

Technical Memorandum

TM 35-10

**MILLERS RIVER WATERSHED 2005
DWM WATER QUALITY MONITORING DATA**

August 2012

**Massachusetts Department of Environmental Protection
Division of Watershed Management
DWM Control Number CN 222.2**

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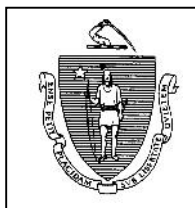


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Introduction

The purpose of this technical memorandum is to publish water quality data collected in the Millers River Watershed as part of the Massachusetts Department of Environmental Protection (MassDEP), Division of Watershed Management (DWM) programmatic monitoring (MassDEP 2005a). The Millers River Watershed water quality surveys were conducted between the months of May and September in 2005. 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.

Project Objectives

The primary goals of the 2005 Millers River Watershed water quality monitoring were to collect biological, physical, and chemical data to assess designated use support status, to evaluate the impacts of NPDES discharges and nonpoint sources of pollution on water quality and biota, and to provide data for the derivation of TMDLs and pollution abatement measures. To fulfill these and other general program goals monitoring was performed to meet the following specific objectives:

- evaluate water quality and aquatic habitat in the Millers River, Otter River and Beaver Brook at stations that bracket major and minor point source discharges;
- evaluate water quality and aquatic habitat in tributaries of the Otter River Watershed in order to assess impacts from known or suspected non-point sources of pollution such as sand and gravel operations and road sanding practices to assess sediment depositional load and turbidity to the Otter River mainstem;
- provide quality-assured fecal coliform and *E. coli* data for the purpose of assessing Primary and Secondary Contact Recreational uses in rivers/streams;

Additional information regarding project objectives may be found in: *Millers River Watershed Sampling and Analysis Plan 2005* (MassDEP 2005b).

Sampling Plan

Water quality surveys were conducted during the weeks of May 9, May 19 (continuous temperature and dissolved oxygen (DO) only), June 13, July 11, August 8 and September 12. Water quality samples from nineteen (19) stations were analyzed for total phosphorous, total nitrogen, ammonia, total suspended solids, color, turbidity, and *E. coli*. The Walls Experiment Station (WES) conducted the analysis of the water quality samples for all parameters excluding color and turbidity which was analyzed by DWM. In-situ parameters (DO, percent DO saturation, pH, conductivity, temperature, and total dissolved solids) were measured at the water quality stations using multi-probe units. Additionally, continuous temperature and dissolved oxygen measurements were collected with multi-probe units deployed for a minimum duration of 48 hours at nineteen (19) stations. Table 1 and Figure 1 provide details and locations of the 2005 sampling sites.

Information regarding the sampling design may be found in *Millers River Watershed Sampling and Analysis Plan 2005* (MassDEP 2005b).

Quality Assurance (QA) and Quality Control (QC)

Quality assurance and quality control procedures used in sample and measurement 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 4.2 - *Water Quality Multi-probe Instrument Use* (MassDEP 2004b) and CN 4.4 - *Multi-probe Deployments for Unattended Logging* (MassDEP 2004c).

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 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 review process for all 2005 DWM data is provided in CN 280.0 – *DATA VALIDATION REPORT for Year 2005 Project Data* (MassDEP 2012b). Appendix 1 of this technical memorandum contains definitions for all data qualifiers.

Field and Analytical Methods

Procedures used for water 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 for multi-probe calibration and deployment are described in CN 4.2 - *Water Quality Multi-probe Instrument Use* (MassDEP 2004b) and CN 4.4 - *Multi-probe Deployments for Unattended Logging* (MassDEP 2004c).

Concurrent with the collection of water quality samples, site characteristics and sampling conditions were recorded on DWM field sheets. Riparian vegetation, observed uses, 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.

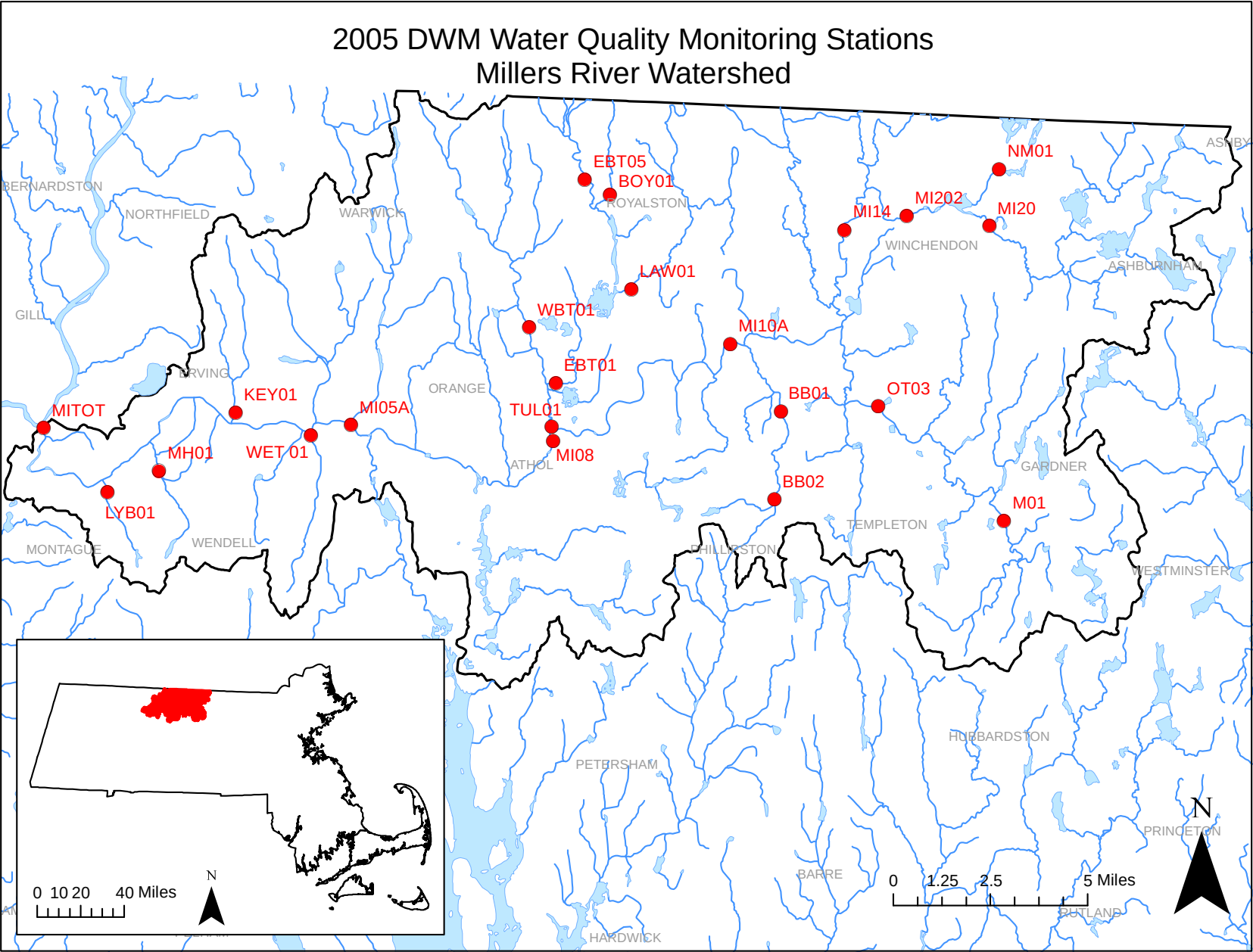
Table 1. MassDEP DWM 2005 Millers River Watershed Sampling Station Descriptions and Sampling Parameters.

