Technical Memorandum

FARMINGTON RIVER WATERSHED 2006
DWM WATER QUALITY MONITORING DATA

November 2012

Massachusetts Department of Environmental Protection
Division of Watershed Management
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COMMONWEALTH OF MASSACHUSETTS
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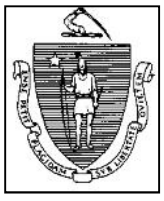

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Introduction

The purpose of this technical memorandum is to publish water quality data collected in the Farmington River Watershed as part of the Massachusetts Department of Environmental Protection (MassDEP), Division of Watershed Management (DWM) programmatic monitoring (MassDEP 2005a). The Farmington River Watershed water quality surveys were conducted between the months of May and September in 2006. Water quality samples were analyzed for nutrients and other conventional pollutants, bacteria (fecal coliform and *E. coli*), as well as dissolved oxygen and other field measurements. The aquatic macroinvertebrate and fish community data are published in separate technical memoranda.

Project Objectives

The 2006 surveys of the Farmington River Watershed focused on obtaining information to meet the following objectives (MassDEP 2006a):

- determine the water quality and biological health of rivers/streams within the watershed that were not assessed in the 2001 Water Quality Assessment Report and increase coverage to rivers/streams that have never before been assessed by conducting assessments based on chemical parameters and biological (aquatic macroinvertebrates, bacteria) communities.
- provide biological and habitat data to document the status of benthic communities over time (trend monitoring); provide biological, habitat, and dissolved oxygen, temperature, and chemical data to DWM's Environmental Monitoring and Assessment Program to be used in making Aquatic Life and Aesthetics use assessments required by Section 305(b) of the Clean Water Act; provide data for other informational needs of Massachusetts regulatory agencies.
- provide quality-assured fecal coliform and *E. coli* data for the purpose of assessing Primary and Secondary Contact Recreational uses in rivers/streams.
- provide quality-assured data to DWM's Total Maximum Daily Load Program to assist with TMDL development.

Additional information regarding project objectives may be found in: *Farmington River Watershed Sampling and Analysis Plan 2006* (MassDEP 2006b).

Sampling Plan

Rivers/Streams

Water quality surveys were conducted a total of five times (weeks of April 24, May 29, July 10, August 14 and September 18). Grab samples for total phosphorus, total nitrogen, ammonia nitrogen, total suspended solids (TSS), color, and turbidity were collected at a total of eight (8) stations along with in-situ multi-probe measurements for temperature, dissolved oxygen, % oxygen saturation, pH, specific conductance, and total dissolved solids. Samples for hardness were collected at four (4) of these stations. Samples for bacterial analysis (fecal coliform and *E. coli*) were obtained from these eight sites plus ten (10) additional locations. Continuous temperature and dissolved oxygen monitoring with unattended metered probes was carried out at twelve (12) sites. These unattended probes were deployed during the months of May, July, and August on Friday of the weeks preceding the water sampling surveys and retrieved 3 – 5 days later (MassDEP 2006a).

Lakes

Four lakes in the Farmington River Watershed were sampled to provide baseline information for lakes that had not been sampled by DWM since 1996 and data for TMDL development. The lakes surveyed were Benton Pond (Otis), Shaw Pond (Becket), Upper Spectacle Pond (Otis/Sandisfield) and York Lake (New Marlborough). Grab samples for total phosphorus, turbidity, phytoplankton/chlorophyll a, and color were collected from the deep-hole station of the lakes on three occasions between July 13 and September 7. Temperature, dissolved oxygen, % oxygen saturation, pH, specific conductance and total dissolved solids profiles were also collected from the deep-hole station using multi-probe meters. Secchi disk transparency depths were also recorded. Aquatic macrophyte coverage was mapped on one occasion for each lake during this period (MassDEP 2006a).

Table 1 and Figure 1 provide details and locations of the 2006 sampling sites. Additional information regarding the sampling design may be found in *Farmington River Watershed Sampling and Analysis Plan 2006* (MassDEP 2006b).

Quality Assurance (QA) and Quality Control (QC)

Quality assurance and quality control procedures used in collecting samples and measurements were consistent with the prevailing DWM protocols that are described in CN 1.21 - Sample Collection Techniques for DWM Surface Water Quality Monitoring (MassDEP 2004a), CN 4.21 - Water Quality Multiprobe Data Collection (MassDEP 2005b) and CN 4.4 - Multi-probe Deployments for Unattended Logging (MassDEP 2004b).

The DWM quality assurance and database management staff reviewed lab data reports and all multi-probe data. The data were validated and finalized per data validation procedures outlined in CN 56.15 - DWM Water Quality Data Validation Process (Summary) (MassDEP 2012a). All water quality sample data were validated by reviewing QC sample results, analytical holding time compliance, QC sample frequency and related ancillary data/documentation (at a minimum). A complete summary of the data review process for all 2006 DWM data is provided in CN 300.0 – Water Quality Data Validation Report for Year 2006 Project Data (MassDEP 2012b). Appendix 1 of this technical memorandum contains definitions for all data qualifiers.

Field and Analytical Methods

Procedures used for water quality sampling and sample handling are described in CN 1.21 - Sample Collection Techniques for DWM Surface Water Quality Monitoring (MassDEP 2004a). The Wall Experiment Station (WES) supplied all sample bottles and field preservatives, which were prepared according to the WES Laboratory Quality Assurance Plan and Standard Operating Procedures (MassDEP 2001). Procedures used for multi-probe calibration and deployment are described in CN 4.21 - Water Quality Multiprobe Data Collection (MassDEP 2005b) and CN 4.4 - Multi-probe Deployments for Unattended Logging (MassDEP 2004b).

Concurrent with the collection of water quality samples, site characteristics and sampling conditions were recorded on DWM field sheets. Riparian vegetation, observed uses (e.g. swimming, boating, fishing), potential pollution sources, the presence/absence of objectionable deposits (trash, debris and scum), the extent of periphyton/algae/aquatic plant growth within the sampling reach, and sampling conditions were all noted at each station.

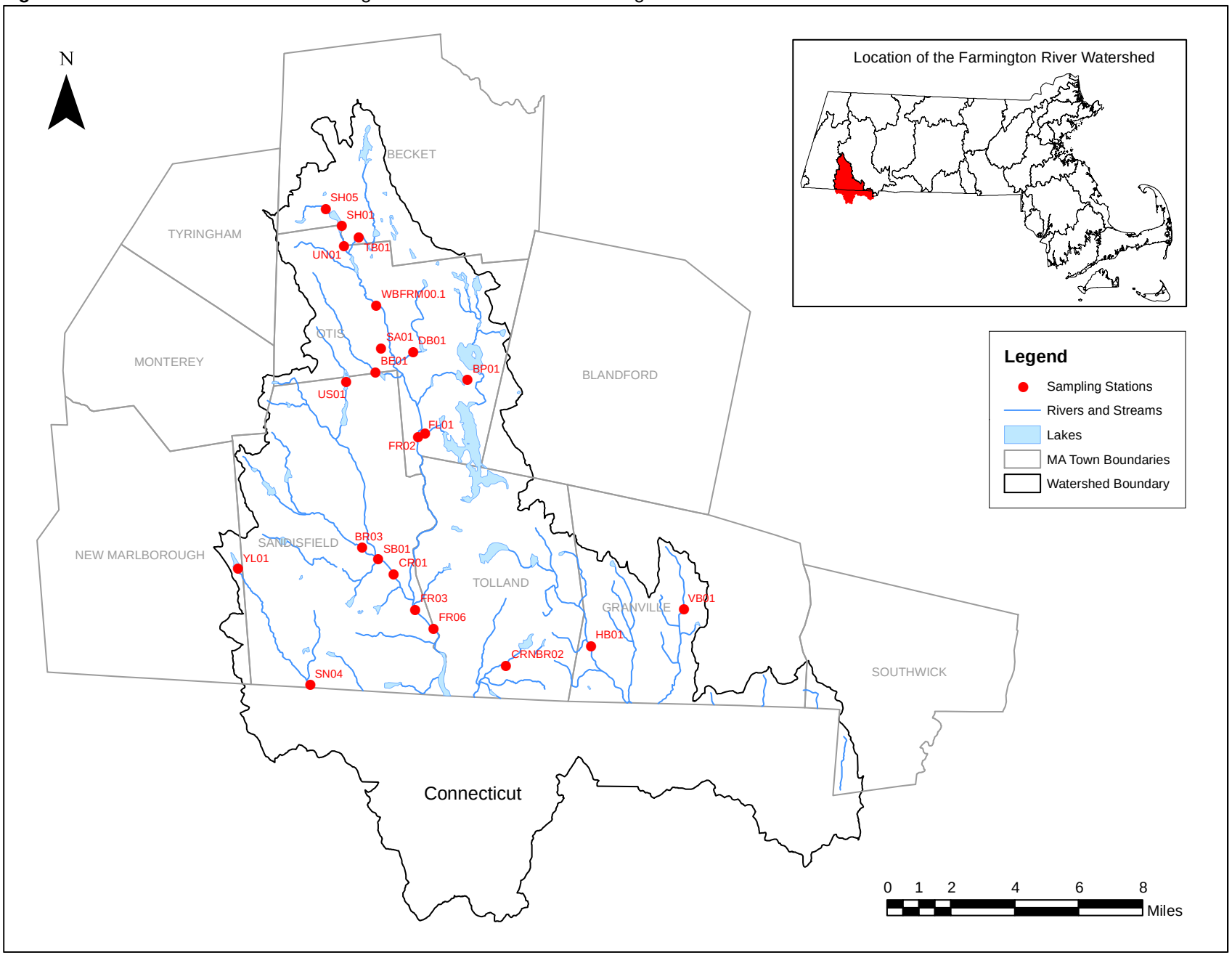
Table 1. MassDEP DWM 2006 Farmington River Watershed sampling station descriptions and sampling parameters.

Station ID	Unique ID	Water Body	Station Description	Latitude	Longitude	*E. coli* Bacteria	Nutrients, Color, Turbidity	Chlorophyll a	Suspended Solids	Hardness	Attended Multiprobe	Deployed Multiprobe
BE01	W1444	Benton Brook	[Lake Shore Drive, Otis]	42.18604	-73.10016	X	X		X		X	X
BR03	W1445	Buck River	[Route 57 bridge crossing approximately 0.6 miles from the confluence with the Clam River, Sandisfield]	42.10660	-73.10636	X					X	X
CR01	W0206	Clam River	[Route 57 bridge, Sandisfield]	42.09475	-73.08666	X	X		X	X	X	X
CRNBR02	W1442	Cranberry Pond Brook	[Colebrook River Road bridge nearest Rivers Road, Tolland]	42.05428	-73.01732	X						
DB01	W0211	Dimmock Brook	[Route 23 bridge, Otis]	42.19545	-73.07710	X						
FL01	W0210	Fall River	[Reservoir Road bridge, Otis]	42.15893	-73.06951	X	X		X	X	X	X
FR02	W0198	West Branch Farmington River	[Reservoir Road bridge, Otis]	42.15689	-73.07353	X	X		X	X	X	X
FR03	W0201	West Branch Farmington River	[Clark Road Extension bridge, near USGS Gage #01185500, Sandisfield]	42.07886	-73.07310	X	X		X	X	X	X
FR06	W1440	West Branch Farmington River	[Roosterville Road bridge, Sandisfield]	42.07043	-73.06198	X	X		X		X	X
HB01	W1448	Hubbard Brook	[West Hartland Road bridge, Granville]	42.06380	-72.96602	X					X	X
SA01	W0351	Unnamed Tributary	[unnamed tributary to West Branch Farmington River, West Center Road bridge, Otis (downstream Otis Ridge Ski Area)]	42.19715	-73.09708	X	X		X		X	X

Table 1. MassDEP DWM 2006 Farmington River Watershed sampling station descriptions and sampling parameters.

Station ID	Unique ID	Water Body	Station Description	Latitude	Longitude	*E. coli* Bacteria	Nutrients, Color, Turbidity	Chlorophyll a	Suspended Solids	Hardness	Attended Multiprobe	Deployed Multiprobe
SB01	W0207	Silver Brook	[Route 57 bridge, Sandisfield]	42.10119	-73.09634	X					X	X
SH05	W1441	Shales Brook	[Peterson Road, Becket]	42.25967	-73.13269	X	X		X		X	
SN04	W1446	Sandy Brook	[Route 183 bridge crossing approximatley 0.2 miles from the Massachusetts/Connecticut border, Sandisfield]	42.04370	-73.13656	X					X	X
TB01	W0212	Thomas Brook	[Werden Road bridge, Becket]	42.24713	-73.11208	X						
UN01	W1443	Unnamed Tributary	[unnamed tributary, outlet Shaw Pond inlet Hayden Pond, Route 8, Otis]	42.24307	-73.12077	X						
VB01	W1447	Valley Brook	[Route 57 bridge, Granville]	42.08114	-72.90991	X					X	X
WBFRM00.1	W1599	West Branch Farmington River	[Route 8 bridge (near Soucie Lane), Otis]	42.21652	-73.10066	X						
BP01	W0347	Benton Pond	[deep hole, Otis]	42.18349	-73.04392		X	X			X	
SH01	W0348	Shaw Pond	[deep hole, center of southern lobe, Otis/Becket]	42.25214	-73.12278		X	X			X	
US01	W1748	Upper Spectacle Pond	[deep hole, Sandisfield]	42.18135	-73.11784		X	X			X	
YL01	W1747	York Lake	[deep hole, southern end of lake, approximately 50 feet above the dam, New Marlborough]	42.09569	-73.18159		X	X			X	

Figure 1. MassDEP DWM 2006 monitoring station locations in the Farmington River Watershed.



Survey Conditions

Precipitation and stream discharge data were analyzed to estimate hydrological conditions during the 2006 water quality surveys in the Farmington River Watershed. Precipitation data collected during the survey period in 2006 were downloaded from the National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center (NCDC) for the Norfolk, CT (GHCND:USC00065445) and West Otis, MA (GHCND:USC00199371) weather stations (NOAA 2012). The precipitation totals on the water quality survey dates and the five days prior to the survey dates were extracted from the records. In addition, the monthly precipitation totals for 2006 and the twenty year monthly averages for the two weather stations were downloaded to determine if precipitation amounts in 2006 were above or below normal (Table 2).

Table 2. Total monthly precipitation in 2006 at weather stations in the Farmington River Watershed. The twenty year monthly average precipitation totals for those stations are in parentheses (NOAA 2012).

Month	Norfolk, CT	West Otis, MA
January	7.96 (3.91)	5.90 (3.33)
February	2.10 (3.61)	1.87 (3.16)
March	1.00 (4.31)	0.85 (3.88)
April	5.48 (4.36)	4.28 (3.96)
May	6.86 (4.50)	6.92 (4.08)
June	7.75 (4.90)	7.91 (4.49)
July	1.98 (4.75)	2.49 (4.02)
August	5.62 (4.53)	5.10 (4.08)
September	3.95 (4.36)	4.20 (4.13)
October	6.00 (5.03)	6.09 (4.67)
November	5.26 (4.50)	3.33 (4.18)
December	2.23 (4.36)	2.19 (3.72)

Stream discharge data from two real-time United States Geological Survey (USGS) stream gage stations (Table 3) were downloaded from the USGS (USGS 2012a). In addition, the 7Q10 for each gage station was downloaded from the USGS web site and included in Table 3 (USGS 2012b). The entire period of record for each station was downloaded and the average daily discharge values on the water quality survey dates and the five days prior to the survey dates were extracted from these records. The percent of time that the average daily discharge on the extracted dates were equaled or exceeded during the entire period of record for the gage was calculated to put the discharge value into historical perspective. The precipitation and discharge data are summarized and presented in Table 4.

