**Motion by Mr. Handel that the Board of Selectmen approve and sign a petition from NSTAR to install approximately 141 feet of conduit at manhole #16853 on Clarke Road, Needham. This work is necessary to provide underground electric service for a new house at 18 Clarke Road.
Second: Mr. Borrelli. Unanimously approved 5-0.**

7:02 p.m. Public Hearing - NSTAR Petition for Charles River Street:
Chris Cosby, NSTAR representative appeared before the Board requesting permission to install approximately 13 feet of conduit at pole 10/13 on Charles River Street, Needham. Ms. Cosby said this work is necessary to provide underground electric service for a new house at 121 Charles River Street.

Mr. Bulian invited public comment. No comments were made.

**Motion by Mr. Handel that the Board of Selectmen approve and sign a petition from NSTAR to install approximately 13 feet of conduit at pole 10/13 on Charles River Street, Needham. This work is necessary to provide underground electric service for a new house at 121 Charles River Street.
Second: Ms. Cooley. Unanimously approved 5-0.**

7:03 p.m. Appointments and Consent Agenda:
Motion by Mr. Handel that the Board of Selectmen vote to approve the Appointments and Consent Agenda as presented.

APPOINTMENTS There are no appointments this meeting.

CONSENT AGENDA

1. Approve a request from the Public Health Department for a 20 (b) exemption to allow the following school employees to work as seasonal packers/drivers for The Traveling Meals program: Dawn O'Halloran, KASE Program; Nancy Milliken, Food Manager at Eliot School; and Catherine Murray, Broadmeadow School Cafeteria.
2. Accept the following donation made to the Needham Off Leash dog area account: \$450 from Sami Porter & Cate Brodowski.
3. Grant permission for a fund-raising bicycle ride through Needham on September 12, 2014. The event, Braking Aids Ride, is a three-day bicycle ride to benefit Housing Works, a major AIDS service organization headquartered in New York City. Approximately 130 riders will pass through Needham between 6:15 a.m. and 9:00 a.m. Permission has been granted by the Conservation Commission to use Ridge Hill as a rest stop. The route of the race has been approved by the following departments, DPW, Police, Fire, and Park & Recreation. Approval is contingent upon receipt of required completed paperwork.
4. Approve a request from Greg Jundanian, of the Dedham Food Pantry, who is organizing a fundraiser bike ride to benefit food pantries in numerous communities including Needham, to have a portion of its ride to go through Needham. The event is scheduled for September 21, 2014 from 8:00 a.m. to 1:00 p.m. The route of the race has been approved by the following departments, DPW, Police, Fire, and Park and Recreation.
5. Accept donations totaling \$279 in memory of Melvin Roboff made to the Needham Fire Department from the following people: Sydna and Steven Weinstein, Robert M. McGarty, Patricia and Robert DeNoble, Judith and Jeffrey Ogilvie, and Christine and Peter Kenney. The monies will be used to support the activities of the Student Awareness of Fire Education program.
6. Approve minutes from May 27, 2014.
7. Approve a request from the Accounting Department for a 20 (b) exemption to allow Caitlin Concannon, an employee of Needham Extended Day Program, to work in a temporary capacity as payroll clerk.
8. Accept a \$25 donation made to Needham Youth Services from Paul and Christine Cusick. The monies are to be used to sponsor Needham Youth Services Peer tutor program.
9. Grant permission for the following residents to hold a Block Party:

Name	Address	Party Location	Party Date	Party Rain Date	Party Time
Ratify: Robert Klein	11 Andrea Circle	Andrea Circle	6/8/2014		12-5pm
Andrew Allen	955 Webster St	900 Block of Webster	9/13/2014	9/20/2014	12-3pm
Deb Tormey	33 Lawton Rd	Lawton Rd	6/21/2014		3-9pm

Second: Mr. Borrelli. Unanimously approved 5-0.

7:03 p.m.

Public Hearing Water and Sewer Rates:

David Davison, Assistant Town Manager/Finance, Evelyn Poness, Town Treasurer/Collector, John Cosgrove, Chairman, MWRA Advisory Board, and Vincent Roy, MWRA Advisory Board appeared before the Board to discuss changes to the water and sewer rate schedule. Mr. Davison gave a brief history of the Town's effort to keep the rates stable. He said that this will be the first time since 2007 that the water and sewer rate schedule has changed, and the first time since 2005 that the estimated annual bill will increase. Mr. Davison said the major reason for the need for higher rates is to offset the decrease in billable water as residential consumption declines to meet the Department of Environmental Protection's reduced water consumption goals. Mr. Davison also addressed consumption trends, the cost of operations, and rate setting factors.

Mr. Davison said the Water and Sewer Rate Structure Committee met four times over the last three months to discuss the rates and various concepts to address the water and sewer issue. Mr. Davison reviewed with the Board the Rate Calculation Analysis dated June 10, 2014 which includes five possible scenarios for changing rates.

Mr. Bulian noted the Board will take action at its meeting scheduled for June 24, 2014 and asked for Board comments.

Ms. Cooley said it would be helpful to see the distribution of houses for each scenario (i.e. what percentage of users fall within each category and in grid format).

John Cosgrove, Chairman, Water and Sewer Rate Structure Committee said the Committee unanimously supported Scenario 3 as it allows the Town to "get 1/3 of the way there."

Mr. Handel asked if new growth from Needham Crossing was factored in to each scenario. He asked if indexing should be considered.

Mr. Matthews said Scenario 3 appears to make the most sense because the weight of the increase is on irrigation. He asked if the \$66 sewer charge is quarterly, and the effect of the rate structure in future years.

Mr. Borrelli said the irrigation drove a lot of the numbers. He commented Scenarios 1, 1B, and 2 seem too drastic of an increase. He said he agrees that Scenario 3 is best for the Town. He commented Scenario 4 is very creative but there is too much burden on lower/upper tiers. He said Scenario 5 is the least risky, but a 20% increase is too high.

Ms. Cooley asked about gallons per person per day for domestic water only, exclusive of irrigation.

Mr. Bulian invited public comment. No comments were made.

Mr. Bulian said he is comfortable with Scenario 3, and reiterated the Board will vote on the issue at its meeting on June 24, 2014. He thanked the Committee for their work.

8:07 p.m. Town Manager:
Christopher Coleman, Assistant Town Manager/Personnel appeared before the Board with 1 item to discuss:

1. ICMA 100th Anniversary Proclamation
Mr. Coleman told the Board the ICMA is celebrating its 100th anniversary and asked the Board recognize this milestone.

Mr. Handel read a proclamation.

Motion by Mr. Handel that the Board approve and sign the ICMA's 100th Anniversary Proclamation.

Second: Mr. Borrelli. Unanimously approved 5-0.

8:10 p.m. Board Discussion:
1. Committee Reports
No Reports were made.

8:10 p.m. Adjourn:
Motion by Mr. Matthews that the Board of Selectmen vote to adjourn the Board of Selectmen meeting of June 10, 2014.
Second: Mr. Handel. Unanimously approved 5-0.

A list of all documents used at this Board of Selectmen meeting are available at:
<http://www.needhamma.gov/Archive.aspx?AMID=99&Type=&ADID=>