Station	Unique ID	Segment	Waterbody	Station Description	Latitude	Longitude	Alkalinity	Nutrients	Total Suspended Solids	E. coli Bacteria	Color	Deployed Multiprobe	Attended multiprobe
M01	W0051	MA35-06	Otter River	[Route 2A bridge, Gardner]	42.56444	-72.01154		X	X	X	X	X	X
MI05A	W0682	MA35-04	Millers River	[Holtshire Road bridge, Orange]	42.59815	-72.34135		X	X	X	X	X	X
MI08	W0684	MA35-04	Millers River	[Route 2A bridge, Athol]	42.59281	-72.23911		X	X	X	X		X
BB01	W0685	MA35-09	Beaver Brook	[Freight Shed Road (south of Route 68), Templeton/Phillipston]	42.60455	-72.12462	X	X		X	X	X	X
OT03	W0686	MA35-08	Otter River	[Route 202 bridge, Templeton]	42.60658	-72.07526		X	X	X	X	X	X
MI10A	W0692	MA35-03	Millers River	[south of Blossom Street, approximately 450 feet west of King Street at USGS flow gauging station #01164000, Royalston]	42.62970	-72.15036						X	X
MI14	W0694	MA35-02	Millers River	[old bridge abutments on eastern shore of closed dirt road (Sibley Road on 1998 Winchendon USGS quad), Winchendon]	42.67232	-72.09306						X	X
MI202	W1311	MA35-01	Millers River	[Route 202, Winchendon]	42.67786	-72.06161	X	X	X	X	X	X	X
MITOT	W1312	MA35-05	Millers River	[East Mineral Road /River Road, Montague/Erving]	42.59581	-72.49616	X	X	X	X	X	X	X
NM01	W1313	MA35-21	North Branch Millers River	[Glenallen Street (Route 202), Winchendon]	42.69532	-72.01523		X	X	X	X		X
TUL01	W1314	MA35-14	Tully River	[east of North Orange Road (approximately 550 feet upstream from confluence with Millers River), Athol]	42.59807	-72.24048	X	X		X	X	X	X
BB02	W1315	New	Beaver Brook	[State Road (Route 202/2A), Phillipston]	42.57191	-72.12741	X	X		X	X	X	X

Table 1. MassDEP DWM 2005 Millers River Watershed Sampling Station Descriptions and Sampling Parameters.

Station	Unique ID	Segment	Waterbody	Station Description	Latitude	Longitude	Alkalinity	Nutrients	Total Suspended Solids	E. coli Bacteria	Color	Deployed Multiprobe	Attended multiprobe
MI20	W1316	MA35-20	Millers River	[unnamed dirt road #450R. Spring Street (Route 12), Winchendon]	42.67431	-72.02013		X	X	X	X	X	X
LYB01	W1334	MA35-19	Lyons Brook	[Mormon Hollow Road, Wendell]	42.57225	-72.46386	X	X		X	X	X	X
MH01	W1335	MA35-15	Mormon Hollow Brook	[Mormon Hollow Road, Wendell]	42.58035	-72.43788	X	X		X	X	X	X
WET 01	W1336	MA35-18	Whetstone Brook	[Depot Road, Wendell]	42.59406	-72.36117	X	X		X	X	X	X
WBT01	W1337	MA35-11	West Branch Tully River	[Royalston Road, Orange]	42.63523	-72.25161	X	X		X	X	X	X
LAW01	W1338	MA35-13	Lawrence Brook	[Athol Road (upstream of Doane Falls), Royalston]	42.64972	-72.20055	X	X	X	X	X		X
BOY01	W1339	MA35-17	Boyce Brook	[Warwick Road (Route 68), Royalston]	42.68498	-72.21159	X	X		X	X	X	X
EBT01	W1340	MA35-12	East Branch Tully River	[Tully Road/Pinedale Avenue, Orange/Athol]	42.61447	-72.23836	X	X		X	X	X	X
KEY01	W1344	MA35-16	Keyup Brook	[Church Street, Erving]	42.60246	-72.39951	X	X		X	X	X	X
EBT05	W1411	MA35-12	East Branch Tully River	[Warwick Road (Route 68), Royalston]	42.69052	-72.22452						X	X

Figure 1. MassDEP DWM 2005 Monitoring Station Locations in the Millers River Watershed



Survey Conditions

Precipitation and stream discharge data were analyzed to estimate hydrological conditions during the 2005 water quality surveys in the Millers River Watershed. Precipitation data collected during the survey period in 2005 were downloaded from the National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center (NCDC) for the Birch Hill Dam (GHCND:USC00190666), Orange Municipal Airport (GHCND:USW00054756), and Tully Lake (GHCND:USC00198573) 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.

Stream discharge data from four real-time United States Geological Survey (USGS) stream gage stations (Table 2) were downloaded from the USGS (USGS 2012a). The entire period of record for the stations 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 the records. The percent of time that the average daily discharge on the extracted dates was equaled or exceeded during the entire period of record for the gage was calculated to put the discharge value into perspective. The precipitation and discharge data are summarized and presented in Table 3. In addition, the 7Q10 for each gage station was downloaded from the USGS web site (Table 2) (USGS 2012b).

Table 2. USGS gage stations used to estimate the hydrological conditions in the Millers River Watershed during the water surveys and the 7Q10 at each gage. (USGS 2012a) (USGS 2012b).

Station Name	Location	Period of Record	7Q10 (cfs)	Remarks
USGS 01166500 Millers River at Erving, MA	Lat 42° 35'51" Long 72° 26'19"	1915 to present	46.8	Flow regulated by power plants and by Lake Monomonac and other reservoirs; high flow regulated by Birch Hill Reservoir 22 mi upstream since 1941 and Tully Lake since 1948. Greater regulation by power plants prior to 1966.
USGS 01163200 Otter River at Otter River, MA	Lat 42°35'18" Long 72°02'29"	1964 to present	4.6	None
USGS 01162500 Priest Brook near Winchendon, MA	Lat 42° 40'57" Long 72° 06'56"	1916 to present	0.45	Prior to 1962, occasional diurnal fluctuation at low flow by mill upstream; prior to 1953, regulation at low flow by mill and ponds.
USGS 01162000 Millers River near Winchendon, MA	Lat 42°41'03" Long 72°05'02"	1916 to present	6.9	Flow regulated by power plant and by Lake Monomonac and other reservoirs upstream, by waste-water treatment plant 500 ft upstream, and infrequent backwater from U.S. Army Corps of Engineers Flood-Control Project at Birch Hill Dam.

Table 3. The precipitation totals (inches) and daily average discharge (cubic feet per second) with percent exceeded on the water quality survey dates and the five days prior to the survey dates. Percent exceeded is percent of time that the discharge was equaled or exceeded during the period of record for the stream gage. Shaded dates indicate the deployment of multiprobes and large bold dates indicate collection of water samples (USGS 2012a) (NOAA 2012).