Table 3. USGS gage stations used to estimate the hydrological conditions in the Farmington River Watershed during the 2006 DWM water quality surveys and the estimated 7Q10 flows for each gage. (USGS 2012a) (USGS 2012b).

Station Name	Latitude Longitude	Period of Record	7Q10 (cfs)	Remarks
01185500 West Branch Farmington River near New Boston, MA	42° 04' 45" -73° 04' 24"	1913 to Present	5.9	Flow regulated by Otis Reservoir 7.0 mi upstream on Fall River. High flow slightly affected by retarding reservoirs since 1966.
01187300 Hubbard River near West Hartland, CT.	42° 02' 14" -72° 56' 22"	1938 to Present	0.51	None

Table 4. The precipitation totals (inches) and daily average discharge (cubic feet per second) for five days prior to and each DWM 2006 Farmington River Watershed survey date (USGS 2012a) (NOAA 2012).

Note: The percent of time that the daily average discharge was equaled or exceeded over the entire period of record at each stream gage are also provided (percent exceeded). Shaded dates indicate the deployment of multiprobes and large bold dates indicate collection of water samples.

	Precipitation		Discharge (Percent Exceeded)	
Date	Norfolk, CT	West Otis, MA	01185500 West Branch Farmington River near New Boston, MA	01187300 Hubbard River near West Hartland, CT.
04/20/06	0.00	0.00	47 (81.1)	11 (66.7)
04/21/06	0.00	0.00	45 (81.9)	10 (68.0)
04/22/06	0.00	0.00	51 (79.4)	13 (63.1)
04/23/06	1.25	0.78	536 (5.9)	164 (4.3)
04/24/06	1.96	1.33	629 (4.2)	398 (0.9)
04/25/06	0.15	0.11	389 (11.0)	150 (5.0)
04/26/06	0.05	0.02	293 (17.3)	69 (15.3)
05/21/06	0.02	0.04	463 (8.0)	87 (11.2)
05/22/06	0.30	0.43	493 (7.1)	59 (18.5)
05/23/06	0.00	0.00	383 (11.2)	51 (21.9)
05/24/06	0.00	0.00	258 (20.8)	44 (25.3)
05/25/06	0.00	0.00	215 (26.5)	37 (30.1)
05/26/06	0.00	0.00	209 (27.6)	58 (18.9)
05/27/06	0.32	0.12	252 (21.5)	207 (2.9)
05/28/06	0.00	0.00	143 (41.2)	28 (39.2)
05/29/06	0.00	0.00	123 (47.5)	21 (49.2)
05/30/06	0.00	0.00	118 (49.8)	18 (54.5)
05/31/06	0.00	0.94	346 (13.5)	16 (57.9)
07/02/06	0.00	0.00	182 (32.2)	30 (36.8)
07/03/06	0.00	0.00	145 (40.8)	22 (47.7)
07/04/06	0.16	0.24	184 (31.9)	21 (49.2)
07/05/06	0.34	0.13	202 (28.6)	20 (51.1)

Table 4. The precipitation totals (inches) and daily average discharge (cubic feet per second) for five days prior to and each DWM 2006 Farmington River Watershed survey date (USGS 2012a) (NOAA 2012).

Note: The percent of time that the daily average discharge was equaled or exceeded over the entire period of record at each stream gage are also provided (percent exceeded). Shaded dates indicate the deployment of multiprobes and large bold dates indicate collection of water samples.

	Precipitation		Discharge (Percent Exceeded)	
Date	Norfolk, CT	West Otis, MA	01185500 West Branch Farmington River near New Boston, MA	01187300 Hubbard River near West Hartland, CT.
07/06/06	0.00	0.00	110 (53.0)	15 (59.5)
07/07/06	0.00	0.00	94 (60.4)	12 (65.0)
07/08/06	0.00	0.00	85 (64.4)	10 (68.0)
07/09/06	0.00	0.00	74 (69.7)	9.5 (69.1)
07/10/06	0.00	0.00	66 (73.1)	7.1 (74.6)
07/11/06	0.00	0.00	77 (68.1)	7.3 (73.9)
07/12/06	0.00	0.00	98 (58.7)	9.4 (69.2)
08/03/06	0.00	0.00	26 (90.4)	2.1 (92.2)
08/04/06	0.25	0.00	24 (91.3)	2.1 (92.2)
08/05/06	0.00	0.00	22 (92.2)	1.6 (94.6)
08/06/06	0.00	0.00	19 (93.8)	1.3 (96.2)
08/07/06	0.17	0.00	18 (94.3)	1.3 (96.2)
08/08/06	0.37	0.06	17 (94.8)	1.1 (97.1)
08/09/06	0.00	0.00	15 (95.9)	0.94 (97.6)
08/10/06	0.00		17 (94.8)	0.78 (98.2)
08/11/06	0.00	0.38	18 (94.3)	0.7 (98.6)
08/12/06	0.00	0.00	16 (95.3)	0.65 (98.7)
08/13/06	0.00	0.00	15 (95.9)	0.57 (99.0)
08/14/06	0.00	0.00	15 (95.9)	0.51 (99.1)
08/15/06	0.79	0.60	22 (92.2)	1.3 (96.2)
08/16/06	0.08	0.15	20 (93.3)	1.2 (96.7)
09/02/06	0.05	0.00	69 (71.8)	4.8 (81.0)
09/03/06	0.44	0.24	169 (34.9)	23 (45.9)
09/04/06	0.03	0.05	136 (43.4)	22 (47.7)
09/05/06	0.00	0.00	64 (74.0)	14 (61.5)
09/06/06	0.17	0.24	67 (72.7)	11 (66.7)
09/07/06	0.00	0.00	56 (77.4)	8.2 (71.9)
09/14/06	0.02	0.00	41 (83.5)	4 (83.8)
09/15/06	1.40	1.01	83 (65.2)	10 (68.0)
09/16/06	0.51	0.49	90 (62.3)	14 (61.5)
09/17/06	0.00	0.00	72 (70.5)	11 (66.7)
09/18/06	0.00	0.00	64 (74.0)	8.1 (72.0)
09/19/06	0.00	0.00	57 (77.0)	5.9 (77.8)

Station Observations

Station observations were recorded on field sheets for each survey by a DWM investigator. Station observations are described below in Table 5 for each sampling event (MassDEP 2006c).

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
BE01	W1444	04/25/06	None	Clear	Brownish	N	N	N	N	N	No		No	
BE01	W1444	04/26/06	None	Clear	Dark Tan	N	N	N	N	S	No		No	
BE01	W1444	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BE01	W1444	05/31/06	Musty	Moderately Turbid	Brownish	N	N	N	N	M	Yes	foam	No	
BE01	W1444	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BE01	W1444	07/12/06	None	Clear	Light Yellow	NR	N	N	N	N	Yes	foam	No	
BE01	W1444	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BE01	W1444	08/15/06	Musty	Clear	Light Yellow	N	M	M	N	D	No		No	
BE01	W1444	09/19/06	None	Clear	Clear	N	N	S	N	M	No		No	
BR03	W1445	04/25/06	None	Clear	Clear	N	S	N	N	S	No		No	
BR03	W1445	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BR03	W1445	05/31/06	None	Clear	Clear	N	N	N	N	S	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
BR03	W1445	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BR03	W1445	07/12/06	Musty	Clear	Light Yellow	N	N	N	N	N	No		No	
BR03	W1445	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
BR03	W1445	08/15/06	None	Clear	Clear	N	N	M	N	S	No		No	
BR03	W1445	09/19/06	Musty	Clear	Clear	N	N	M	N	S	No		No	
CR01	W0206	04/25/06	None	Moderately Turbid	Brownish	U	U	U	U	U	No		No	
CR01	W0206	04/26/06	None	Slightly Turbid	Light Yellow	N	N	M	N	N	No		No	
CR01	W0206	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
CR01	W0206	05/31/06	None	Clear	Brownish	N	N	S	N	S	No		No	
CR01	W0206	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
CR01	W0206	07/12/06	Musty	Clear	Clear	N	N	D	N	N	No		No	
CR01	W0206	08/11/06	None	Clear	Light Yellow	Not Applicable - Probe Deploy Field Sheet								
CR01	W0206	08/15/06	Musty	Slightly Turbid	Brownish	N	N	M	N	N	No		No	
CR01	W0206	09/19/06	Musty	Clear	Light Yellow	N	N	M	S	S	No		No	
CRNBR02	W1442	04/25/06	None	Clear	Clear	N	N	M	N	M	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
CRNBR02	W1442	05/31/06	None	Clear	Clear	N	D	N	N	N	No		No	
CRNBR02	W1442	07/12/06	None	Clear	Clear	N	N	N	N	VD	No		No	
CRNBR02	W1442	08/15/06	None	Clear	Light Yellow	N	N	N	N	D	No		No	
CRNBR02	W1442	09/19/06	Musty	Clear	Clear	N	N	S	N	M	No		No	
DB01	W0211	04/25/06	Musty	Clear	Brownish	N	M	N	N	N	No		No	
DB01	W0211	05/31/06	Musty	Clear	Brownish	N	D	N	N	M	Yes	slight foam	No	
DB01	W0211	07/12/06	None	NR	Light Yellow	M	N	N	N	D	Yes	moderate foam	No	
DB01	W0211	08/15/06	None	Slightly Turbid	Light Yellow	N	D	D	N	VD	No		No	
DB01	W0211	09/19/06	None	Clear	Brownish	N	S	D	N	M	Yes	slight foam	No	
FL01	W0210	04/25/06	None	Clear	Brownish	N	N	M	N	N	No		No	
FL01	W0210	04/26/06	None	Clear	Light Yellow	N	M	N	N	D	No		No	
FL01	W0210	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FL01	W0210	05/31/06	None	Clear	Clear	N	S	N	N	D	No		No	
FL01	W0210	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FL01	W0210	07/12/06	None	Slightly Turbid	Light Yellow	NR	M	N	N	N	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
FL01	W0210	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FL01	W0210	08/15/06	Musty	Clear	Light Yellow	N	M	M	N	M	No		No	
FL01	W0210	09/19/06	Musty	Clear	Clear	N	N	M	N	S	No		No	
FR02	W0198	04/25/06	None	Clear	Brownish	N	N	M	N	N	No		Yes	slight trash
FR02	W0198	04/26/06	Musty	Slightly Turbid	Brownish	N	N	M	N	N	No		No	
FR02	W0198	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR02	W0198	05/31/06	None	Moderately Turbid	Brownish	N	U	U	U	U	No		No	
FR02	W0198	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR02	W0198	07/12/06	Musty	Slightly Turbid	Light Yellow	NR	NR	N	N	N	Yes	foam	No	
FR02	W0198	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR02	W0198	08/15/06	Musty	Clear	Light Yellow	N	M	D	N	M	No		No	
FR02	W0198	09/19/06	None	Clear	Brownish	N	N	D	N	N	No		No	
FR03	W0201	04/25/06	None	Slightly Turbid	Brownish	N	N	N	N	S	No		No	
FR03	W0201	04/26/06	NR	Slightly Turbid	Brownish	N	N	S	N	N	No		No	
FR03	W0201	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
FR03	W0201	05/31/06	None	Slightly Turbid	Brownish	N	N	M	N	N	No		No	
FR03	W0201	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR03	W0201	07/12/06	None	Clear	Brownish	N	N	D	N	N	No		No	
FR03	W0201	08/11/06	Musty	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR03	W0201	08/15/06	Musty	Slightly Turbid	Light Yellow	N	N	M	M	N	U		No	
FR03	W0201	09/19/06	Musty	Clear	Light Yellow	N	N	M	S	N	No		No	
FR06	W1440	04/25/06	Musty	Slightly Turbid	Brownish	U	N	N	N	S	No		No	
FR06	W1440	04/26/06	None	Clear	Dark Tan	N	N	M	N	N	No		No	
FR06	W1440	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR06	W1440	05/31/06	None	Slightly Turbid	Brownish	N	U	U	U	U	No		No	
FR06	W1440	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR06	W1440	07/12/06	None	Clear	Brownish	N	N	D	N	N	No		No	
FR06	W1440	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
FR06	W1440	08/15/06	Musty	Slightly Turbid	Light Yellow	N	N	M	N	N	No		No	
FR06	W1440	09/19/06	None	Clear	Light Yellow	N	N	M	N	N	No		Yes	trash

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
HB01	W1448	04/25/06	None	Slightly Turbid	Brownish	N	N	N	N	S	No		No	
HB01	W1448	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
HB01	W1448	05/31/06	Musty	Clear	Brownish	N	S	D	N	D	No		No	
HB01	W1448	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
HB01	W1448	07/12/06	None	Clear	Brownish	N	N	S	N	D	No		No	
HB01	W1448	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
HB01	W1448	08/15/06	None	Clear	Light Yellow	N	N	S	N	M	No		No	
HB01	W1448	09/19/06	None	Clear	Light Yellow	N	N	M	N	M	No		No	
SA01	W0351	04/25/06	None	Clear	Brownish	N	N	N	N	N	No		Yes	slight trash
SA01	W0351	04/26/06	None	Clear	Clear	N	N	N	N	N	No		No	
SA01	W0351	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SA01	W0351	05/31/06	None	Slightly Turbid	Brownish	N	N	N	N	N	No		No	
SA01	W0351	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SA01	W0351	07/12/06	None	Clear	Light Yellow	M	N	N	N	M	No		Yes	trash
SA01	W0351	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
SA01	W0351	08/15/06	None	Clear	Clear	N	D	S	N	M	No		No	
SA01	W0351	09/19/06	None	Clear	Clear	N	S	S	N	S	No		No	
SB01	W0207	04/25/06	None	Moderately Turbid	Brownish	N	U	U	U	U	No		No	
SB01	W0207	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SB01	W0207	05/31/06	None	Clear	Clear	N	N	S	N	N	No		NR	
SB01	W0207	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SB01	W0207	07/12/06	None	Clear	Clear	N	N	N	N	S	No		No	
SB01	W0207	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SB01	W0207	08/15/06	Musty	Clear	Light Yellow	N	N	S	S	S	U		No	
SB01	W0207	09/19/06	Musty	Clear	Clear	N	N	M	N	S	No		Yes	trash
SH05	W1441	04/25/06	None	Clear	Brownish	N	N	S	N	N	No		Yes	slight trash
SH05	W1441	04/26/06	None	Clear	Clear	N	N	N	N	N	No		No	
SH05	W1441	05/31/06	None	Clear	Clear	N	S	N	N	S	No		No	
SH05	W1441	07/12/06	Musty	Clear	Light Yellow	N	M	N	N	M	No		No	
SH05	W1441	08/15/06	None	Clear	Clear	N	VD	M	N	S	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
SH05	W1441	09/19/06	Musty	Clear	Light Yellow	N	S	N	N	S	No		No	
SN04	W1446	04/25/06	None	Slightly Turbid	Brownish	N	S	S	N	N	No		Yes	trash - microwave and newspaper box
SN04	W1446	05/26/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SN04	W1446	05/31/06	None	Clear	Brownish	N	D	N	N	N	No		Yes	trash - microwave and newspaper box
SN04	W1446	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SN04	W1446	07/12/06	None	Clear	Brownish	N	N	N	N	N	No		Yes	Toilet paper in woods
SN04	W1446	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
SN04	W1446	08/15/06	None	Slightly Turbid	Light Yellow	N	S	M	M	N	No		Yes	trash - microwave and newspaper box
SN04	W1446	09/19/06	Musty	Clear	Clear	N	S	N	NR	N	No		Yes	trash
TB01	W0212	04/25/06	None	Clear	Brownish	N	N	S	N	N	No		No	
TB01	W0212	05/31/06	None	Slightly Turbid	Brownish	N	N	N	N	N	No		No	
TB01	W0212	07/12/06	None	Highly Turbid	Brownish	NR	D	N	N	M	No		No	
TB01	W0212	08/15/06	None	Slightly Turbid	Dark Tan	N	S	D	N	S	No		No	
TB01	W0212	09/19/06	Musty	Slightly Turbid	Dark Tan	N	D	D	N	D	No		No	
UN01	W1443	04/25/06	None	Clear	Brownish	N	N	S	N	N	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
UN01	W1443	05/31/06	None	Clear	Brownish	N	D	N	N	N	No		No	
UN01	W1443	07/12/06	Sulfide	Clear	Light Yellow	M	D	N	N	N	No		No	
UN01	W1443	08/15/06	Musty	Clear	Light Yellow	N	S	M	N	D	No		No	
UN01	W1443	09/19/06	Musty	Clear	Brownish	N	N	S	N	S	No		No	
VB01	W1447	04/25/06	None	Clear	Clear	N	N	NR	N	M	No		No	
VB01	W1447	05/31/06	None	Clear	Clear	N	M	N	N	D	No		No	
VB01	W1447	07/07/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
VB01	W1447	07/12/06	None	Clear	Clear	N	N	N	N	D	No		No	
VB01	W1447	08/11/06	None	Clear	Clear	Not Applicable - Probe Deploy Field Sheet								
VB01	W1447	08/15/06	None	Clear	Clear	N	M	N	N	D	No		No	
VB01	W1447	09/19/06	None	Clear	Clear	N	N	N	N	D	No		No	
WBFRM00.1	W1599	04/25/06	None	Clear	Brownish	N	U	U	U	U	No		No	
WBFRM00.1	W1599	05/31/06	None	Clear	Brownish	N	N	N	N	N	No		No	
WBFRM00.1	W1599	07/12/06	Musty	Highly Turbid	Light Yellow	NR	D	N	N	D	No		No	
WBFRM00.1	W1599	08/15/06	None	Slightly Turbid	Light Yellow	N	S	S	N	N	No		No	

Table 5. 2006 Field observations from MassDEP DWM Farmington River Watershed river surveys.
S=sparse (0-25%, M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

						Areal Density								
Station ID	**Unique ID**	**Date**	**Odor**	**Water Clarity**	**Color**	**Aquatic Plants**	**Filamentous Algae**	**Film Algae**	**Loose Floc**	**Moss**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposit Comments**
WBFRM00.1	W1599	09/19/06	None	Clear	Brownish	N	N	D	N	D	No		No	

Table 6. 2006 Field observations from MassDEP DWM Farmington River Watershed lake surveys.
S=sparse (0-25%), M=moderate (25-50%), D=dense (50-75%), VD=very dense (75-100%), N=none, U=unobservable, NR=not recorded) (MassDEP 2006c)

								Aquatic Plants							
Station ID	**Unique ID**	**Date**	**Odor**	**Clarity**	**Color**	**Secchi (meters)**	**Algae**	**Emergent**	**Floating**	**Submerged**	**Overall Density**	**Floating Scum**	**Floating Scum Comments**	**Objectionable Deposits**	**Objectionable Deposits Comments**
BP01	W0347	07/13/06	None	Clear	Green	6.5	N	N	N	N	N	No		No	
BP01	W0347	08/16/06	None	Clear	Grayish	5.8	N	N	N	N	N	No		No	
BP01	W0347	09/07/06	None	Clear	Green	6.1	NR	N	N	N	N	No		No	
SH01	W0348	07/13/06	None	Slightly Turbid	Green	3.1	N	N	N	N	N	No		No	
SH01	W0348	08/16/06	None	Clear	Brownish	2.6	N	N	N	N	N	No		No	
SH01	W0348	09/07/06	None	Slightly Turbid	Green	4.1	NR	N	S	N	N	No		No	
US01	W1748	07/13/06	None	Clear	Dark Tan	1.6	N	N	N	N	N	No		No	
US01	W1748	08/08/06	None	Clear	Light Yellow	2.0	NR	NR	NR	NR	NR	No		No	
US01	W1748	09/07/06	None	Clear	Green	2.0	N	N	N	N	N	No		No	
YL01	W1747	07/13/06	None	Clear	Clear	3.6	N	N	N	N	N	No		No	
YL01	W1747	08/08/06	None	Clear	Light Yellow	3.6	NR	NR	NR	NR	NR	No		No	
YL01	W1747	09/07/06	None	Clear	Clear	3.2	N	N	N	N	N	No		No	

Water Quality Data

All MassDEP DWM water quality data are managed and maintained in the Water Quality Data Access Database (WQD). Tables 7 – 12 below provide the 2006 Farmington River Watershed water quality data. The procedures used to accept, accept with qualification or censor data are based on the DWM Standard Operating Procedures (SOP) for data validation and usability (MassDEP 2012a), and are in addition to separate quality assurance activities and laboratory validation steps undertaken by WES. Definitions for the data qualifiers are provided in Appendix 1.