Date	Precipitation			Discharge (Percent Exceeded)			
	Birch Hill Dam	Orange Municipal Airport	Tully Lake	Millers River @ Erving, MA	Otter River @ Otter River, MA	Priest Brook near Winchendon, MA	Millers River near Winchendon, MA
05/06/05	0.00	0.00	0.00	1060 (18)	115 (15)	48 (21)	239 (18)
05/07/05	0.00	0.13	0.01	968 (21)	109 (16)	44 (24)	225 (20)
05/08/05	0.40	0.00	0.40	1010 (20)	131 (11)	48 (21)	269 (15)
05/09/05	0.00	0.00	0.00	1020 (19)	128 (12)	48 (21)	265 (16)
05/10/05	0.00	0.00	0.00	977 (20)	114 (15)	44 (24)	236 (19)
05/11/05	0.00	0.00	0.00	874 (24)	102 (18)	39 (27)	208 (22)
05/14/05	0.00	0.00	0.00	594 (37)	74 (29)	26 (38)	134 (36)
05/15/05	0.00	0.01	0.00	557 (39)	72 (30)	24 (41)	128 (38)
05/16/05	0.09	0.00	0.12	539 (41)	71 (30)	24 (41)	131 (37)
05/17/05	0.00	0.00	0.00	524 (42)	68 (32)	24 (41)	123 (39)
05/18/05	0.00	0.01	0.00	492 (44)	63 (35)	22 (44)	110 (44)
05/19/05	0.08	0.00	0.04	500 (44)	59 (38)	20 (47)	117 (41)
05/20/05	0.00	0.00	0.00	448 (48)	57 (39)	18 (51)	107 (45)
05/21/05	0.00	0.06	0.00	403 (51)	56 (40)	15 (57)	106 (45)
05/22/05	0.00	0.30	0.60	461 (47)	63 (35)	21 (46)	118 (41)
05/23/05	0.54	0.10	0.07	557 (39)	70 (31)	33 (31)	127 (38)
05/24/05	0.58	0.05	0.42	693 (31)	100 (19)	43 (24)	179 (27)
05/25/05	0.32	0.05	0.22	857 (24)	146 (9)	59 (17)	290 (14)
06/05/05	0.00	0.00	0.00	433 (49)	60 (37)	22 (44)	132 (37)
06/06/05	0.00	0.41	0.00	393 (53)	56 (40)	19 (49)	124 (39)
06/07/05	0.39	0.00	0.30	431 (49)	64 (34)	20 (47)	151 (32)
06/08/05	0.00		0.00	440 (48)	58 (38)	22 (44)	137 (36)
06/09/05	1.15	0.00	0.84	652 (34)	116 (15)	40 (26)	242 (18)
06/10/05	0.00	0.00	0.00	763 (28)	118 (14)	46 (22)	245 (18)
06/11/05	0.00	0.00	0.00	727 (30)	96 (20)	36 (29)	207 (22)
06/12/05	0.00	0.29	0.00	628 (35)	83 (25)	28 (36)	174 (27)
06/13/05	0.13	0.00	0.02	626 (35)	95 (21)	29 (35)	155 (31)
06/14/05	0.03	0.00	0.04	571 (38)	79 (27)	28 (36)	128 (38)
06/15/05	0.25	0.00	0.28	511 (43)	76 (28)	25 (40)	136 (36)
07/03/05	0.00	0.00	0.00	1210 (15)	54 (41)	135 (4)	184 (25)
07/04/05	0.00	0.00	0.00	972 (20)	43 (51)	100 (7)	148 (33)
07/05/05	0.00	0.00	0.00	725 (30)	36 (58)	66 (15)	117 (41)
07/06/05	0.44	0.38	0.42	734 (29)	34 (60)	49 (21)	114 (42)
07/07/05	0.40	0.00	1.08	980 (20)	46 (48)	42 (25)	122 (40)
07/08/05	0.00	0.61	0.00	804 (26)	51 (44)	35 (30)	126 (39)

Table 3. The precipitation totals (inches) and daily average discharge (cubic feet per second) with percent exceeded on the water quality survey dates and the five days prior to the survey dates. Percent exceeded is percent of time that the discharge was equaled or exceeded during the period of record for the stream gage. Shaded dates indicate the deployment of multiprobes and large bold dates indicate collection of water samples (USGS 2012a) (NOAA 2012).

Date	Precipitation			Discharge (Percent Exceeded)			
	Birch Hill Dam	Orange Municipal Airport	Tully Lake	Millers River @ Erving, MA	Otter River @ Otter River, MA	Priest Brook near Winchendon, MA	Millers River near Winchendon, MA
07/09/05	1.40	0.14	1.06	1220 (15)	140 (10)	53 (19)	272 (15)
07/10/05	0.00	0.00	0.06	1340 (13)	158 (8)	64 (15)	269 (15)
07/11/05	0.00	0.00	0.01	1160 (16)	121 (13)	55 (18)	239 (18)
07/12/05	0.00	0.00	0.00	919 (22)	83 (25)	40 (26)	188 (25)
07/13/05	0.00	0.00	0.00	721 (30)	60 (37)	29 (35)	138 (35)
07/31/05	0.00	0.19	0.00	214 (73)	18 (81)	7.4 (74)	29 (83)
08/01/05	0.17	0.32	0.30	219 (72)	19 (79)	9.1 (69)	34 (80)
08/02/05	0.11	0.00	0.03	235 (70)	19 (79)	24 (41)	63 (63)
08/03/05	0.00	0.00	0.00	238 (70)	15 (85)	22 (44)	72 (59)
08/04/05	0.00	0.00	0.00	233 (70)	12 (90)	15 (57)	65 (63)
08/05/05	0.00	0.00	0.00	205 (74)	14 (86)	17 (53)	54 (69)
08/06/05	0.00	0.00	0.00	198 (75)	16 (83)	16 (55)	47 (73)
08/07/05	0.00	0.00	0.00	191 (76)	13 (88)	13 (61)	41 (76)
08/08/05	0.00	0.00	0.00	167 (80)	12 (90)	11 (66)	35 (80)
08/09/05	0.00	0.00	0.00	162 (81)	11 (91)	8.5 (71)	33 (81)
08/10/05	0.00	0.00	0.00	152 (82)	11 (91)	6.8 (76)	31 (82)
09/04/05	0.00	0.00	0.00	120 (88)	9.4 (93)	2.2 (92)	26 (85)
09/05/05	0.00	0.00	0.00	109 (90)	9.2 (93)	2 (93)	24 (87)
09/06/05	0.00	0.00	0.00	98 (92)	8.6 (94)	1.9 (94)	22 (88)
09/07/05	0.00	0.00	0.00	89 (94)	8.2 (95)	1.9 (94)	40 (77)
09/08/05	0.00	0.00	0.00	87 (94)	7.7 (96)	1.8 (94)	80 (55)
09/09/05	0.00	0.00	0.00	116 (89)	6.8 (97)	1.7 (95)	76 (57)
09/10/05	0.00	0.00	0.00	125 (87)	7.5 (96)	1.6 (95)	68 (61)
09/11/05	0.00	0.00	0.00	117 (89)	7.1 (97)	1.3 (96)	60 (65)
09/12/05	0.00	0.00	0.00	105 (91)	7.1 (97)	1.3 (96)	50 (71)
09/13/05	0.00	0.00	0.00	104 (91)	6.1 (98)	1.3 (96)	47 (73)
09/14/05	0.00	0.00	0.00	100 (92)	6.8 (97)	1.2 (97)	42 (76)

Station Observations

Station observations were recorded on field sheets for each survey by a DWM investigator. Station observations are described below in Table 4 for each DWM sampling event (MassDEP 2005c).