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
BE01	W1444	31-0158	04/25/06	10:43	*E. coli*	MPN/100mL	51	
BE01	W1444	31-0250	05/31/06	10:50	*E. coli*	CFU/100mL	304	
BE01	W1444	31-0318	07/12/06	11:20	*E. coli*	CFU/100mL	8	
BE01	W1444	31-0384	08/15/06	11:34	*E. coli*	CFU/100mL	56	
BE01	W1444	31-0417	09/19/06	10:56	*E. coli*	CFU/100mL	<4	
BE01	W1444	31-0250	05/31/06	10:50	Fecal Coliforms	CFU/100mL	380	
BE01	W1444	31-0318	07/12/06	11:20	Fecal Coliforms	CFU/100mL	12	
BE01	W1444	31-0384	08/15/06	11:34	Fecal Coliforms	CFU/100mL	80	
BE01	W1444	31-0417	09/19/06	10:56	Fecal Coliforms	CFU/100mL	<10	
BE01	W1444	31-0184	04/26/06	12:29	Ammonia-N	mg/L	<0.02	
BE01	W1444	31-0250	05/31/06	10:50	Ammonia-N	mg/L	<0.02	
BE01	W1444	31-0318	07/12/06	11:20	Ammonia-N	mg/L	<0.02	
BE01	W1444	31-0384	08/15/06	11:34	Ammonia-N	mg/L	0.03	
BE01	W1444	31-0417	09/19/06	10:56	Ammonia-N	mg/L	<0.02	
BE01	W1444	31-0384	08/15/06	11:34	Total Nitrogen	mg/L	0.57	
BE01	W1444	31-0417	09/19/06	10:56	Total Nitrogen	mg/L	0.34	
BE01	W1444	31-0184	04/26/06	12:29	Total Phosphorus	mg/L	0.013	
BE01	W1444	31-0250	05/31/06	10:50	Total Phosphorus	mg/L	0.027	b
BE01	W1444	31-0318	07/12/06	11:20	Total Phosphorus	mg/L	0.038	
BE01	W1444	31-0384	08/15/06	11:34	Total Phosphorus	mg/L	0.030	
BE01	W1444	31-0417	09/19/06	10:56	Total Phosphorus	mg/L	0.015	
BE01	W1444	31-0184	04/26/06	12:29	Suspended Solids	mg/L	1.6	
BE01	W1444	31-0250	05/31/06	10:50	Suspended Solids	mg/L	4.2	
BE01	W1444	31-0318	07/12/06	11:20	Suspended Solids	mg/L	2.5	
BE01	W1444	31-0384	08/15/06	11:34	Suspended Solids	mg/L	3.2	
BE01	W1444	31-0417	09/19/06	10:56	Suspended Solids	mg/L	1.5	
BE01	W1444	31-0184	04/26/06	12:29	Turbidity	NTU	0.6	b
BE01	W1444	31-0250	05/31/06	10:50	Turbidity	NTU	1.4	
BE01	W1444	31-0318	07/12/06	11:20	Turbidity	NTU	1.6	
BE01	W1444	31-0384	08/15/06	11:34	Turbidity	NTU	1.8	
BE01	W1444	31-0250	05/31/06	10:50	True color	PCU	55	h
BE01	W1444	31-0318	07/12/06	11:20	True color	PCU	65	
BE01	W1444	31-0384	08/15/06	11:34	True color	PCU	35	
BE01	W1444	31-0184	04/26/06	12:29	Apparent color	PCU	36	
BE01	W1444	31-0250	05/31/06	10:50	Apparent color	PCU	55	h
BE01	W1444	31-0318	07/12/06	11:20	Apparent color	PCU	65	
BE01	W1444	31-0384	08/15/06	11:34	Apparent color	PCU	38	
BR03	W1445	31-0168	04/25/06	11:18	*E. coli*	MPN/100mL	7	
BR03	W1445	31-0238	05/31/06	12:20	*E. coli*	CFU/100mL	32	
BR03	W1445	31-0306	07/12/06	11:38	*E. coli*	CFU/100mL	88	
BR03	W1445	31-0372	08/15/06	11:50	*E. coli*	CFU/100mL	768	e
BR03	W1445	31-0408	09/19/06	12:25	*E. coli*	CFU/100mL	16	e
BR03	W1445	31-0238	05/31/06	12:20	Fecal Coliforms	CFU/100mL	38	
BR03	W1445	31-0306	07/12/06	11:38	Fecal Coliforms	CFU/100mL	160	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
BR03	W1445	31-0372	08/15/06	11:50	Fecal Coliforms	CFU/100mL	630	e
BR03	W1445	31-0408	09/19/06	12:25	Fecal Coliforms	CFU/100mL	<10	e
CR01	W0206	31-0172	04/25/06	11:36	*E. coli*	MPN/100mL	7	
CR01	W0206	31-0240	05/31/06	12:40	*E. coli*	CFU/100mL	8	
CR01	W0206	31-0308	07/12/06	11:58	*E. coli*	CFU/100mL	64	e
CR01	W0206	31-0374	08/15/06	12:10	*E. coli*	CFU/100mL	120	e
CR01	W0206	31-0410	09/19/06	12:46	*E. coli*	CFU/100mL	4	
CR01	W0206	31-0240	05/31/06	12:40	Fecal Coliforms	CFU/100mL	56	
CR01	W0206	31-0308	07/12/06	11:58	Fecal Coliforms	CFU/100mL	50	e
CR01	W0206	31-0374	08/15/06	12:10	Fecal Coliforms	CFU/100mL	110	e
CR01	W0206	31-0410	09/19/06	12:46	Fecal Coliforms	CFU/100mL	10	
CR01	W0206	31-0178	04/26/06	11:11	Ammonia-N	mg/L	<0.02	
CR01	W0206	31-0240	05/31/06	12:40	Ammonia-N	mg/L	<0.02	
CR01	W0206	31-0308	07/12/06	11:58	Ammonia-N	mg/L	<0.02	
CR01	W0206	31-0374	08/15/06	12:10	Ammonia-N	mg/L	0.10	
CR01	W0206	31-0410	09/19/06	12:46	Ammonia-N	mg/L	0.02	
CR01	W0206	31-0374	08/15/06	12:10	Total Nitrogen	mg/L	0.66	
CR01	W0206	31-0410	09/19/06	12:46	Total Nitrogen	mg/L	0.36	
CR01	W0206	31-0178	04/26/06	11:11	Total Phosphorus	mg/L	0.007	
CR01	W0206	31-0240	05/31/06	12:40	Total Phosphorus	mg/L	0.016	
CR01	W0206	31-0308	07/12/06	11:58	Total Phosphorus	mg/L	0.029	
CR01	W0206	31-0374	08/15/06	12:10	Total Phosphorus	mg/L	0.037	
CR01	W0206	31-0410	09/19/06	12:46	Total Phosphorus	mg/L	0.014	
CR01	W0206	31-0178	04/26/06	11:11	Suspended Solids	mg/L	1.7	
CR01	W0206	31-0240	05/31/06	12:40	Suspended Solids	mg/L	3.2	
CR01	W0206	31-0308	07/12/06	11:58	Suspended Solids	mg/L	1.6	
CR01	W0206	31-0374	08/15/06	12:10	Suspended Solids	mg/L	2.9	
CR01	W0206	31-0410	09/19/06	12:46	Suspended Solids	mg/L	1.4	
CR01	W0206	31-0178	04/26/06	11:11	Turbidity	NTU	1.4	b
CR01	W0206	31-0240	05/31/06	12:40	Turbidity	NTU	1.1	
CR01	W0206	31-0308	07/12/06	11:58	Turbidity	NTU	1.0	
CR01	W0206	31-0374	08/15/06	12:10	Turbidity	NTU	1.3	
CR01	W0206	31-0240	05/31/06	12:40	True color	PCU	26	
CR01	W0206	31-0308	07/12/06	11:58	True color	PCU	19	
CR01	W0206	31-0374	08/15/06	12:10	True color	PCU	30	
CR01	W0206	31-0178	04/26/06	11:11	Apparent color	PCU	24	
CR01	W0206	31-0240	05/31/06	12:40	Apparent color	PCU	30	
CR01	W0206	31-0308	07/12/06	11:58	Apparent color	PCU	20	
CR01	W0206	31-0374	08/15/06	12:10	Apparent color	PCU	42	
CR01	W0206	31-0374	08/15/06	12:10	Hardness	mg/L	32	
CRNBR02	W1442	31-0164	04/25/06	09:48	*E. coli*	MPN/100mL	4	
CRNBR02	W1442	31-0230	05/31/06	10:05	*E. coli*	CFU/100mL	4	
CRNBR02	W1442	31-0298	07/12/06	09:40	*E. coli*	CFU/100mL	8	e
CRNBR02	W1442	31-0364	08/15/06	09:59	*E. coli*	CFU/100mL	176	
CRNBR02	W1442	31-0402	09/19/06	10:50	*E. coli*	CFU/100mL	24	
CRNBR02	W1442	31-0230	05/31/06	10:05	Fecal Coliforms	CFU/100mL	10	
CRNBR02	W1442	31-0298	07/12/06	09:40	Fecal Coliforms	CFU/100mL	<2	e
CRNBR02	W1442	31-0364	08/15/06	09:59	Fecal Coliforms	CFU/100mL	280	
CRNBR02	W1442	31-0402	09/19/06	10:50	Fecal Coliforms	CFU/100mL	40	
DB01	W0211	31-0155	04/25/06	10:20	*E. coli*	MPN/100mL	12	
DB01	W0211	31-0249	05/31/06	11:07	*E. coli*	CFU/100mL	64	
DB01	W0211	31-0317	07/12/06	11:01	*E. coli*	CFU/100mL	4	e
DB01	W0211	31-0383	08/15/06	11:13	*E. coli*	CFU/100mL	<4	
DB01	W0211	31-0416	09/19/06	10:40	*E. coli*	CFU/100mL	4	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
DB01	W0211	31-0249	05/31/06	11:07	Fecal Coliforms	CFU/100mL	70	
DB01	W0211	31-0317	07/12/06	11:01	Fecal Coliforms	CFU/100mL	<2	e
DB01	W0211	31-0383	08/15/06	11:13	Fecal Coliforms	CFU/100mL	50	
DB01	W0211	31-0416	09/19/06	10:40	Fecal Coliforms	CFU/100mL	<10	
FL01	W0210	31-0160	04/25/06	11:05	*E. coli*	MPN/100mL	4	
FL01	W0210	31-0256	05/31/06	09:40	*E. coli*	CFU/100mL	4	e
FL01	W0210	31-0324	07/12/06	12:17	*E. coli*	CFU/100mL	<4	
FL01	W0210	31-0390	08/15/06	12:28	*E. coli*	CFU/100mL	36	
FL01	W0210	31-0421	09/19/06	11:38	*E. coli*	CFU/100mL	<4	
FL01	W0210	31-0256	05/31/06	09:40	Fecal Coliforms	CFU/100mL	2	e
FL01	W0210	31-0324	07/12/06	12:17	Fecal Coliforms	CFU/100mL	8	
FL01	W0210	31-0390	08/15/06	12:28	Fecal Coliforms	CFU/100mL	80	
FL01	W0210	31-0421	09/19/06	11:38	Fecal Coliforms	CFU/100mL	<10	
FL01	W0210	31-0180	04/26/06	11:44	Ammonia-N	mg/L	<0.02	
FL01	W0210	31-0256	05/31/06	09:40	Ammonia-N	mg/L	<0.02	
FL01	W0210	31-0324	07/12/06	12:17	Ammonia-N	mg/L	<0.02	
FL01	W0210	31-0390	08/15/06	12:28	Ammonia-N	mg/L	0.02	
FL01	W0210	31-0421	09/19/06	11:38	Ammonia-N	mg/L	<0.02	
FL01	W0210	31-0390	08/15/06	12:28	Total Nitrogen	mg/L	0.35	
FL01	W0210	31-0421	09/19/06	11:38	Total Nitrogen	mg/L	0.19	
FL01	W0210	31-0180	04/26/06	11:44	Total Phosphorus	mg/L	0.005	
FL01	W0210	31-0256	05/31/06	09:40	Total Phosphorus	mg/L	0.012	b
FL01	W0210	31-0324	07/12/06	12:17	Total Phosphorus	mg/L	0.022	
FL01	W0210	31-0390	08/15/06	12:28	Total Phosphorus	mg/L	0.005	
FL01	W0210	31-0421	09/19/06	11:38	Total Phosphorus	mg/L	<0.005	
FL01	W0210	31-0180	04/26/06	11:44	Suspended Solids	mg/L	<1.0	
FL01	W0210	31-0256	05/31/06	09:40	Suspended Solids	mg/L	<1.0	
FL01	W0210	31-0324	07/12/06	12:17	Suspended Solids	mg/L	<1.0	
FL01	W0210	31-0390	08/15/06	12:28	Suspended Solids	mg/L	<1.0	
FL01	W0210	31-0421	09/19/06	11:38	Suspended Solids	mg/L	<1.0	
FL01	W0210	31-0180	04/26/06	11:44	Turbidity	NTU	<0.5	b
FL01	W0210	31-0256	05/31/06	09:40	Turbidity	NTU	0.7	h
FL01	W0210	31-0324	07/12/06	12:17	Turbidity	NTU	0.6	
FL01	W0210	31-0390	08/15/06	12:28	Turbidity	NTU	<0.5	
FL01	W0210	31-0256	05/31/06	09:40	True color	PCU	22	h
FL01	W0210	31-0324	07/12/06	12:17	True color	PCU	20	
FL01	W0210	31-0390	08/15/06	12:28	True color	PCU	17	
FL01	W0210	31-0180	04/26/06	11:44	Apparent color	PCU	27	
FL01	W0210	31-0256	05/31/06	09:40	Apparent color	PCU	22	h
FL01	W0210	31-0324	07/12/06	12:17	Apparent color	PCU	25	
FL01	W0210	31-0390	08/15/06	12:28	Apparent color	PCU	20	
FL01	W0210	31-0390	08/15/06	12:28	Hardness	mg/L	22	
FR02	W0198	31-0159	04/25/06	10:55	*E. coli*	MPN/100mL	26	
FR02	W0198	31-0252	05/31/06	10:10	*E. coli*	CFU/100mL	296	
FR02	W0198	31-0320	07/12/06	**	*E. coli*	CFU/100mL	65	e
FR02	W0198	31-0386	08/15/06	12:01	*E. coli*	CFU/100mL	132	
FR02	W0198	31-0418	09/19/06	11:20	*E. coli*	CFU/100mL	12	e
FR02	W0198	31-0252	05/31/06	10:10	Fecal Coliforms	CFU/100mL	370	
FR02	W0198	31-0320	07/12/06	**	Fecal Coliforms	CFU/100mL	50	e
FR02	W0198	31-0386	08/15/06	12:01	Fecal Coliforms	CFU/100mL	140	
FR02	W0198	31-0418	09/19/06	11:20	Fecal Coliforms	CFU/100mL	10	e
FR02	W0198	31-0182	04/26/06	12:06	Ammonia-N	mg/L	<0.02	
FR02	W0198	31-0252	05/31/06	10:10	Ammonia-N	mg/L	<0.02	
FR02	W0198	31-0320	07/12/06	**	Ammonia-N	mg/L	<0.02	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
FR02	W0198	31-0386	08/15/06	12:01	Ammonia-N	mg/L	0.02	
FR02	W0198	31-0418	09/19/06	11:20	Ammonia-N	mg/L	<0.02	
FR02	W0198	31-0386	08/15/06	12:01	Total Nitrogen	mg/L	0.34	
FR02	W0198	31-0418	09/19/06	11:20	Total Nitrogen	mg/L	0.26	
FR02	W0198	31-0182	04/26/06	12:06	Total Phosphorus	mg/L	0.007	
FR02	W0198	31-0252	05/31/06	10:10	Total Phosphorus	mg/L	0.038	b
FR02	W0198	31-0320	07/12/06	**	Total Phosphorus	mg/L	0.010	
FR02	W0198	31-0386	08/15/06	12:01	Total Phosphorus	mg/L	0.008	
FR02	W0198	31-0418	09/19/06	11:20	Total Phosphorus	mg/L	0.006	
FR02	W0198	31-0182	04/26/06	12:06	Suspended Solids	mg/L	1.3	
FR02	W0198	31-0252	05/31/06	10:10	Suspended Solids	mg/L	4.7	
FR02	W0198	31-0320	07/12/06	**	Suspended Solids	mg/L	<1.0	
FR02	W0198	31-0386	08/15/06	12:01	Suspended Solids	mg/L	<1.0	
FR02	W0198	31-0418	09/19/06	11:20	Suspended Solids	mg/L	<1.0	
FR02	W0198	31-0182	04/26/06	12:06	Turbidity	NTU	1.1	b
FR02	W0198	31-0252	05/31/06	10:10	Turbidity	NTU	3.1	h
FR02	W0198	31-0320	07/12/06	**	Turbidity	NTU	1.1	
FR02	W0198	31-0386	08/15/06	12:01	Turbidity	NTU	0.9	d
FR02	W0198	31-0252	05/31/06	10:10	True color	PCU	38	h
FR02	W0198	31-0320	07/12/06	**	True color	PCU	29	
FR02	W0198	31-0386	08/15/06	12:01	True color	PCU	20	
FR02	W0198	31-0182	04/26/06	12:06	Apparent color	PCU	32	
FR02	W0198	31-0252	05/31/06	10:10	Apparent color	PCU	42	h
FR02	W0198	31-0320	07/12/06	**	Apparent color	PCU	34	
FR02	W0198	31-0386	08/15/06	12:01	Apparent color	PCU	25	
FR02	W0198	31-0386	08/15/06	12:01	Hardness	mg/L	36	
FR03	W0201	31-0165	04/25/06	10:07	*E. coli*	MPN/100mL	20	
FR03	W0201	31-0231	05/31/06	10:32	*E. coli*	CFU/100mL	208	
FR03	W0201	31-0299	07/12/06	10:08	*E. coli*	CFU/100mL	108	e
FR03	W0201	31-0365	08/15/06	10:26	*E. coli*	CFU/100mL	124	
FR03	W0201	31-0403	09/19/06	11:20	*E. coli*	CFU/100mL	<4	
FR03	W0201	31-0231	05/31/06	10:32	Fecal Coliforms	CFU/100mL	260	
FR03	W0201	31-0299	07/12/06	10:08	Fecal Coliforms	CFU/100mL	72	e
FR03	W0201	31-0365	08/15/06	10:26	Fecal Coliforms	CFU/100mL	260	
FR03	W0201	31-0403	09/19/06	11:20	Fecal Coliforms	CFU/100mL	10	
FR03	W0201	31-0176	04/26/06	10:43	Ammonia-N	mg/L	<0.02	
FR03	W0201	31-0231	05/31/06	10:32	Ammonia-N	mg/L	<0.02	
FR03	W0201	31-0299	07/12/06	10:08	Ammonia-N	mg/L	<0.02	
FR03	W0201	31-0365	08/15/06	10:26	Ammonia-N	mg/L	0.06	
FR03	W0201	31-0403	09/19/06	11:20	Ammonia-N	mg/L	<0.02	
FR03	W0201	31-0365	08/15/06	10:26	Total Nitrogen	mg/L	0.45	
FR03	W0201	31-0403	09/19/06	11:20	Total Nitrogen	mg/L	0.29	
FR03	W0201	31-0176	04/26/06	10:43	Total Phosphorus	mg/L	0.007	
FR03	W0201	31-0231	05/31/06	10:32	Total Phosphorus	mg/L	0.019	
FR03	W0201	31-0299	07/12/06	10:08	Total Phosphorus	mg/L	0.017	
FR03	W0201	31-0365	08/15/06	10:26	Total Phosphorus	mg/L	0.017	
FR03	W0201	31-0403	09/19/06	11:20	Total Phosphorus	mg/L	0.008	
FR03	W0201	31-0176	04/26/06	10:43	Suspended Solids	mg/L	1.2	
FR03	W0201	31-0231	05/31/06	10:32	Suspended Solids	mg/L	4.0	
FR03	W0201	31-0299	07/12/06	10:08	Suspended Solids	mg/L	1.4	
FR03	W0201	31-0365	08/15/06	10:26	Suspended Solids	mg/L	1.5	
FR03	W0201	31-0403	09/19/06	11:20	Suspended Solids	mg/L	<1.0	
FR03	W0201	31-0176	04/26/06	10:43	Turbidity	NTU	1.2	b
FR03	W0201	31-0231	05/31/06	10:32	Turbidity	NTU	1.6	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
FR03	W0201	31-0299	07/12/06	10:08	Turbidity	NTU	0.9	
FR03	W0201	31-0365	08/15/06	10:26	Turbidity	NTU	1.1	
FR03	W0201	31-0231	05/31/06	10:32	True color	PCU	33	h
FR03	W0201	31-0299	07/12/06	10:08	True color	PCU	27	
FR03	W0201	31-0365	08/15/06	10:26	True color	PCU	23	
FR03	W0201	31-0176	04/26/06	10:43	Apparent color	PCU	28	
FR03	W0201	31-0231	05/31/06	10:32	Apparent color	PCU	39	
FR03	W0201	31-0299	07/12/06	10:08	Apparent color	PCU	30	
FR03	W0201	31-0365	08/15/06	10:26	Apparent color	PCU	25	
FR03	W0201	31-0365	08/15/06	10:26	Hardness	mg/L	33	
FR06	W1440	31-0166	04/25/06	10:22	*E. coli*	MPN/100mL	12	
FR06	W1440	31-0235	05/31/06	11:10	*E. coli*	CFU/100mL	172	e
FR06	W1440	31-0303	07/12/06	10:40	*E. coli*	CFU/100mL	104	e
FR06	W1440	31-0369	08/15/06	11:02	*E. coli*	CFU/100mL	188	
FR06	W1440	31-0406	09/19/06	11:40	*E. coli*	CFU/100mL	8	
FR06	W1440	31-0235	05/31/06	11:10	Fecal Coliforms	CFU/100mL	122	e
FR06	W1440	31-0303	07/12/06	10:40	Fecal Coliforms	CFU/100mL	60	e
FR06	W1440	31-0369	08/15/06	11:02	Fecal Coliforms	CFU/100mL	250	
FR06	W1440	31-0406	09/19/06	11:40	Fecal Coliforms	CFU/100mL	10	
FR06	W1440	31-0174	04/26/06	10:00	Ammonia-N	mg/L	<0.02	
FR06	W1440	31-0235	05/31/06	11:10	Ammonia-N	mg/L	<0.02	
FR06	W1440	31-0303	07/12/06	10:40	Ammonia-N	mg/L	<0.02	
FR06	W1440	31-0369	08/15/06	11:02	Ammonia-N	mg/L	0.04	
FR06	W1440	31-0406	09/19/06	11:40	Ammonia-N	mg/L	<0.02	
FR06	W1440	31-0369	08/15/06	11:02	Total Nitrogen	mg/L	0.40	
FR06	W1440	31-0406	09/19/06	11:40	Total Nitrogen	mg/L	0.27	
FR06	W1440	31-0174	04/26/06	10:00	Total Phosphorus	mg/L	0.007	
FR06	W1440	31-0235	05/31/06	11:10	Total Phosphorus	mg/L	0.016	
FR06	W1440	31-0303	07/12/06	10:40	Total Phosphorus	mg/L	0.015	
FR06	W1440	31-0369	08/15/06	11:02	Total Phosphorus	mg/L	0.015	
FR06	W1440	31-0406	09/19/06	11:40	Total Phosphorus	mg/L	0.007	
FR06	W1440	31-0174	04/26/06	10:00	Suspended Solids	mg/L	3.5	
FR06	W1440	31-0235	05/31/06	11:10	Suspended Solids	mg/L	3.6	
FR06	W1440	31-0303	07/12/06	10:40	Suspended Solids	mg/L	1.4	
FR06	W1440	31-0369	08/15/06	11:02	Suspended Solids	mg/L	1.2	
FR06	W1440	31-0406	09/19/06	11:40	Suspended Solids	mg/L	<1.0	
FR06	W1440	31-0174	04/26/06	10:00	Turbidity	NTU	1.4	b
FR06	W1440	31-0235	05/31/06	11:10	Turbidity	NTU	2.6	
FR06	W1440	31-0303	07/12/06	10:40	Turbidity	NTU	1.3	
FR06	W1440	31-0369	08/15/06	11:02	Turbidity	NTU	0.9	
FR06	W1440	31-0235	05/31/06	11:10	True color	PCU	33	h
FR06	W1440	31-0303	07/12/06	10:40	True color	PCU	24	
FR06	W1440	31-0369	08/15/06	11:02	True color	PCU	19	
FR06	W1440	31-0174	04/26/06	10:00	Apparent color	PCU	25	
FR06	W1440	31-0235	05/31/06	11:10	Apparent color	PCU	33	
FR06	W1440	31-0303	07/12/06	10:40	Apparent color	PCU	29	
FR06	W1440	31-0369	08/15/06	11:02	Apparent color	PCU	27	
HB01	W1448	31-0163	04/25/06	09:22	*E. coli*	MPN/100mL	17	
HB01	W1448	31-0229	05/31/06	09:45	*E. coli*	CFU/100mL	4	
HB01	W1448	31-0297	07/12/06	09:20	*E. coli*	CFU/100mL	32	
HB01	W1448	31-0363	08/15/06	09:39	*E. coli*	CFU/100mL	252	
HB01	W1448	31-0401	09/19/06	10:32	*E. coli*	CFU/100mL	8	
HB01	W1448	31-0229	05/31/06	09:45	Fecal Coliforms	CFU/100mL	4	
HB01	W1448	31-0297	07/12/06	09:20	Fecal Coliforms	CFU/100mL	36	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
HB01	W1448	31-0363	08/15/06	09:39	Fecal Coliforms	CFU/100mL	270	
HB01	W1448	31-0401	09/19/06	10:32	Fecal Coliforms	CFU/100mL	20	
SA01	W0351	31-0154	04/25/06	10:04	*E. coli*	MPN/100mL	11	
SA01	W0351	31-0247	05/31/06	11:18	*E. coli*	CFU/100mL	136	e
SA01	W0351	31-0315	07/12/06	10:32	*E. coli*	CFU/100mL	12	e
SA01	W0351	31-0381	08/15/06	10:46	*E. coli*	CFU/100mL	240	
SA01	W0351	31-0415	09/19/06	10:13	*E. coli*	CFU/100mL	124	
SA01	W0351	31-0247	05/31/06	11:18	Fecal Coliforms	CFU/100mL	54	e
SA01	W0351	31-0315	07/12/06	10:32	Fecal Coliforms	CFU/100mL	<2	e
SA01	W0351	31-0381	08/15/06	10:46	Fecal Coliforms	CFU/100mL	450	
SA01	W0351	31-0415	09/19/06	10:13	Fecal Coliforms	CFU/100mL	170	
SA01	W0351	31-0186	04/26/06	12:48	Ammonia-N	mg/L	<0.02	
SA01	W0351	31-0247	05/31/06	11:18	Ammonia-N	mg/L	<0.02	
SA01	W0351	31-0315	07/12/06	10:32	Ammonia-N	mg/L	<0.02	
SA01	W0351	31-0381	08/15/06	10:46	Ammonia-N	mg/L	0.03	
SA01	W0351	31-0415	09/19/06	10:13	Ammonia-N	mg/L	<0.02	
SA01	W0351	31-0381	08/15/06	10:46	Total Nitrogen	mg/L	0.42	
SA01	W0351	31-0415	09/19/06	10:13	Total Nitrogen	mg/L	0.31	
SA01	W0351	31-0186	04/26/06	12:48	Total Phosphorus	mg/L	<0.005	
SA01	W0351	31-0247	05/31/06	11:18	Total Phosphorus	mg/L	0.022	b
SA01	W0351	31-0315	07/12/06	10:32	Total Phosphorus	mg/L	0.010	
SA01	W0351	31-0381	08/15/06	10:46	Total Phosphorus	mg/L	0.010	
SA01	W0351	31-0415	09/19/06	10:13	Total Phosphorus	mg/L	0.009	
SA01	W0351	31-0186	04/26/06	12:48	Suspended Solids	mg/L	1.6	
SA01	W0351	31-0247	05/31/06	11:18	Suspended Solids	mg/L	2.4	
SA01	W0351	31-0315	07/12/06	10:32	Suspended Solids	mg/L	2.3	
SA01	W0351	31-0381	08/15/06	10:46	Suspended Solids	mg/L	1.7	
SA01	W0351	31-0415	09/19/06	10:13	Suspended Solids	mg/L	1.0	
SA01	W0351	31-0186	04/26/06	12:48	Turbidity	NTU	0.5	b
SA01	W0351	31-0247	05/31/06	11:18	Turbidity	NTU	1.2	
SA01	W0351	31-0315	07/12/06	10:32	Turbidity	NTU	1.0	
SA01	W0351	31-0381	08/15/06	10:46	Turbidity	NTU	0.6	
SA01	W0351	31-0247	05/31/06	11:18	True color	PCU	37	h
SA01	W0351	31-0315	07/12/06	10:32	True color	PCU	20	
SA01	W0351	31-0381	08/15/06	10:46	True color	PCU	19	
SA01	W0351	31-0186	04/26/06	12:48	Apparent color	PCU	20	
SA01	W0351	31-0247	05/31/06	11:18	Apparent color	PCU	37	
SA01	W0351	31-0315	07/12/06	10:32	Apparent color	PCU	22	
SA01	W0351	31-0381	08/15/06	10:46	Apparent color	PCU	21	
SB01	W0207	31-0169	04/25/06	11:26	*E. coli*	MPN/100mL	14	
SB01	W0207	31-0239	05/31/06	12:32	*E. coli*	CFU/100mL	20	e
SB01	W0207	31-0307	07/12/06	11:45	*E. coli*	CFU/100mL	48	e
SB01	W0207	31-0373	08/15/06	11:57	*E. coli*	CFU/100mL	120	
SB01	W0207	31-0409	09/19/06	12:35	*E. coli*	CFU/100mL	<4	
SB01	W0207	31-0239	05/31/06	12:32	Fecal Coliforms	CFU/100mL	4	e
SB01	W0207	31-0307	07/12/06	11:45	Fecal Coliforms	CFU/100mL	40	e
SB01	W0207	31-0373	08/15/06	11:57	Fecal Coliforms	CFU/100mL	340	
SB01	W0207	31-0409	09/19/06	12:35	Fecal Coliforms	CFU/100mL	<10	
SH05	W1441	31-0150	04/25/06	09:01	*E. coli*	MPN/100mL	7	
SH05	W1441	31-0242	05/31/06	12:10	*E. coli*	CFU/100mL	36	
SH05	W1441	31-0310	07/12/06	09:12	*E. coli*	CFU/100mL	32	e
SH05	W1441	31-0376	08/15/06	09:43	*E. coli*	CFU/100mL	76	
SH05	W1441	31-0411	09/19/06	09:32	*E. coli*	CFU/100mL	8	
SH05	W1441	31-0242	05/31/06	12:10	Fecal Coliforms	CFU/100mL	44	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
SH05	W1441	31-0310	07/12/06	09:12	Fecal Coliforms	CFU/100mL	<2	e
SH05	W1441	31-0376	08/15/06	09:43	Fecal Coliforms	CFU/100mL	160	
SH05	W1441	31-0411	09/19/06	09:32	Fecal Coliforms	CFU/100mL	20	
SH05	W1441	31-0188	04/26/06	13:10	Ammonia-N	mg/L	<0.02	
SH05	W1441	31-0242	05/31/06	12:10	Ammonia-N	mg/L	<0.02	
SH05	W1441	31-0310	07/12/06	09:12	Ammonia-N	mg/L	<0.02	
SH05	W1441	31-0376	08/15/06	09:43	Ammonia-N	mg/L	0.03	
SH05	W1441	31-0411	09/19/06	09:32	Ammonia-N	mg/L	<0.02	
SH05	W1441	31-0376	08/15/06	09:43	Total Nitrogen	mg/L	0.50	
SH05	W1441	31-0411	09/19/06	09:32	Total Nitrogen	mg/L	0.31	
SH05	W1441	31-0188	04/26/06	13:10	Total Phosphorus	mg/L	<0.005	
SH05	W1441	31-0242	05/31/06	12:10	Total Phosphorus	mg/L	0.012	b
SH05	W1441	31-0310	07/12/06	09:12	Total Phosphorus	mg/L	0.011	
SH05	W1441	31-0376	08/15/06	09:43	Total Phosphorus	mg/L	0.012	
SH05	W1441	31-0411	09/19/06	09:32	Total Phosphorus	mg/L	0.005	
SH05	W1441	31-0188	04/26/06	13:10	Suspended Solids	mg/L	<1.0	
SH05	W1441	31-0242	05/31/06	12:10	Suspended Solids	mg/L	1.9	
SH05	W1441	31-0310	07/12/06	09:12	Suspended Solids	mg/L	1.9	
SH05	W1441	31-0376	08/15/06	09:43	Suspended Solids	mg/L	4.2	
SH05	W1441	31-0411	09/19/06	09:32	Suspended Solids	mg/L	<1.0	
SH05	W1441	31-0188	04/26/06	13:10	Turbidity	NTU	1.1	b
SH05	W1441	31-0242	05/31/06	12:10	Turbidity	NTU	0.8	
SH05	W1441	31-0310	07/12/06	09:12	Turbidity	NTU	0.6	
SH05	W1441	31-0376	08/15/06	09:43	Turbidity	NTU	0.6	
SH05	W1441	31-0242	05/31/06	12:10	True color	PCU	20	
SH05	W1441	31-0310	07/12/06	09:12	True color	PCU	20	
SH05	W1441	31-0376	08/15/06	09:43	True color	PCU	19	
SH05	W1441	31-0188	04/26/06	13:10	Apparent color	PCU	30	
SH05	W1441	31-0242	05/31/06	12:10	Apparent color	PCU	26	
SH05	W1441	31-0310	07/12/06	09:12	Apparent color	PCU	21	
SH05	W1441	31-0376	08/15/06	09:43	Apparent color	PCU	20	
SN04	W1446	31-0167	04/25/06	10:52	*E. coli*	MPN/100mL	8	
SN04	W1446	31-0237	05/31/06	11:55	*E. coli*	CFU/100mL	16	
SN04	W1446	31-0305	07/12/06	11:10	*E. coli*	CFU/100mL	<4	
SN04	W1446	31-0371	08/15/06	11:30	*E. coli*	CFU/100mL	440	
SN04	W1446	31-0407	09/19/06	12:08	*E. coli*	CFU/100mL	12	e
SN04	W1446	31-0237	05/31/06	11:55	Fecal Coliforms	CFU/100mL	16	
SN04	W1446	31-0305	07/12/06	11:10	Fecal Coliforms	CFU/100mL	12	
SN04	W1446	31-0371	08/15/06	11:30	Fecal Coliforms	CFU/100mL	580	
SN04	W1446	31-0407	09/19/06	12:08	Fecal Coliforms	CFU/100mL	<10	e
TB01	W0212	31-0152	04/25/06	09:38	*E. coli*	MPN/100mL	49	
TB01	W0212	31-0245	05/31/06	11:50	*E. coli*	CFU/100mL	80	
TB01	W0212	31-0313	07/12/06	10:09	*E. coli*	CFU/100mL	4	
TB01	W0212	31-0379	08/15/06	10:23	*E. coli*	CFU/100mL	32	
TB01	W0212	31-0413	09/19/06	10:02	*E. coli*	CFU/100mL	16	e
TB01	W0212	31-0245	05/31/06	11:50	Fecal Coliforms	CFU/100mL	98	
TB01	W0212	31-0313	07/12/06	10:09	Fecal Coliforms	CFU/100mL	24	
TB01	W0212	31-0379	08/15/06	10:23	Fecal Coliforms	CFU/100mL	50	
TB01	W0212	31-0413	09/19/06	10:02	Fecal Coliforms	CFU/100mL	10	e
UN01	W1443	31-0151	04/25/06	09:21	*E. coli*	MPN/100mL	9	
UN01	W1443	31-0244	05/31/06	12:00	*E. coli*	CFU/100mL	68	e
UN01	W1443	31-0312	07/12/06	09:48	*E. coli*	CFU/100mL	20	e
UN01	W1443	31-0378	08/15/06	09:30	*E. coli*	CFU/100mL	44	
UN01	W1443	31-0412	09/19/06	09:51	*E. coli*	CFU/100mL	28	

Table 7. 2006 MassDEP DWM Farmington River Watershed water quality data - rivers.

Station ID	Unique ID	OWMID	Date	Time	Analyte	Units	Result	Data Qualifiers
UN01	W1443	31-0244	05/31/06	12:00	Fecal Coliforms	CFU/100mL	54	e
UN01	W1443	31-0312	07/12/06	09:48	Fecal Coliforms	CFU/100mL	14	e
UN01	W1443	31-0378	08/15/06	09:30	Fecal Coliforms	CFU/100mL	70	
UN01	W1443	31-0412	09/19/06	09:51	Fecal Coliforms	CFU/100mL	30	
VB01	W1447	31-0162	04/25/06	08:57	*E. coli*	MPN/100mL	<1	
VB01	W1447	31-0228	05/31/06	09:25	*E. coli*	CFU/100mL	<4	
VB01	W1447	31-0296	07/12/06	08:55	*E. coli*	CFU/100mL	16	
VB01	W1447	31-0362	08/15/06	09:19	*E. coli*	CFU/100mL	3020	
VB01	W1447	31-0400	09/19/06	10:14	*E. coli*	CFU/100mL	56	e
VB01	W1447	31-0228	05/31/06	09:25	Fecal Coliforms	CFU/100mL	2	
VB01	W1447	31-0296	07/12/06	08:55	Fecal Coliforms	CFU/100mL	16	
VB01	W1447	31-0362	08/15/06	09:19	Fecal Coliforms	CFU/100mL	6120	
VB01	W1447	31-0400	09/19/06	10:14	Fecal Coliforms	CFU/100mL	50	e
WBFRM00.1	W1599	31-0153	04/25/06	09:50	*E. coli*	MPN/100mL	17	
WBFRM00.1	W1599	31-0246	05/31/06	11:40	*E. coli*	CFU/100mL	124	e
WBFRM00.1	W1599	31-0314	07/12/06	10:22	*E. coli*	CFU/100mL	24	e
WBFRM00.1	W1599	31-0380	08/15/06	10:33	*E. coli*	CFU/100mL	36	
WBFRM00.1	W1599	31-0414	09/19/06	10:13	*E. coli*	CFU/100mL	24	e
WBFRM00.1	W1599	31-0246	05/31/06	11:40	Fecal Coliforms	CFU/100mL	48	e
WBFRM00.1	W1599	31-0314	07/12/06	10:22	Fecal Coliforms	CFU/100mL	18	e
WBFRM00.1	W1599	31-0380	08/15/06	10:33	Fecal Coliforms	CFU/100mL	140	
WBFRM00.1	W1599	31-0414	09/19/06	10:13	Fecal Coliforms	CFU/100mL	10	e

Table 8. Geometric mean* of the 2006 *E. coli* results for each DWM river sampling station.