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
BB01	W0685	05/11/05	None	Clear	Brownish	S	N	N	N	N	Yes	minor foam on surface	NR	
BB01	W0685	06/14/05	None	Slightly Turbid	Brownish	N	U	U	U	U	Yes		No	
BB01	W0685	07/13/05	None	Clear	Brownish	N	N	N	N	N	Yes	foam, large area @ bridge trapped by stick	No	
BB01	W0685	08/09/05	None	Moderately Turbid	Light Yellow/Tan	N	N	N	N	N	Yes	foam	No	
BB01	W0685	09/14/05	None	Clear	Light Yellow/Tan	N	N	N	D	N	Yes	foam natural	No	
BB01	W0685	06/13/05	Musty	Slightly Turbid	Reddish	Not Applicable – Probe Deploy Field Sheet								
BB01	W0685	07/11/05	None	Clear	Reddish									
BB01	W0685	08/08/05	None	Clear	Reddish									
BB01	W0685	09/12/05	None	Clear	Light Yellow/Tan									
BB02	W1315	05/11/05	Musty	Clear	Brownish	S	S	N	S	N	No		No	
BB02	W1315	06/14/05	None	Slightly Turbid	Brownish	N	U	U	U	U	No		No	
BB02	W1315	07/13/05	None	Clear	Brownish	M	N	N	N	N	No		No	
BB02	W1315	08/09/05	None	Clear	Brownish	M	N	D	N	N	Yes	oil sheen pollen/dust blankets	No	
BB02	W1315	09/14/05	None	Clear	Clear	M	N	N	VD	N	Yes	pollen dust blankets	No	
BB02	W1315	06/13/05	Musty	Slightly Turbid	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
BB02	W1315	07/11/05	Musty	Clear	Light Yellow/Tan									
BB02	W1315	08/08/05	Petroleum	Highly Turbid	Light Yellow/Tan									
BB02	W1315	09/12/05	None	Clear	Clear									
BOY01	W1339	05/11/05	None	Clear	Reddish	N	M	N	N	N	No		No	
BOY01	W1339	06/14/05	None	Clear	Brownish	N	N	N	N	S	NR	foam natural	No	
BOY01	W1339	07/13/05	None	Clear	Brownish	S	N	N	N	N	No		No	discarded rusted pipe 12' in length on shore and into water
BOY01	W1339	08/09/05	None	Clear	Light Yellow/Tan	N	S	N	N	S	Yes	foam very light	No	
BOY01	W1339	09/14/05	None	Clear	Clear	N	N	N	N	Y	No		No	
BOY01	W1339	07/11/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
BOY01	W1339	09/12/05	None	Clear	Clear									
EBT01	W1340	05/11/05	None	Slightly Turbid	Reddish	N	N	N	N	S	No		No	
EBT01	W1340	06/14/05	None	Clear	Brownish	N	U	U	U	S	No		No	
EBT01	W1340	07/13/05	None	Clear	Brownish	S	U	U	U	U	NR	foam natural	No	beer cans
EBT01	W1340	08/09/05	None	Clear	Light Yellow/Tan	N	M	N	N	N	Yes	foam	No	
EBT01	W1340	09/14/05	None	Clear	Brownish	N	N	N	N	N	NR	natural foam	No	
EBT01	W1340	06/10/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
EBT01	W1340	07/08/05	None	Clear	Light Yellow/Tan									

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
EBT01	W1340	08/05/05	Musty	Slightly Turbid	Light Yellow/Tan									
EBT01	W1340	09/09/05	None	Clear	Light Yellow/Tan									
EBT05	W1411	06/13/05	None	Clear	Clear									
EBT05	W1411	08/08/05	Musty	Clear	Clear									
KEY01	W1344	05/11/05	None	Clear	Light Yellow/Tan	N	S	N	N	N	No		No	
KEY01	W1344	06/14/05	None	Clear	Light Yellow/Tan	N	N	M	N	S	No		No	
KEY01	W1344	07/13/05	None	Clear	Light Yellow/Tan	N	N	S	N	N	No		No	
KEY01	W1344	08/09/05	Septic	Clear	Clear	N	M	M	N	M	Yes	oil sheens, algal mat, slight in pooled areas	No	
KEY01	W1344	09/14/05	None	Clear	Light Yellow/Tan	N	N	S	M	M	Yes	bubbly green algal mat; mats in backwater pockets	Yes	flocculant mass rusty floc in side pools
KEY01	W1344	06/10/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
KEY01	W1344	07/08/05	Musty	Clear	Light Yellow/Tan									
KEY01	W1344	08/08/05	None	Clear	Clear									
KEY01	W1344	09/09/05	None	Clear	Clear									
LAW01	W1338	05/11/05	None	Clear	Brownish	S	N	N	N	N	No		No	
LAW01	W1338	06/14/05	None	Clear	Brownish	M	U	U	U	S	NR	patches of foam (NATURAL)	No	
LAW01	W1338	07/13/05	None	Clear	Brownish	M	N	N	N	M	NR	foam natural	No	
LAW01	W1338	08/09/05	None	Clear	Light Yellow/Tan	VD	S	N	N	D	No		No	
LAW01	W1338	09/14/05	None	Clear	Brownish	D	N	N	N	M	No		No	

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
LYB01	W1334	05/11/05	None	Clear	Clear	N	N	N	N	N	No		No	
LYB01	W1334	06/14/05	None	Clear	Light Yellow/Tan	N	N	S	N	M	No		No	
LYB01	W1334	07/13/05	None	Clear	Light Yellow/Tan	N	N	S	N	M	No		No	
LYB01	W1334	08/09/05	None	Clear	Light Yellow/Tan	S	N	S	N	D	No		No	
LYB01	W1334	09/14/05	None	Clear	Clear	N	N	N	N	M	No		No	
LYB01	W1334	05/23/05	None	Clear	Clear	Not Applicable – Probe Deploy Field Sheet								
LYB01	W1334	06/10/05	None	Clear	Clear									
LYB01	W1334	07/08/05	NR	Clear	Light Yellow/Tan									
LYB01	W1334	08/05/05	Musty	Clear	Light Yellow/Tan									
LYB01	W1334	09/09/05	None	Clear	Clear									
M01	W0051	05/11/05	NR	Clear	Brownish	S	VD	N	N	N	No		No	
M01	W0051	06/14/05	None	Slightly Turbid	Brownish	M	U	U	U	U	No		No	
M01	W0051	07/13/05	None	Clear	Brownish	M	D	N	N	N	Yes	unidentified - large area~30' upstream from sampling location	No	
M01	W0051	08/09/05	None	Clear	Brownish	M	M	N	N	N	No	no floating but some green algal scum around exposed rocks	No	
M01	W0051	09/14/05	None	Moderately Turbid	Brownish	M	U	U	U	U	No	oil sheen appears when disturb sediments	No	
M01	W0051	06/13/05	Musty	Slightly Turbid	Reddish	Not Applicable – Probe Deploy Field Sheet								
M01	W0051	07/11/05	Musty	Slightly Turbid	Reddish									