Station ID	Unique ID	Sample Count	Geometric Mean (CFU/100 ml)
BE01	W1444	5	31
BR03	W1445	5	48
CR01	W0206	5	18
CRNBR02	W1442	5	14
DB01	W0211	5	9
FL01	W0210	5	6
FR02	W0198	5	60
FR03	W0201	5	47
FR06	W1440	5	50
HB01	W1448	5	21
SA01	W0351	5	56
SB01	W0207	5	23
SH05	W1441	5	22
SN04	W1446	5	19
TB01	W0212	5	24
UN01	W1443	5	27
VB01	W1447	5	26
WBFRM00.1	W1599	5	34

*The detection limit was used in the geometric mean calculation if the result was below the detection limit. Results from duplicate samples were removed before completing the geometric mean calculation.

Table 9. 2006 MassDEP DWM Farmington River Watershed water quality data - lake.

Station ID	Unique ID	OWMID	Date	Time	Relative Sample Depth	Analyte	Units	Result	Data Qualifiers
BP01	W0347	LB-3641	07/13/06	13:20	Surface	Apparent color	PCU	15	
BP01	W0347	LB-3751	08/16/06	13:11	Surface	Apparent color	PCU	<15	
BP01	W0347	LB-3643	07/13/06	14:53	--	chlorophyll a	mg/m3	3.9	
BP01	W0347	LB-3753	08/16/06	13:49	--	chlorophyll a	mg/m3	4.8	m
BP01	W0347	LB-3833	09/07/06	13:00	--	chlorophyll a	mg/m3	2.1	
BP01	W0347	LB-3641	07/13/06	13:20	Surface	Total Phosphorus	mg/L	<0.005	
BP01	W0347	LB-3642	07/13/06	13:30	Near bottom	Total Phosphorus	mg/L	0.016	
BP01	W0347	LB-3751	08/16/06	13:11	Surface	Total Phosphorus	mg/L	0.009	
BP01	W0347	LB-3752	08/16/06	13:29	Near bottom	Total Phosphorus	mg/L	0.014	
BP01	W0347	LB-3831	09/07/06	13:03	Surface	Total Phosphorus	mg/L	<0.005	
BP01	W0347	LB-3832	09/07/06	13:06	Near bottom	Total Phosphorus	mg/L	0.005	
BP01	W0347	LB-3641	07/13/06	13:20	Surface	True color	PCU	<15	
BP01	W0347	LB-3751	08/16/06	13:11	Surface	True color	PCU	<15	
BP01	W0347	LB-3641	07/13/06	13:20	Surface	Turbidity	NTU	0.5	
BP01	W0347	LB-3751	08/16/06	13:11	Surface	Turbidity	NTU	0.6	
SH01	W0348	LB-3631	07/13/06	09:10	Surface	Apparent color	PCU	36	
SH01	W0348	LB-3741	08/16/06	10:26	Surface	Apparent color	PCU	19	
SH01	W0348	LB-3635	07/13/06	11:05	--	chlorophyll a	mg/m3	5.6	
SH01	W0348	LB-3743	08/16/06	11:07	--	chlorophyll a	mg/m3	4.5	
SH01	W0348	LB-3846	09/07/06	10:54	--	chlorophyll a	mg/m3	2.4	
SH01	W0348	LB-3631	07/13/06	09:10	Surface	Total Phosphorus	mg/L	0.010	
SH01	W0348	LB-3632	07/13/06	11:20	Near bottom	Total Phosphorus	mg/L	0.012	
SH01	W0348	LB-3741	08/16/06	10:26	Surface	Total Phosphorus	mg/L	0.009	
SH01	W0348	LB-3742	08/16/06	10:46	Near bottom	Total Phosphorus	mg/L	0.030	
SH01	W0348	LB-3841	09/07/06	11:00	Surface	Total Phosphorus	mg/L	0.006	
SH01	W0348	LB-3842	09/07/06	11:03	Near bottom	Total Phosphorus	mg/L	0.008	
SH01	W0348	LB-3631	07/13/06	09:10	Surface	True color	PCU	24	
SH01	W0348	LB-3741	08/16/06	10:26	Surface	True color	PCU	<15	
SH01	W0348	LB-3631	07/13/06	09:10	Surface	Turbidity	NTU	1.4	
SH01	W0348	LB-3741	08/16/06	10:26	Surface	Turbidity	NTU	1.9	
US01	W1748	LB-3661	07/13/06	13:56	Surface	Apparent color	PCU	100	
US01	W1748	LB-3721	08/08/06	09:33	Surface	Apparent color	PCU	60	
US01	W1748	LB-3662	07/13/06	14:29	Near bottom	chlorophyll a	mg/m3	10.8	
US01	W1748	LB-3723	08/08/06	11:06	--	chlorophyll a	mg/m3	15.2	
US01	W1748	LB-3816	09/07/06	11:40	--	chlorophyll a	mg/m3	6.7	
US01	W1748	LB-3661	07/13/06	13:56	Surface	Total Phosphorus	mg/L	0.022	
US01	W1748	LB-3662	07/13/06	14:29	Near bottom	Total Phosphorus	mg/L	0.16	
US01	W1748	LB-3721	08/08/06	09:33	Surface	Total Phosphorus	mg/L	0.018	
US01	W1748	LB-3722	08/08/06	09:45	Near bottom	Total Phosphorus	mg/L	0.19	

Table 9. 2006 MassDEP DWM Farmington River Watershed water quality data - lake.

Station ID	Unique ID	OWMID	Date	Time	Relative Sample Depth	Analyte	Units	Result	Data Qualifiers
US01	W1748	LB-3811	09/07/06	11:10	Surface	Total Phosphorus	mg/L	0.017	
US01	W1748	LB-3812	09/07/06	11:17	Near bottom	Total Phosphorus	mg/L	0.11	
US01	W1748	LB-3661	07/13/06	13:56	Surface	True color	PCU	90	
US01	W1748	LB-3721	08/08/06	09:33	Surface	True color	PCU	50	
US01	W1748	LB-3661	07/13/06	13:56	Surface	Turbidity	NTU	1.3	b
US01	W1748	LB-3721	08/08/06	09:33	Surface	Turbidity	NTU	1.5	d
YL01	W1747	LB-3651	07/13/06	10:04	Surface	Apparent color	PCU	30	
YL01	W1747	LB-3731	08/08/06	13:06	Surface	Apparent color	PCU	<15	
YL01	W1747	LB-3655	07/13/06	10:48	--	chlorophyll a	mg/m3	5.2	
YL01	W1747	LB-3733	08/08/06	13:45	--	chlorophyll a	mg/m3	5.3	
YL01	W1747	LB-3823	09/07/06	13:42	--	chlorophyll a	mg/m3	3.7	
YL01	W1747	LB-3651	07/13/06	10:04	Surface	Total Phosphorus	mg/L	0.009	
YL01	W1747	LB-3652	07/13/06	10:15	Near bottom	Total Phosphorus	mg/L	0.011	
YL01	W1747	LB-3731	08/08/06	13:06	Surface	Total Phosphorus	mg/L	0.006	
YL01	W1747	LB-3732	08/08/06	13:20	Near bottom	Total Phosphorus	mg/L	0.031	
YL01	W1747	LB-3821	09/07/06	13:40	Surface	Total Phosphorus	mg/L	0.007	
YL01	W1747	LB-3822	09/07/06	13:45	Near bottom	Total Phosphorus	mg/L	0.007	
YL01	W1747	LB-3651	07/13/06	10:04	Surface	True color	PCU	21	
YL01	W1747	LB-3731	08/08/06	13:06	Surface	True color	PCU	<15	
YL01	W1747	LB-3651	07/13/06	10:04	Surface	Turbidity	NTU	1.0	b
YL01	W1747	LB-3731	08/08/06	13:06	Surface	Turbidity	NTU	1.9	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
BE01	W1444	31-0185	04/26/06	12:36	0.3		8.5		6.8		43		28		11.4		97	
BE01	W1444	31-0196	05/26/06	10:53	0.2		16.8		--		--		--		8.9		94	
BE01	W1444	31-0197	05/31/06	10:27	0.4		20.0		--		--		--		8.2		91	
BE01	W1444	31-0251	05/31/06	10:50	0.4		20.1		6.8		56		37		8.8		97	
BE01	W1444	31-0264	07/07/06	10:40	0.2		19.1		--		--		--		8.0	i	88	i
BE01	W1444	31-0265	07/12/06	09:46	0.2		21.6		--		--		--		7.8		89	
BE01	W1444	31-0319	07/12/06	11:35	0.1		21.6		7.3		57		37		8.1		92	
BE01	W1444	31-0330	08/11/06	10:07	0.1		17.4		--		--		--		8.6		92	
BE01	W1444	31-0385	08/15/06	11:45	0.1		18.6		7.5		70		46		8.6		92	
BE01	W1444	31-0331	08/16/06	09:40	0.1		17.8		--		--		--		8.4		91	
BE01	W1444	31-0397	09/19/06	11:03	##	i	17.6		7.2		60		39		9.1		95	
BP01	W0347	LB-3640	07/13/06	13:37	0.5		24.3	m	7.7	m	245	m	157	m	7.5	m	91	m
BP01	W0347	LB-3640	07/13/06	13:48	2.2		24.3	m	7.6	m	244	m	156	m	7.5	m	92	m
BP01	W0347	LB-3640	07/13/06	13:53	4.2		21.0	m	7.5	m	245	m	157	m	8.9	m	102	m
BP01	W0347	LB-3640	07/13/06	14:00	4.8		18.7		7.6		246		157		9.1		100	
BP01	W0347	LB-3640	07/13/06	14:05	5.2		18.2		7.5		246		157		8.7		95	
BP01	W0347	LB-3640	07/13/06	14:09	5.6		17.8	m	7.1	m	246	m	158	m	6.7	u, m	72	u, m
BP01	W0347	LB-3640	07/13/06	14:16	6.0		17.1		6.9		247		158		4.8		51	
BP01	W0347	LB-3640	07/13/06	14:24	6.4		16.6		6.7		247		158		3.6		37	
BP01	W0347	LB-3640	07/13/06	14:28	6.8		16.0		6.6		249		160		1.4		15	
BP01	W0347	LB-3640	07/13/06	14:34	7.2		15.3		6.6		256		164		<0.2		<2	
BP01	W0347	LB-3640	07/13/06	14:38	7.7		14.6	m	6.7	m	273	m	175	m	<0.2	m	<2	m
BP01	W0347	LB-3750	08/16/06	13:15	0.5		23.8		7.8		256		166		8.1		96	
BP01	W0347	LB-3750	08/16/06	13:19	0.9		23.8	m	7.8	m	256	m	166	m	8.1	m	96	m

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
BP01	W0347	LB-3750	08/16/06	13:27	2.0		23.8		7.9		256		166		8.1		96	
BP01	W0347	LB-3750	08/16/06	13:31	3.0		23.8	m	7.9	m	256	m	166	m	8.1	m	96	m
BP01	W0347	LB-3750	08/16/06	13:35	4.0		23.3	m	7.7	m	256	m	166	m	8.0	m	93	m
BP01	W0347	LB-3750	08/16/06	13:39	5.0		23.1	m	7.6	m	256	m	166	m	7.6	m	89	m
BP01	W0347	LB-3750	08/16/06	13:44	6.0		18.6		6.8		256		167		3.2		34	
BP01	W0347	LB-3750	08/16/06	13:50	7.0		16.3	m	6.7	m	274	m	178	m	0.3	m	3	m
BP01	W0347	LB-3830	09/07/06	13:19	0.5		20.0		7.1		248		159		8.2		91	
BP01	W0347	LB-3830	09/07/06	13:24	1.0		19.8		7.2		248		159		8.2		91	
BP01	W0347	LB-3830	09/07/06	13:29	2.0		18.8		7.3		248		159		8.2		89	
BP01	W0347	LB-3830	09/07/06	13:34	3.0		18.6		7.3		248		159		8.1		88	
BP01	W0347	LB-3830	09/07/06	13:39	4.0		18.6		7.3		248		159		8.1		87	
BP01	W0347	LB-3830	09/07/06	13:44	5.0		18.5		7.2		248		159		7.8		85	
BP01	W0347	LB-3830	09/07/06	13:49	6.0		18.4		7.1		248		159		7.3		79	
BP01	W0347	LB-3830	09/07/06	13:54	7.0		18.2		6.8		250		160		5.5		59	
BR03	W1445	31-0217	05/26/06	13:47	0.3		14.5		--		--		--		9.6		96	
BR03	W1445	31-0218	05/31/06	13:26	0.2		18.6		--		--		--		8.7		94	
BR03	W1445	31-0285	07/07/06	13:28	0.1		18.6		--		--		--		8.4	i	91	i
BR03	W1445	31-0286	07/12/06	12:05	0.2		19.2		--		--		--		8.6		94	
BR03	W1445	31-0351	08/11/06	13:28	0.1		17.1		--		--		--		9.1		96	
BR03	W1445	31-0352	08/16/06	12:16	0.1		17.1		--		--		--		9.1		96	
CR01	W0206	31-0179	04/26/06	11:19	0.3		8.1		7.1		62		40		12.0		102	
CR01	W0206	31-0211	05/26/06	13:04	0.4		14.3		--		--		--		9.8		98	
CR01	W0206	31-0212	05/31/06	12:50	0.5		18.5		--		--		--		8.9		96	
CR01	W0206	31-0241	05/31/06	12:50	0.3		18.5		7.1		69		45		9.6		102	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
CR01	W0206	31-0279	07/07/06	12:42	0.1		18.0		--		--		--		8.6	i	91	i
CR01	W0206	31-0280	07/12/06	11:31	0.2		18.9		--		--		--		8.7		94	
CR01	W0206	31-0309	07/12/06	12:03	0.2		18.9		7.6	i	82		53		9.4		101	
CR01	W0206	31-0345	08/11/06	12:36	0.2		19.0		--		--		--		8.9		97	
CR01	W0206	31-0375	08/15/06	12:16	0.0	i	18.7		7.6		98		64		9.3		100	
CR01	W0206	31-0346	08/16/06	11:28	0.2		18.2		--		--		--		9.0		98	
CR01	W0206	31-0394	09/19/06	12:50	0.2		17.5		7.8		91		59		9.9		104	
FL01	W0210	31-0181	04/26/06	11:53	0.2		8.0		7.2		99		64		11.8		100	
FL01	W0210	31-0199	05/26/06	11:21	0.6		14.7		--		--		--		9.5		96	
FL01	W0210	31-0257	05/31/06	09:53	0.2		19.3		7.1		88		57		9.4		102	
FL01	W0210	31-0200	05/31/06	10:55	0.4		19.6		--		--		--		8.6		95	
FL01	W0210	31-0267	07/07/06	11:04	0.3		17.2		--		--		--		8.8	i	92	i
FL01	W0210	31-0268	07/12/06	10:10	0.2		17.5		--		--		--		8.7		92	
FL01	W0210	31-0325	07/12/06	12:31	0.1		18.0		7.2		91		59		9.2		97	
FL01	W0210	31-0333	08/11/06	10:32	0.1		18.1		--		--		--		8.7		94	
FL01	W0210	31-0391	08/15/06	12:38	0.1		19.2		7.4		100		65		8.9		97	
FL01	W0210	31-0334	08/16/06	10:03	0.2		17.6		--		--		--		8.7		93	
FL01	W0210	31-0395	09/19/06	11:56	##	i	19.0		7.3		93		60		9.1		98	
FR02	W0198	31-0183	04/26/06	12:13	0.4		9.7		7.3		158		103		11.7		103	
FR02	W0198	31-0202	05/26/06	11:40	0.2		15.7		--		--		--		9.6		99	
FR02	W0198	31-0255	05/31/06	10:20	0.5		19.9		7.2		117		76		9.2		101	
FR02	W0198	31-0203	05/31/06	11:12	0.4		20.4		--		--		--		8.2		92	
FR02	W0198	31-0270	07/07/06	11:21	0.2		19.7		--		--		--		8.4	i	92	i
FR02	W0198	31-0271	07/12/06	10:25	0.1		21.1		--		--		--		8.5		96	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
FR02	W0198	31-0323	07/12/06	12:06	0.2		21.2		7.8		157		102		9.0		101	
FR02	W0198	31-0336	08/11/06	10:52	0.1		17.4		--		--		--		9.4		100	
FR02	W0198	31-0389	08/15/06	12:19	0.2		20.4		7.9		188		122		9.3		103	
FR02	W0198	31-0337	08/16/06	10:22	0.1		17.2		--		--		--		9.0		96	
FR02	W0198	31-0396	09/19/06	11:27	##	i	18.3		7.7		140		91		9.7		103	
FR03	W0201	31-0177	04/26/06	10:49	0.3		8.1		6.9		117	u	76	u	12.0		101	
FR03	W0201	31-0208	05/26/06	12:43	0.8		15.7		--		--		--		9.5		97	
FR03	W0201	31-0232	05/31/06	10:51	0.1		19.4		7.1		110		72		9.2		100	
FR03	W0201	31-0209	05/31/06	12:03	0.9		20.1		--		--		--		8.6		95	
FR03	W0201	31-0276	07/07/06	12:14	0.3		19.7		--		--		--		7.9	i	87	i
FR03	W0201	31-0302	07/12/06	10:13	0.4		20.2		7.4	i	109		71		9.1		101	
FR03	W0201	31-0277	07/12/06	11:09	0.3		20.3		--		--		--		8.1		90	
FR03	W0201	31-0342	08/11/06	11:46	0.1		18.9		--		--		--		9.1		100	
FR03	W0201	31-0368	08/15/06	10:37	0.2		19.0		7.6		144		93		9.3		101	
FR03	W0201	31-0343	08/16/06	11:08	0.1		18.5		--		--		--		9.0		98	
FR03	W0201	31-0393	09/19/06	11:25	0.3		18.0		7.7		119		78		9.9		104	
FR06	W1440	31-0175	04/26/06	10:06	0.1		7.6		6.8		94		61		12.3		103	
FR06	W1440	31-0205	05/26/06	12:13	0.4		15.2		--		--		--		9.8		99	
FR06	W1440	31-0236	05/31/06	11:23	0.2		18.8		7.2		91		59		9.7		104	
FR06	W1440	31-0206	05/31/06	11:42	0.7		18.9		--		--		--		8.9		96	
FR06	W1440	31-0273	07/07/06	11:50	0.2		19.3		--		--		--		8.8	i	97	i
FR06	W1440	31-0304	07/12/06	10:43	0.2		20.1		7.8	i	104		68		9.4		104	
FR06	W1440	31-0274	07/12/06	10:52	0.2		20.1		--		--		--		9.0		100	
FR06	W1440	31-0339	08/11/06	11:23	0.1		21.6		--		--		--		9.0		104	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
FR06	W1440	31-0370	08/15/06	11:09	0.2		19.4		7.8		138		90		9.6		104	
FR06	W1440	31-0340	08/16/06	10:50	0.1		20.8		--		--		--		9.1		103	
FR06	W1440	31-0392	09/19/06	11:46	0.3		18.7		7.9		114		74		10.0		107	
HB01	W1448	31-0223	05/26/06	15:12	0.3		16.1		--		--		--		9.1		94	
HB01	W1448	31-0224	05/31/06	14:44	0.2		22.0		--		--		--		8.1		94	
HB01	W1448	31-0291	07/07/06	14:51	0.1		20.7		--		--		--		8.1	i	92	i
HB01	W1448	31-0292	07/12/06	13:50	0.2		21.2		--		--		--		8.1		92	
HB01	W1448	31-0357	08/11/06	14:53	0.4		20.1		--		--		--		8.5		96	
HB01	W1448	31-0358	08/16/06	14:05	0.4		20.2		--		--		--		8.1		91	
SA01	W0351	31-0187	04/26/06	12:54	0.2		9.4		7.3		160		104		11.2		98	
SA01	W0351	31-0193	05/26/06	10:29	0.2		13.6		--		--		--		9.9		97	
SA01	W0351	31-0194	05/31/06	10:05	0.2		17.2		--		--		--		9.2		96	
SA01	W0351	31-0248	05/31/06	11:28	0.2		17.9		7.5		111		72		9.7		102	
SA01	W0351	31-0261	07/07/06	10:18	0.1		16.1		--		--		--		8.3	i	85	i
SA01	W0351	31-0262	07/12/06	09:25	0.1		17.9		--		--		--		8.8		94	
SA01	W0351	31-0316	07/12/06	10:46	0.1		18.3		7.7		225		146		8.9		94	
SA01	W0351	31-0327	08/11/06	09:34	0.0	i	15.5		--		--		--		8.5		86	
SA01	W0351	31-0382	08/15/06	11:00	0.1		16.6		7.7		300		195		9.3		96	
SA01	W0351	31-0328	08/16/06	09:19	0.1		15.1		--		--		--		8.9		91	
SA01	W0351	31-0398	09/19/06	10:32	##	i	15.6		7.7		223		145		9.8		98	
SB01	W0207	31-0214	05/26/06	13:26	0.5		15.2		--		--		--		9.4		95	
SB01	W0207	31-0215	05/31/06	13:08	0.3		19.9		--		--		--		8.6		95	
SB01	W0207	31-0282	07/07/06	13:08	0.4		18.6		--		--		--		8.5	i	92	i
SB01	W0207	31-0283	07/12/06	11:49	0.2		18.9		--		--		--		8.7		95	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
SB01	W0207	31-0348	08/11/06	13:03	0.1		17.4		--		--		--		8.8		93	
SB01	W0207	31-0349	08/16/06	11:51	0.2		16.0		--		--		--		8.7		90	
SH01	W0348	LB-3630	07/13/06	09:38	0.5		23.9		7.3		259		166		7.2		87	
SH01	W0348	LB-3630	07/13/06	09:48	2.0		23.8		7.3		260		166		7.1		86	
SH01	W0348	LB-3630	07/13/06	10:14	1.5		23.9		7.3		260		166		7.2		87	
SH01	W0348	LB-3630	07/13/06	10:19	3.0		22.5	m	7.0	m	261	m	167	m	6.4	m	75	m
SH01	W0348	LB-3630	07/13/06	10:25	3.2		20.1	m	6.9	m	257	m	165	m	5.7	m	64	m
SH01	W0348	LB-3630	07/13/06	10:30	3.4		17.6	u	6.7		262		168		4.0	u	43	u
SH01	W0348	LB-3630	07/13/06	10:36	3.6		16.3		6.6		267		171		2.2		23	
SH01	W0348	LB-3630	07/13/06	10:40	3.8		15.5	m	6.6	m	273	m	175	m	1.2	m	12	m
SH01	W0348	LB-3630	07/13/06	10:45	4.5		14.7	m	6.6	m	282	m	181	m	0.6	m	6	m
SH01	W0348	LB-3630	07/13/06	10:49	5.0		14.3	m	6.6	m	290	m	186	m	0.2	m	2	m
SH01	W0348	LB-3740	08/16/06	10:27	0.5		23.0	m	7.4	m	300	m	195	m	7.5	m	87	m
SH01	W0348	LB-3740	08/16/06	10:36	1.6		23.0		7.4		300		195		7.5	u	88	u
SH01	W0348	LB-3740	08/16/06	10:42	2.5		23.0		7.4		300		195		7.5	u	87	u
SH01	W0348	LB-3740	08/16/06	10:48	3.5		22.5		7.2		302		196		6.5	u	75	u
SH01	W0348	LB-3740	08/16/06	10:53	4.5		21.0		6.9		309		201		3.7	u	42	u
SH01	W0348	LB-3740	08/16/06	10:59	5.1		16.3		7.0		382		248		0.3		3	
SH01	W0348	LB-3840	09/07/06	11:25	1.1		19.1		7.0		309		198		7.4		81	
SH01	W0348	LB-3840	09/07/06	11:30	2.0		18.6		7.1		309		198		7.2		78	
SH01	W0348	LB-3840	09/07/06	11:35	3.0		18.4		7.0		309		198		6.8		74	
SH01	W0348	LB-3840	09/07/06	11:40	4.1		18.3		7.0		311		199		6.6		71	
SH01	W0348	LB-3840	09/07/06	11:44	5.0		18.2		6.9		313		200		5.4		57	
SH05	W1441	31-0191	04/26/06	13:20	0.0	i	9.4		6.8		38		25		11.2		98	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
SH05	W1441	31-0243	05/31/06	12:18	0.3		18.9		7.1		36		23		9.3		101	
SH05	W1441	31-0311	07/12/06	09:33	0.1		17.9		7.1		52		34		8.7		92	
SH05	W1441	31-0377	08/15/06	10:09	0.1		16.8		7.2		52		34		8.7		89	
SH05	W1441	31-0399	09/19/06	09:42	##	i	15.8		6.9		61		40		9.1		92	
SN04	W1446	31-0220	05/26/06	14:16	0.2		16.2		--		--		--		9.0		93	
SN04	W1446	31-0221	05/31/06	13:59	0.1		21.5		--		--		--		8.1		92	
SN04	W1446	31-0288	07/07/06	14:02	0.2		19.3		--		--		--		8.1	i	89	i
SN04	W1446	31-0289	07/12/06	13:05	0.2		20.4		--		--		--		8.2		91	
SN04	W1446	31-0354	08/11/06	14:02	0.3		18.4		--		--		--		9.0		98	
SN04	W1446	31-0355	08/16/06	13:08	0.2		17.7		--		--		--		8.8		95	
US01	W1748	LB-3660	07/13/06	14:18	0.6		24.4	m	--		--		--		6.7	m	82	m
US01	W1748	LB-3660	07/13/06	14:22	1.0		24.4		--		--		--		6.5		79	
US01	W1748	LB-3660	07/13/06	14:25	1.5		24.1	m	--		--		--		6.2	u, m	75	u, m
US01	W1748	LB-3660	07/13/06	14:29	2.0		20.8	u	--		--		--		0.7		8	
US01	W1748	LB-3660	07/13/06	14:33	3.3		14.4	u, m	--		--		--		0.9	m	9	m
US01	W1748	LB-3660	07/13/06	14:39	4.7		10.1		--		--		--		1.1		10	
US01	W1748	LB-3660	07/13/06	14:43	5.9		7.2	m	--		--		--		<0.2	m	<2	m
US01	W1748	LB-3660	07/13/06	14:47	6.6		6.6	m	--		--		--		<0.2		<2	
US01	W1748	LB-3660	07/13/06	14:51	8.0		6.2	m	--		--		--		<0.2		<2	
US01	W1748	LB-3660	07/13/06	14:55	8.5		6.2	m	--		--		--		<0.2		<2	
US01	W1748	LB-3720	08/08/06	09:38	0.5		25.6		6.9		70		45		6.4		78	
US01	W1748	LB-3720	08/08/06	09:44	1.5		25.2		6.7		70		46		4.9	u	60	u
US01	W1748	LB-3720	08/08/06	09:49	2.6		18.1		6.2		71		46		0.3		3	
US01	W1748	LB-3720	08/08/06	09:54	3.5		13.6		6.2		69		45		<0.2		<2	

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
US01	W1748	LB-3720	08/08/06	09:58	4.5		10.5		6.1		75		49		<0.2		<2	
US01	W1748	LB-3720	08/08/06	10:03	5.5		8.3		6.2		84		54		<0.2		<2	
US01	W1748	LB-3720	08/08/06	10:07	6.5		6.9		6.4		96		62		<0.2		<2	
US01	W1748	LB-3720	08/08/06	10:12	7.6		6.4		6.5		110		71		<0.2		<2	
US01	W1748	LB-3720	08/08/06	10:17	8.5		6.3		6.6		113		74		<0.2		<2	
US01	W1748	LB-3720	08/08/06	10:27	9.1		6.2		6.6		116		75		0.2		2	
US01	W1748	LB-3810	09/07/06	11:01	0.3		18.2		6.8		68		44		8.1		86	
US01	W1748	LB-3810	09/07/06	11:19	1.0		17.7		6.9		68		44		8.1		85	
US01	W1748	LB-3810	09/07/06	11:29	2.0		17.2		6.7		68		44		7.3		76	
US01	W1748	LB-3810	09/07/06	11:38	3.1		16.0		6.2		71		46		1.9	u	19	u
US01	W1748	LB-3810	09/07/06	11:46	4.0		13.0		6.2		78		51		0.2		<2	
US01	W1748	LB-3810	09/07/06	11:52	5.0		10.1		6.2		86		56		<0.2		<2	
US01	W1748	LB-3810	09/07/06	11:57	6.1		7.8		6.5		99		64		<0.2		<2	
US01	W1748	LB-3810	09/07/06	12:04	7.1		7.1		6.6		110		71		<0.2		<2	
US01	W1748	LB-3810	09/07/06	12:11	8.1		6.6		6.6		151		98		<0.2		<2	
VB01	W1447	31-0294	07/07/06	15:27	0.2		16.0		--		--		--		8.6	i	88	i
VB01	W1447	31-0295	07/12/06	14:21	0.3		17.1		--		--		--		8.7		92	
VB01	W1447	31-0360	08/11/06	15:25	0.4		16.0		--		--		--		8.8		90	
VB01	W1447	31-0361	08/16/06	14:30	0.4		16.0		--		--		--		8.7		90	
YL01	W1747	LB-3650	07/13/06	10:21	0.4		24.2		--		--		--		7.1		86	
YL01	W1747	LB-3650	07/13/06	10:26	1.5		24.2	m	--		--		--		6.8	m	82	m
YL01	W1747	LB-3650	07/13/06	10:31	2.5		24.1	u	--		--		--		6.7	u	81	u
YL01	W1747	LB-3650	07/13/06	10:39	2.8		21.0	m	--		--		--		5.7	m	65	m
YL01	W1747	LB-3650	07/13/06	10:46	3.2		19.5	u, m	--		--		--		3.7	u, m	41	u, m

Table 10. 2006 MassDEP DWM Farmington River Watershed attended multi-probe data – rivers and lakes.