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
M01	W0051	08/08/05	Musty	Slightly Turbid	Light Yellow/Tan									
M01	W0051	09/12/05	None	Slightly Turbid	Light Yellow/Tan									
MH01	W1335	05/11/05	None	Clear	Light Yellow/Tan	N	M	N	N	N	Yes	foam-small foam patches at log jams	No	
MH01	W1335	06/14/05	None	Clear	Light Yellow/Tan	N	N	M	N	M	No		No	
MH01	W1335	07/13/05	None	Clear	Light Yellow/Tan	N	N	M	N	M	Yes	foam slight at log jam	No	
MH01	W1335	08/09/05	None	Clear	Light Yellow/Tan	N	N	M	S	D	No		No	
MH01	W1335	09/14/05	None	Clear	Clear	N	N	M	N	M	No		No	
MH01	W1335	05/23/05	None	Clear	Clear	Not Applicable – Probe Deploy Field Sheet								
MH01	W1335	06/10/05	None	Clear	Clear									
MH01	W1335	07/08/05	None	Clear	Light Yellow/Tan									
MH01	W1335	08/05/05	Musty	Clear	Clear									
MH01	W1335	09/09/05	None	Clear	Clear									
MI05A	W0682	05/11/05	None	Clear	Light Yellow/Tan	N	N	N	N	N	No		No	
MI05A	W0682	06/14/05	None	Slightly Turbid	Dark Tan	S	N	N	N	N	No		No	
MI05A	W0682	07/13/05	None	Slightly Turbid	Dark Tan	N	N	S	N	N	No		No	
MI05A	W0682	08/09/05	None	Slightly Turbid	Dark Tan	M	M	D	M	M	No		No	
MI05A	W0682	09/14/05	None	Clear	Light Yellow/Tan	M	N	M	D	S	No		No	
MI05A	W0682	06/10/05	NR	Slightly Turbid	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
MI05A	W0682	07/08/05	None	Slightly Turbid	NR									
MI05A	W0682	08/05/05	None	Slightly Turbid	Light Yellow/Tan									
MI05A	W0682	09/09/05	None	Clear	Clear									
MI08	W0684	05/11/05	None	Slightly Turbid	Reddish	N	N	N	N	N	NR	foam, foam floating down river	No	
MI08	W0684	06/14/05	None	Slightly Turbid	Brownish	N	N	N	N	N	No	foam appears natural	No	
MI08	W0684	07/13/05	None	Slightly Turbid	Brownish	S	U	U	U	U	No	foam natural	NR	trash old carpet sections
MI08	W0684	08/09/05	None	Clear	Brownish	N	M	N	N	N	NR	foam light/sparse foam	Yes	trash light trash
MI08	W0684	09/14/05	None	Clear	Brownish	N	N	N	N	N	Yes	natural foam	No	rug at shoreline
MI10A	W0692	05/19/05	Septic Sewage	Slightly Turbid	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
MI10A	W0692	06/13/05	None	Clear	Light Yellow/Tan									
MI10A	W0692	07/11/05	None	Slightly Turbid	Light Yellow/Tan									
MI10A	W0692	08/08/05	Musty	Clear	Reddish									
MI10A	W0692	09/12/05	None	Clear	Light Yellow/Tan									
MI14	W0694	06/13/05	Musty	Clear	Light Yellow/Tan									
MI14	W0694	07/11/05	None	Clear	Light Yellow/Tan									
MI14	W0694	08/08/05	None	Slightly Turbid	Light Yellow/Tan									
MI14	W0694	09/12/05	None	Slightly Turbid	Light Yellow/Tan									
MI20	W1316	05/11/05	Musty	Clear	Brownish	N	N	N	S	N	No		No	

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
MI20	W1316	06/14/05	None	Slightly Turbid	Brownish	N	U	U	U	U	No		No	
MI20	W1316	07/13/05	None	Clear	Brownish	M	N	N	N	N	No		No	
MI20	W1316	08/09/05	Musty	Slightly Turbid	Reddish	S	N	N	N	N	Yes	oil sheens, pollen dust blankets	No	
MI20	W1316	09/14/05	None	Highly Turbid	Light Yellow/Tan	S	U	U	U	U	Yes	oil sheens, pollen dust blankets, foam	No	
MI20	W1316	06/13/05	Musty	Clear	Reddish	Not Applicable – Probe Deploy Field Sheet								
MI20	W1316	07/11/05	Musty	Slightly Turbid	Light Yellow/Tan									
MI20	W1316	08/08/05	Musty	Slightly Turbid	Reddish									
MI20	W1316	09/12/05	Musty	Slightly Turbid	Reddish									
MI202	W1311	05/11/05	None	Clear	Brownish	S	S	N	N	S	No		No	
MI202	W1311	06/14/05	None	Clear	Light Yellow/Tan	S	N	S	N	D	No		No	
MI202	W1311	07/13/05	None	Clear	Light Yellow/Tan	S	N	D	N	N	No		No	
MI202	W1311	08/09/05	None	Slightly Turbid	Brownish	S	D	N	N	N	No		No	
MI202	W1311	09/14/05	None	Clear	Light Yellow/Tan	N	N	D	N	D	No		No	
MI202	W1311	05/19/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
MI202	W1311	06/13/05	Musty	Clear	Light Yellow/Tan									
MI202	W1311	07/11/05	None	Slightly Turbid	Light Yellow/Tan									
MI202	W1311	08/08/05	Musty	Slightly Turbid	Light Yellow/Tan									
MI202	W1311	09/12/05	Musty	Slightly Turbid	Light Yellow/Tan									

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
MITOT	W1312	05/11/05	None	Clear	Rusty	N	N	S	N	N	U		No	
MITOT	W1312	06/14/05	None	Clear	Light Yellow/Tan	N	N	S	N	N	Yes	foam	No	
MITOT	W1312	07/13/05	None	Clear	Dark Tan	N	N	S	N	N	No		No	
MITOT	W1312	08/09/05	Musty	Slightly Turbid	Dark Tan	N	N	M	S	S	No		No	
MITOT	W1312	09/14/05	None	Clear	Dark Tan	N	N	S	N	S	Yes	lots of foam - big yellow blobs	No	
MITOT	W1312	06/10/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
MITOT	W1312	07/08/05	None	Slightly Turbid	Light Yellow/Tan									
MITOT	W1312	08/05/05	Musty	Clear	Light Yellow/Tan									
MITOT	W1312	09/09/05	None	Clear	Clear									
NM01	W1313	05/11/05	None	Clear	Clear	N	M	M	N	N	No		No	
NM01	W1313	06/14/05	None	Clear	Light Yellow/Tan	M	N	D	N	M	No		No	
NM01	W1313	07/13/05	None	Clear	Light Yellow/Tan	M	N	N	N	N	No		No	
NM01	W1313	08/09/05	None	Clear	Clear	M	N	M	N	VD	Yes	foam	No	
NM01	W1313	09/14/05	None	Clear	Clear	M	N	D	N	N	No		No	
OT03	W0686	05/11/05	Septic	Clear	Brownish	N	S	N	N	N	Yes	slight foam	No	
OT03	W0686	06/14/05	None	Slightly Turbid	Brownish	N	U	U	U	U	Yes	foam	No	
OT03	W0686	07/13/05	None	Moderately Turbid	Brownish	N	N	N	N	N	Yes	foam	No	
OT03	W0686	08/09/05	None	Slightly Turbid	Brownish	N	N	N	N	N	Yes		No	

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
OT03	W0686	09/14/05	None	Clear	Light Yellow/Tan	N	N	N	N	N	Yes	foam	No	
OT03	W0686	05/19/05	Chlorine Septic Sewage	Slightly Turbid	Brownish	Not Applicable – Probe Deploy Field Sheet								
OT03	W0686	06/13/05	Musty	Clear	Reddish									
OT03	W0686	07/11/05	None	Highly Turbid	Light Yellow/Tan									
OT03	W0686	08/08/05	None	Moderately Turbid	Reddish									
OT03	W0686	09/12/05	Musty	Clear	Light Yellow/Tan									
TUL01	W1314	05/11/05	None	Slightly Turbid	Reddish	N	N	N	N	N	Yes	white foam in mid channel	No	
TUL01	W1314	06/14/05	None	Moderately Turbid	Brownish	N	N	N	N	N	NR	natural foam	No	
TUL01	W1314	07/13/05	None	Slightly Turbid	Brownish	UO	U	U	U	U	NR	foam natural	No	
TUL01	W1314	08/09/05	None	Clear	Brownish	N	N	N	N	N	Yes	foam very little foam	No	
TUL01	W1314	09/14/05	None	Clear	Brownish	N	N	N	N	N	No		No	
TUL01	W1314	05/23/05	None	Slightly Turbid	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
TUL01	W1314	06/10/05	Musty	Slightly Turbid	Light Yellow/Tan									
TUL01	W1314	07/08/05	None	Slightly Turbid	Brownish									
TUL01	W1314	08/05/05	Musty	Slightly Turbid	Light Yellow/Tan									
TUL01	W1314	09/09/05	None	Clear	Light Yellow/Tan									
WBT01	W1337	05/11/05	None	Clear	Reddish	S	Y	N	N	N	No		No	
WBT01	W1337	06/14/05	None	Clear	Clear	NR	S	N	N	N	No		No	

Table 4. 2005 field observations from MassDEP DWM Millers River Watershed 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 2005c)

Site	Unique ID	Date	Odor	Water Clarity	Color	Aquatic Plants	Filamentous Algae	Film Algae	Loose Floc	Moss	Floating Scum	Floating Scum Comments	Obj. Deposits	Objectionable Deposit Comments
WBT01	W1337	07/13/05	None	Clear	Brownish	S	N	N	N	S	NR	slight natural foam	No	
WBT01	W1337	08/09/05	None	Clear	Light Yellow/Tan	S	M	N	N	N	No		No	
WBT01	W1337	09/14/05	None	Clear	Brownish	S	Y	N	N	N	No		No	
WBT01	W1337	06/10/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
WBT01	W1337	07/08/05	Musty	Slightly Turbid	Light Yellow/Tan									
WBT01	W1337	08/05/05	None	Clear	Light Yellow/Tan									
WBT01	W1337	09/09/05	None	Clear	Light Yellow/Tan									
WET 01	W1336	05/11/05	None	Clear	Light Yellow/Tan	N	N	N	N	N	No		No	
WET 01	W1336	06/14/05	None	Clear	Light Yellow/Tan	S	N	S	N	N	No		No	
WET 01	W1336	07/13/05	None	Clear	Light Yellow/Tan	S	N	S	N	N	No		No	
WET 01	W1336	08/09/05	None	Clear	Light Yellow/Tan	S	N	M	S	N	No		No	
WET 01	W1336	09/14/05	None	Clear	Light Yellow/Tan	S	S	M	D	N	No		No	
WET 01	W1336	06/10/05	None	Clear	Light Yellow/Tan	Not Applicable – Probe Deploy Field Sheet								
WET 01	W1336	07/08/05	Musty	Clear	Light Yellow/Tan									
WET 01	W1336	08/05/05	Musty	Clear	Clear									
WET 01	W1336	09/09/05	None	Clear	Clear									

Water Quality Data

All MassDEP DWM water quality data are managed and maintained in the Water Quality Data (WQD) Access Database. Tables 5 – 8 below are 2005 data for the Millers River Watershed. 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 2005), and are in addition to separate quality assurance activities and laboratory validation steps undertaken by the WES. Data qualifiers are listed in Appendix 1.