Station ID	Unique ID	OWMID	Date	Time	Sample Depth (m)	Depth Qualifiers	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (µS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Dissolved Oxygen Saturation (%)	Dissolved Oxygen Saturation Qualifiers
YL01	W1747	LB-3650	07/13/06	10:51	3.6		17.8	m	--		--		--		1.6	m	17	m
YL01	W1747	LB-3650	07/13/06	10:54	4.0		16.8	m	--		--		--		0.3	m	3	m
YL01	W1747	LB-3650	07/13/06	10:58	4.3		15.8	m	--		--		--		<0.2	m	<2	m
YL01	W1747	LB-3650	07/13/06	11:03	4.6		15.2		--		--		--		<0.2		<2	
YL01	W1747	LB-3730	08/08/06	13:09	0.5		25.9		7.1		55		36		7.0		86	
YL01	W1747	LB-3730	08/08/06	13:14	1.5		25.9		7.1		55		36		7.0		86	
YL01	W1747	LB-3730	08/08/06	13:19	2.5		25.8		7.1		55		36		6.9		85	
YL01	W1747	LB-3730	08/08/06	13:25	3.6		19.0		6.7		90		58		0.3		4	
YL01	W1747	LB-3730	08/08/06	13:35	4.0		17.1		6.6		106		69		<0.2		<2	
YL01	W1747	LB-3820	09/07/06	13:40	0.5		19.7		7.1		56		36		8.3		90	
YL01	W1747	LB-3820	09/07/06	13:49	1.1		18.3		7.0		54		35		8.3		89	
YL01	W1747	LB-3820	09/07/06	13:54	2.0		17.7		7.0		54		35		8.1		85	
YL01	W1747	LB-3820	09/07/06	14:01	3.0		17.4		6.9		56		37		7.1		74	
YL01	W1747	LB-3820	09/07/06	14:08	3.6		17.4		6.9		56		37		7.0		73	

Table 11. 2006 MassDEP DWM Farmington River Watershed unattended probes dissolved oxygen data - rivers.

Station ID	Unique ID	OWMID	Start Date	Deployment Duration (Hours)	Average Dissolved Oxygen (mg/L)	Minimum Dissolved Oxygen (mg/L)	Amount of Time < 5.0 mg/L (Hours)	Percentage of Time < 5.0 mg/L (Hours)	Amount of Time < 6.0 mg/L (Hours)	Percentage of Time < 6.0 mg/L (%)	Average Saturation (%)	Minimum Saturation (%)	Maximum Saturation (%)
BE01	W1444	31-0195	05/26/06	119.5	8.0	7.4	0.0	0.0	0.0	0.0	90	88	92
BE01	W1444	31-0263	07/07/06	119.0	7.9	7.5	0.0	0.0	0.0	0.0	90	88	91
BE01	W1444	31-0329	08/11/06	119.3	8.6	8.2	0.0	0.0	0.0	0.0	91	89	93
BR03	W1445	31-0216	05/26/06	119.5	9.4	8.5	0.0	0.0	0.0	0.0	97	93	100
BR03	W1445	31-0284	07/07/06	98.0	9.0	8.5	0.0	0.0	0.0	0.0	97	95	99
BR03	W1445	31-0350	08/11/06	118.5	9.2	8.5	0.0	0.0	0.0	0.0	95	91	100
CR01	W0206	31-0278	07/07/06	118.5	8.8	8.2	0.0	0.0	0.0	0.0	95	92	100
CR01	W0206	31-0344	08/11/06	118.5	8.7	8.1	0.0	0.0	0.0	0.0	91	87	97
FL01	W0210	31-0198	05/26/06	119.3	9.3	8.3	0.0	0.0	0.0	0.0	97	95	101
FL01	W0210	31-0266	07/07/06	118.8	8.9	8.6	0.0	0.0	0.0	0.0	94	93	97
FL01	W0210	31-0332	08/11/06	119.3	8.7	8.2	0.0	0.0	0.0	0.0	94	91	96
FR02	W0198	31-0201	05/26/06	119.3	8.6	7.4	0.0	0.0	0.0	0.0	93	86	102
FR02	W0198	31-0269	07/07/06	118.8	8.1	7.4	0.0	0.0	0.0	0.0	92	86	100
FR02	W0198	31-0335	08/11/06	119.3	8.5	7.5	0.0	0.0	0.0	0.0	92	84	102
FR03	W0201	31-0207	05/26/06	119.2	8.8	7.7	0.0	0.0	0.0	0.0	95	91	101
FR03	W0201	31-0275	07/07/06	118.8	8.4	7.8	0.0	0.0	0.0	0.0	95	89	101
FR03	W0201	31-0341	08/11/06	119.3	8.8	7.9	0.0	0.0	0.0	0.0	95	89	101
FR06	W1440	31-0204	05/26/06	119.3	8.9	7.8	0.0	0.0	0.0	0.0	94	89	100
FR06	W1440	31-0272	07/07/06	118.8	8.5	7.8	0.0	0.0	0.0	0.0	94	89	101
FR06	W1440	31-0338	08/11/06	119.3	8.8	8.0	0.0	0.0	0.0	0.0	95	89	105
HB01	W1448	31-0222	05/26/06	119.3	8.5	7.7	0.0	0.0	0.0	0.0	93	90	96
HB01	W1448	31-0290	07/07/06	118.8	8.3	7.7	0.0	0.0	0.0	0.0	93	90	97
HB01	W1448	31-0356	08/11/06	103.5	8.7	8.0	0.0	0.0	0.0	0.0	91	86	98
SA01	W0351	31-0192	05/26/06	119.5	9.1	8.2	0.0	0.0	0.0	0.0	94	89	98
SA01	W0351	31-0260	07/07/06	118.8	8.7	8.3	0.0	0.0	0.0	0.0	92	90	95
SA01	W0351	31-0326	08/11/06	119.5	9.0	7.4	0.0	0.0	0.0	0.0	91	78	96
SB01	W0207	31-0213	05/26/06	119.5	9.0	8.2	0.0	0.0	0.0	0.0	95	90	98
SB01	W0207	31-0281	07/07/06	118.3	8.9	8.4	0.0	0.0	0.0	0.0	95	94	98
SB01	W0207	31-0347	08/11/06	118.5	8.8	8.0	0.0	0.0	0.0	0.0	90	85	95
SN04	W1446	31-0219	05/26/06	119.5	8.5	7.6	0.0	0.0	0.0	0.0	92	89	96
SN04	W1446	31-0287	07/07/06	118.8	8.1	7.5	0.0	0.0	0.0	0.0	90	87	94
SN04	W1446	31-0353	08/11/06	118.8	8.9	8.3	0.0	0.0	0.0	0.0	92	87	100
VB01	W1447	31-0293	07/07/06	118.5	8.7	8.1	0.0	0.0	0.0	0.0	90	87	93
VB01	W1447	31-0359	08/11/06	119.0	7.6	3.6	8.6	7.2	11.6	9.7	75	35	85

Table 12. 2006 MassDEP DWM Farmington River Watershed unattended probes temperature data – rivers.

Unique ID	Station ID	OWMID	Start Date	Deployment Duration (Hours)	Average (deg. C)	Maximum (deg. C)	Mean of the Daily Maximum (deg. C)	Amount of Time > 20 deg. C (Hours)	Percentage of Time > 20 deg. C (%)	Amount of Time > 28.3 deg. C (Hours)	Percentage of Time > 28.3 deg. C (%)
FR02	W0198	31-0201	05/26/06	119.3	18.7	24.4	21.8	35.7	29.9	0.0	0.0
FR02	W0198	31-0269	07/07/06	118.8	21.4	24.9	24.3	97.2	81.8	0.0	0.0
FR02	W0198	31-0335	08/11/06	119.3	18.6	23.3	22.5	40.4	33.9	0.0	0.0
FR03	W0201	31-0207	05/26/06	119.2	18.0	22.9	20.3	27.3	22.9	0.0	0.0
FR03	W0201	31-0275	07/07/06	118.8	20.7	24.2	23.1	81.6	68.7	0.0	0.0
FR03	W0201	31-0341	08/11/06	119.3	18.2	22.2	21.2	28.6	24.0	0.0	0.0
CR01	W0206	31-0210	05/26/06	119.7	16.4	20.3	18.4	3.5	2.9	0.0	0.0
CR01	W0206	31-0278	07/07/06	118.5	18.9	21.5	20.7	22.5	19.0	0.0	0.0
CR01	W0206	31-0344	08/11/06	118.5	16.9	20.0	19.4	1.3	1.1	0.0	0.0
SB01	W0207	31-0213	05/26/06	119.5	17.2	20.7	19.0	5.9	4.9	0.0	0.0
SB01	W0207	31-0281	07/07/06	118.3	18.5	21.0	20.3	15.7	13.3	0.0	0.0
SB01	W0207	31-0347	08/11/06	118.5	15.7	19.9	19.1	0.0	0.0	0.0	0.0
FL01	W0210	31-0198	05/26/06	119.3	16.7	21.2	18.6	10.4	8.7	0.0	0.0
FL01	W0210	31-0266	07/07/06	118.8	17.9	19.1	18.9	0.0	0.0	0.0	0.0
FL01	W0210	31-0332	08/11/06	119.3	17.8	20.0	18.9	2.0	1.6	0.0	0.0
SA01	W0351	31-0192	05/26/06	119.5	16.2	19.7	18.2	0.0	0.0	0.0	0.0
SA01	W0351	31-0260	07/07/06	118.8	18.2	20.4	19.6	3.2	2.7	0.0	0.0
SA01	W0351	31-0326	08/11/06	119.5	15.2	17.7	16.5	0.0	0.0	0.0	0.0
FR06	W1440	31-0204	05/26/06	119.3	17.2	21.6	19.2	11.0	9.2	0.0	0.0
FR06	W1440	31-0272	07/07/06	118.8	20.2	23.0	22.2	58.7	49.5	0.0	0.0
FR06	W1440	31-0338	08/11/06	119.3	18.5	22.9	22.1	34.9	29.2	0.0	0.0
BE01	W1444	31-0195	05/26/06	119.5	19.9	23.0	21.8	63.9	53.5	0.0	0.0
BE01	W1444	31-0263	07/07/06	119.0	21.6	23.4	23.0	106.0	89.0	0.0	0.0
BE01	W1444	31-0329	08/11/06	119.3	17.0	19.4	17.7	0.0	0.0	0.0	0.0
BR03	W1445	31-0216	05/26/06	119.5	16.0	20.0	18.1	0.5	0.4	0.0	0.0
BR03	W1445	31-0284	07/07/06	98.0	18.7	21.3	20.5	18.6	19.0	0.0	0.0
BR03	W1445	31-0350	08/11/06	118.5	16.0	19.0	17.7	0.0	0.0	0.0	0.0
SN04	W1446	31-0219	05/26/06	119.5	18.4	22.2	20.2	25.4	21.3	0.0	0.0
SN04	W1446	31-0287	07/07/06	118.8	20.2	22.3	21.7	65.1	54.8	0.0	0.0
SN04	W1446	31-0353	08/11/06	118.8	16.0	18.6	17.2	0.0	0.0	0.0	0.0
VB01	W1447	31-0293	07/07/06	118.5	16.6	18.5	17.6	0.0	0.0	0.0	0.0
VB01	W1447	31-0359	08/11/06	119.0	14.1	16.8	14.7	0.0	0.0	0.0	0.0
HB01	W1448	31-0222	05/26/06	119.3	18.3	22.1	20.0	21.5	18.0	0.0	0.0
HB01	W1448	31-0290	07/07/06	118.8	20.8	23.1	22.4	86.6	72.9	0.0	0.0
HB01	W1448	31-0356	08/11/06	103.5	16.8	20.3	18.8	2.6	2.5	0.0	0.0

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APPENDIX 1: 2006 DATA SYMBOLS AND QUALIFIERS

Excerpted from: Water Quality Data Validation Report for Year 2006 Project Data (CN 300.0)

The following data qualifiers or symbols are used in the MADEP/DWM WQD database for qualified and censored water quality and multi-probe data. Decisions regarding censoring vs. qualification for specific, problematic data are made based on a thorough review of all pertinent information related to the data.

General Symbols (applicable to all types):

" ## " = Censored data (i.e., data that has been discarded for some reason).

" ** " = Missing data (i.e., data that should have been reported).

" -- " = No data (i.e., data not taken/not required)

" ^^ " = No data due to no water

Multi-probe-specific Qualifiers:

" i " = inaccurate readings from Multi-probe likely; may be due to significant pre-survey calibration problems, post-survey checks outside typical acceptance ranges for the low ionic and deionized water checks, lack of calibration of the depth sensor prior to use, or to checks against laboratory analyses. Where documentation on unit pre-calibration is lacking, but SOPs at the time of sampling dictated pre-calibration prior to use, then data are considered potentially inaccurate.

" m " = method not followed; one or more protocols contained in the DWM Multi-probe SOP not followed, i.e., operator error (e.g., less than 3 readings per station (rivers) or per depth (lakes), or instrument failure not allowing method to be implemented.

" s " = field sheet recorded data were used to accept data, not data electronically recorded in the Multi-probe surveyor unit, due to operator error or equipment failure.

" u " = unstable readings, due to lack of sufficient equilibration time prior to final readings, non-representative location, highly-variable water quality conditions, etc. See Section 4.1 for acceptance criteria.

" c " = greater than calibration standard used for pre-calibration, or outside the acceptable range about the calibration standard. Typically used for conductivity (>718, 1,413, 2,760, 6,668 or 12,900 uS/cm) or turbidity (>10, 20 or 40 NTU). It can also be used for TDS and Salinity calculations based on qualified ("c") conductivity data, or that the calculation was not possible due to censored conductivity data (TDS and Salinity are calculated values and entirely based on conductivity reading). See Section 4.1 for acceptance criteria.

" r " = data not representative of actual field conditions.

" t " = tidal conditions

Sample-Specific Qualifiers:

" a " = accuracy as estimated at WES Lab via matrix spikes, PT sample recoveries, internal check standards and lab-fortified blanks did not meet project data quality objectives identified for program or in QAPP.

“ b ” = blank Contamination in lab reagent blanks and/or field blank samples (indicating possible bias high and false positives).

“ d ” = precision of field duplicates (as RPD) did not meet project data quality objectives identified for program or in QAPP. Batched samples may also be affected.

“ e ” = not theoretically possible. Specifically, used for bacteria data where colonies per unit volume for e-coli bacteria > fecal coliform bacteria, for lake Secchi and station depth data where a specific Secchi depth is greater than the reported station depth, and for other incongruous or conflicting results.

“ f ” = frequency of quality control duplicates did not meet data quality objectives identified for program or in QAPP.

“ h ” = holding time violation (usually indicating possible bias low)

“ j ” = ‘estimated’ value; used for lab-related issues where certain lab QC criteria are not met and re-testing is not possible (as identified by the WES lab only). Also used to report sample data where the sample concentration is less than the ‘reporting’ limit or RDL and greater than the method detection limit or MDL (mdl< x <rdl). Also used to note where values have been reported at levels less than the mdl.

“ m ” = method SOP not followed, only partially implemented or not implemented at all, due to complications with sample matrix (e.g., sediment in sample, floc formation), lab error (e.g., cross-contamination between samples), additional steps taken by the lab to deal with matrix complications, lost/unanalyzed samples, and missing data.

“ p ” = samples not preserved per SOP or analytical method requirements.

“ r ” = samples collected may not be representative of actual field conditions, including the possibility of “outlier” data and flow-limited conditions (e.g., pooled).

“ t ” = tidal conditions