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0051	M01	5/11/2005	930	35-1129		Ammonia-N	mg/L	<0.02	no	--
W0051	M01	6/14/2005	905	35-1208		Ammonia-N	mg/L	0.09	no	--
W0051	M01	7/13/2005	850	35-1457		Ammonia-N	mg/L	0.04	no	--
W0051	M01	8/9/2005	847	35-1517		Ammonia-N	mg/L	0.07	no	--
W0051	M01	9/14/2005	843	35-1676		Ammonia-N	mg/L	0.31	no	--
W0051	M01	5/11/2005	930	35-1129		Total Nitrogen	mg/L	<0.040	no	b
W0051	M01	6/14/2005	905	35-1208		Total Nitrogen	mg/L	0.88	no	--
W0051	M01	7/13/2005	850	35-1457		Total Nitrogen	mg/L	0.85	no	b
W0051	M01	8/9/2005	847	35-1517		Total Nitrogen	mg/L	0.84	no	--
W0051	M01	9/14/2005	843	35-1676		Total Nitrogen	mg/L	0.68	no	b
W0051	M01	5/11/2005	930	35-1129		Total Phosphorus	mg/L	0.018	no	--
W0051	M01	6/14/2005	905	35-1208		Total Phosphorus	mg/L	0.068	no	--
W0051	M01	7/13/2005	850	35-1457		Total Phosphorus	mg/L	0.060	no	--
W0051	M01	8/9/2005	847	35-1517		Total Phosphorus	mg/L	0.062	no	--
W0051	M01	9/14/2005	843	35-1676		Total Phosphorus	mg/L	0.081	no	--
W0051	M01	5/11/2005	930	35-1129		<i>E. coli</i>	CFU/100 mL	6	no	--
W0051	M01	6/14/2005	905	35-1208		<i>E. coli</i>	CFU/100 mL	64	no	e
W0051	M01	7/13/2005	850	35-1457		<i>E. coli</i>	CFU/100 mL	40	no	e
W0051	M01	8/9/2005	847	35-1517		<i>E. coli</i>	CFU/100 mL	120	no	e
W0051	M01	9/14/2005	843	35-1676		<i>E. coli</i>	CFU/100 mL	210	no	e
W0051	M01	5/11/2005	930	35-1129		Fecal Coliforms	CFU/100 mL	6	no	--
W0051	M01	6/14/2005	905	35-1208		Fecal Coliforms	CFU/100 mL	32	no	e
W0051	M01	7/13/2005	850	35-1457		Fecal Coliforms	CFU/100 mL	32	no	e
W0051	M01	8/9/2005	847	35-1517		Fecal Coliforms	CFU/100 mL	71	no	e
W0051	M01	9/14/2005	843	35-1676		Fecal Coliforms	CFU/100 mL	180	no	e
W0051	M01	5/11/2005	930	35-1129		Turbidity	NTU	2.6	no	--
W0051	M01	6/14/2005	905	35-1208		Turbidity	NTU	8.5	no	--
W0051	M01	7/13/2005	850	35-1457		Turbidity	NTU	8.4	no	--
W0051	M01	8/9/2005	847	35-1517		Turbidity	NTU	13.0	no	--
W0051	M01	9/14/2005	843	35-1676		Turbidity	NTU	1.4	no	--
W0051	M01	5/11/2005	930	35-1129		Apparent color	PCU	60	no	--
W0051	M01	6/14/2005	905	35-1208		Apparent color	PCU	280	no	--
W0051	M01	7/13/2005	850	35-1457		Apparent color	PCU	250	no	--
W0051	M01	8/9/2005	847	35-1517		Apparent color	PCU	230	no	--
W0051	M01	9/14/2005	843	35-1676		Apparent color	PCU	180	no	--
W0051	M01	5/11/2005	930	35-1129		True Color	PCU	55	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0051	M01	6/14/2005	905	35-1208		True Color	PCU	200	no	--
W0051	M01	7/13/2005	850	35-1457		True Color	PCU	200	no	--
W0051	M01	8/9/2005	847	35-1517		True Color	PCU	150	no	--
W0051	M01	9/14/2005	843	35-1676		True Color	PCU	90	no	--
W0051	M01	5/11/2005	930	35-1129		Suspended Solids	mg/L	2.8	no	--
W0051	M01	6/14/2005	905	35-1208		Suspended Solids	mg/L	10	no	--
W0051	M01	7/13/2005	850	35-1457		Suspended Solids	mg/L	8.9	no	--
W0051	M01	8/9/2005	847	35-1517		Suspended Solids	mg/L	7.8	no	j
W0051	M01	9/14/2005	843	35-1676		Suspended Solids	mg/L	8.3	no	--
W0682	MI05A	5/11/2005	1145	35-1112		Ammonia-N	mg/L	<0.02	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Ammonia-N	mg/L	0.10	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Ammonia-N	mg/L	<0.02	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Ammonia-N	mg/L	<0.02	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Ammonia-N	mg/L	<0.02	no	--
W0682	MI05A	5/11/2005	1145	35-1112		Total Nitrogen	mg/L	0.41	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Total Nitrogen	mg/L	0.88	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Total Nitrogen	mg/L	0.66	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Total Nitrogen	mg/L	1.1	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Total Nitrogen	mg/L	1.2	no	--
W0682	MI05A	5/11/2005	1145	35-1112		Total Phosphorus	mg/L	0.024	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Total Phosphorus	mg/L	0.073	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Total Phosphorus	mg/L	0.055	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Total Phosphorus	mg/L	0.043	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Total Phosphorus	mg/L	0.043	no	--
W0682	MI05A	5/11/2005	1145	35-1112		<i>E. coli</i>	CFU/100 mL	13	no	--
W0682	MI05A	6/14/2005	1120	35-1198		<i>E. coli</i>	CFU/100 mL	130	no	e
W0682	MI05A	7/13/2005	1045	35-1447		<i>E. coli</i>	CFU/100 mL	39	no	--
W0682	MI05A	8/9/2005	1100	35-1507		<i>E. coli</i>	CFU/100 mL	120	no	--
W0682	MI05A	9/14/2005	1030	35-1667		<i>E. coli</i>	CFU/100 mL	170	no	e
W0682	MI05A	5/11/2005	1145	35-1112		Fecal Coliforms	CFU/100 mL	19	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Fecal Coliforms	CFU/100 mL	120	no	e
W0682	MI05A	7/13/2005	1045	35-1447		Fecal Coliforms	CFU/100 mL	39	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Fecal Coliforms	CFU/100 mL	190	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Fecal Coliforms	CFU/100 mL	150	no	e
W0682	MI05A	5/11/2005	1145	35-1112		Turbidity	NTU	2.0	no	b
W0682	MI05A	6/14/2005	1120	35-1198		Turbidity	NTU	3.8	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Turbidity	NTU	2.4	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Turbidity	NTU	1.7	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Turbidity	NTU	1.4	no	--
W0682	MI05A	5/11/2005	1145	35-1112		Apparent color	PCU	55	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Apparent color	PCU	110	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Apparent color	PCU	130	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Apparent color	PCU	80	no	--
W0682	MI05A	9/14/2005	1030	35-1667		Apparent color	PCU	80	no	--
W0682	MI05A	5/11/2005	1145	35-1112		True Color	PCU	50	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0682	MI05A	6/14/2005	1120	35-1198		True Color	PCU	90	no	--
W0682	MI05A	7/13/2005	1045	35-1447		True Color	PCU	100	no	--
W0682	MI05A	8/9/2005	1100	35-1507		True Color	PCU	70	no	--
W0682	MI05A	9/14/2005	1030	35-1667		True Color	PCU	70	no	--
W0682	MI05A	5/11/2005	1145	35-1112		Suspended Solids	mg/L	1.8	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Suspended Solids	mg/L	4.2	no	--
W0682	MI05A	6/14/2005	1120	35-1198		Suspended Solids	mg/L	4.2	no	--
W0682	MI05A	7/13/2005	1045	35-1447		Suspended Solids	mg/L	4.5	no	--
W0682	MI05A	8/9/2005	1100	35-1507		Suspended Solids	mg/L	<1.0	no	j
W0682	MI05A	9/14/2005	1030	35-1667		Suspended Solids	mg/L	<1.0	no	d
W0684	MI08	5/11/2005	952	35-1114		Ammonia-N	mg/L	<0.02	no	--
W0684	MI08	6/14/2005	927	35-1199		Ammonia-N	mg/L	0.08	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	Ammonia-N	mg/L	<0.02	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Ammonia-N	--	--	--	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	Ammonia-N	mg/L	<0.02	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	Ammonia-N	mg/l	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Ammonia-N	mg/L	##	yes	b
W0684	MI08	5/11/2005	952	35-1114		Total Nitrogen	mg/L	0.38	no	--
W0684	MI08	6/14/2005	927	35-1199		Total Nitrogen	mg/L	0.81	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	Total Nitrogen	mg/L	0.57	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Total Nitrogen	--	--	--	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	Total Nitrogen	mg/L	1.0	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	Total Nitrogen	mg/l	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Total Nitrogen	mg/L	0.88	no	--
W0684	MI08	5/11/2005	952	35-1114		Total Phosphorus	mg/L	0.024	no	--
W0684	MI08	6/14/2005	927	35-1199		Total Phosphorus	mg/L	0.067	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	Total Phosphorus	mg/L	0.039	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Total Phosphorus	--	--	--	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	Total Phosphorus	mg/L	0.038	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	Total Phosphorus	mg/l	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Total Phosphorus	mg/L	0.037	no	--
W0684	MI08	5/11/2005	952	35-1114		<i>E. coli</i>	CFU/100 mL	6	no	--
W0684	MI08	6/14/2005	927	35-1199		<i>E. coli</i>	CFU/100 mL	90	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	<i>E. coli</i>	CFU/100 mL	97	no	e
W0684	MI08	8/9/2005	849	35-1508	35-1509	<i>E. coli</i>	CFU/100 mL	90	no	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	<i>E. coli</i>	CFU/100 mL	32	no	e
W0684	MI08	5/11/2005	952	35-1114		Fecal Coliforms	CFU/100 mL	19	no	--
W0684	MI08	6/14/2005	927	35-1199		Fecal Coliforms	CFU/100 mL	100	no	d
W0684	MI08	7/13/2005	901	35-1448	35-1449	Fecal Coliforms	CFU/100 mL	66	no	e
W0684	MI08	8/9/2005	849	35-1508	35-1509	Fecal Coliforms	CFU/100 mL	120	no	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Fecal Coliforms	CFU/100 mL	26	no	e
W0684	MI08	5/11/2005	952	35-1114		Turbidity	NTU	1.6	no	--
W0684	MI08	6/14/2005	927	35-1199		Turbidity	NTU	3.9	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	Turbidity	NTU	2.6	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Turbidity	--	--	--	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0684	MI08	8/9/2005	849	35-1508	35-1509	Turbidity	NTU	3.4	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	Turbidity	NTU	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Turbidity	NTU	2.3	no	--
W0684	MI08	5/11/2005	952	35-1114		Apparent color	PCU	50	no	--
W0684	MI08	6/14/2005	927	35-1199		Apparent color	PCU	110	no	d
W0684	MI08	7/13/2005	901	35-1448	35-1449	Apparent color	PCU	120	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Apparent color	--	--	--	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	Apparent color	PCU	90	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	Apparent color	PCU	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	Apparent color	PCU	70	no	--
W0684	MI08	5/11/2005	952	35-1114		True Color	PCU	45	no	--
W0684	MI08	6/14/2005	927	35-1199		True Color	PCU	100	no	d
W0684	MI08	7/13/2005	901	35-1448	35-1449	True Color	PCU	100	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	True Color	--	--	--	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	True Color	PCU	80	no	--
W0684	MI08	8/9/2005	850	35-1509	35-1508	True Color	PCU	**	--	--
W0684	MI08	9/14/2005	856	35-1668	35-1685	True Color	PCU	60	no	--
W0684	MI08	5/11/2005	952	35-1114	35-1115	Suspended Solids	mg/L	1.6	no	d
W0684	MI08	5/11/2005	952	35-1115	35-1114	Suspended Solids	mg/L	2.0	no	d
W0684	MI08	6/14/2005	927	35-1199		Suspended Solids	mg/L	5.1	no	--
W0684	MI08	7/13/2005	901	35-1448	35-1449	Suspended Solids	mg/L	4.6	no	--
W0684	MI08	7/13/2005	905	35-1449	35-1448	Suspended Solids	mg/L	4.4	no	--
W0684	MI08	8/9/2005	849	35-1508	35-1509	Suspended Solids	mg/L	1.7	no	d,j
W0684	MI08	8/9/2005	850	35-1509	35-1508	Suspended Solids	mg/L	1.3	no	d,j
W0684	MI08	9/14/2005	856	35-1668	35-1685	Suspended Solids	mg/L	<1.0	no	--
W0684	MI08	9/14/2005	859	35-1685	35-1668	Suspended Solids	mg/L	<1.0	no	--
W0685	BB01	5/11/2005	1025	35-1133		Ammonia-N	mg/L	<0.02	no	--
W0685	BB01	6/14/2005	1005	35-1210		Ammonia-N	mg/L	0.05	no	--
W0685	BB01	7/13/2005	947	35-1459		Ammonia-N	mg/L	0.04	no	--
W0685	BB01	8/9/2005	957	35-1519		Ammonia-N	mg/L	0.04	no	--
W0685	BB01	9/14/2005	938	35-1678		Ammonia-N	mg/L	0.07	no	--
W0685	BB01	5/11/2005	1025	35-1133		Total Nitrogen	mg/L	##	yes	h,b
W0685	BB01	6/14/2005	1005	35-1210		Total Nitrogen	mg/L	0.93	no	--
W0685	BB01	7/13/2005	947	35-1459		Total Nitrogen	mg/L	0.70	no	b
W0685	BB01	8/9/2005	957	35-1519		Total Nitrogen	mg/L	0.84	no	--
W0685	BB01	9/14/2005	938	35-1678		Total Nitrogen	mg/L	1.1	no	b
W0685	BB01	5/11/2005	1025	35-1133		Total Phosphorus	mg/L	0.051	no	--
W0685	BB01	6/14/2005	1005	35-1210		Total Phosphorus	mg/L	0.15	no	--
W0685	BB01	7/13/2005	947	35-1459		Total Phosphorus	mg/L	0.12	no	--
W0685	BB01	8/9/2005	957	35-1519		Total Phosphorus	mg/L	0.15	no	--
W0685	BB01	9/14/2005	938	35-1678		Total Phosphorus	mg/L	0.35	no	--
W0685	BB01	5/11/2005	1025	35-1133		<i>E. coli</i>	CFU/100 mL	<6	no	--
W0685	BB01	6/14/2005	1005	35-1210		<i>E. coli</i>	CFU/100 mL	64	no	e
W0685	BB01	7/13/2005	947	35-1459		<i>E. coli</i>	CFU/100 mL	<6	no	--
W0685	BB01	8/9/2005	957	35-1519		<i>E. coli</i>	CFU/100 mL	45	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0685	BB01	9/14/2005	938	35-1678		<i>E. coli</i>	CFU/100 mL	65	no	e
W0685	BB01	5/11/2005	1025	35-1133		Fecal Coliforms	CFU/100 mL	6	no	--
W0685	BB01	6/14/2005	1005	35-1210		Fecal Coliforms	CFU/100 mL	45	no	e
W0685	BB01	7/13/2005	947	35-1459		Fecal Coliforms	CFU/100 mL	13	no	--
W0685	BB01	8/9/2005	957	35-1519		Fecal Coliforms	CFU/100 mL	45	no	--
W0685	BB01	9/14/2005	938	35-1678		Fecal Coliforms	CFU/100 mL	39	no	e
W0685	BB01	5/11/2005	1025	35-1133		Turbidity	NTU	2.9	no	--
W0685	BB01	6/14/2005	1005	35-1210		Turbidity	NTU	5.4	no	--
W0685	BB01	7/13/2005	947	35-1459		Turbidity	NTU	1.5	no	--
W0685	BB01	8/9/2005	957	35-1519		Turbidity	NTU	2.1	no	--
W0685	BB01	9/14/2005	938	35-1678		Turbidity	NTU	1.3	no	--
W0685	BB01	5/11/2005	1025	35-1133		Apparent color	PCU	100	no	--
W0685	BB01	6/14/2005	1005	35-1210		Apparent color	PCU	230	no	--
W0685	BB01	7/13/2005	947	35-1459		Apparent color	PCU	210	no	--
W0685	BB01	8/9/2005	957	35-1519		Apparent color	PCU	130	no	--
W0685	BB01	9/14/2005	938	35-1678		Apparent color	PCU	100	no	--
W0685	BB01	5/11/2005	1025	35-1133		True Color	PCU	65	no	--
W0685	BB01	6/14/2005	1005	35-1210		True Color	PCU	230	no	--
W0685	BB01	7/13/2005	947	35-1459		True Color	PCU	200	no	--
W0685	BB01	8/9/2005	957	35-1519		True Color	PCU	100	no	--
W0685	BB01	9/14/2005	938	35-1678		True Color	PCU	90	no	--
W0685	BB01	5/11/2005	1025	35-1133		Alkalinity	mg/L	<2	no	--
W0685	BB01	6/14/2005	1005	35-1210		Alkalinity	mg/L	5	no	--
W0685	BB01	7/13/2005	947	35-1459		Alkalinity	mg/L	5	no	--
W0685	BB01	8/9/2005	957	35-1519		Alkalinity	mg/L	4	no	--
W0685	BB01	9/14/2005	938	35-1678		Alkalinity	mg/L	5	no	--
W0686	OT03	5/11/2005	1050	35-1135		Ammonia-N	mg/L	0.26	no	--
W0686	OT03	6/14/2005	1035	35-1211		Ammonia-N	mg/L	0.45	no	--
W0686	OT03	7/13/2005	1010	35-1460		Ammonia-N	mg/L	0.44	no	--
W0686	OT03	8/9/2005	1025	35-1520		Ammonia-N	mg/L	1.6	no	--
W0686	OT03	9/14/2005	1006	35-1679		Ammonia-N	mg/L	0.95	no	--
W0686	OT03	5/11/2005	1050	35-1135		Total Nitrogen	mg/L	1.6	no	b
W0686	OT03	6/14/2005	1035	35-1211		Total Nitrogen	mg/L	2.1	no	--
W0686	OT03	7/13/2005	1010	35-1460		Total Nitrogen	mg/L	2.3	no	b
W0686	OT03	8/9/2005	1025	35-1520		Total Nitrogen	mg/L	6.2	no	--
W0686	OT03	9/14/2005	1006	35-1679		Total Nitrogen	mg/L	7.7	no	b
W0686	OT03	5/11/2005	1050	35-1135		Total Phosphorus	mg/L	0.099	no	--
W0686	OT03	6/14/2005	1035	35-1211		Total Phosphorus	mg/L	0.19	no	--
W0686	OT03	7/13/2005	1010	35-1460		Total Phosphorus	mg/L	0.13	no	--
W0686	OT03	8/9/2005	1025	35-1520		Total Phosphorus	mg/L	0.13	no	--
W0686	OT03	9/14/2005	1006	35-1679		Total Phosphorus	mg/L	0.16	no	--
W0686	OT03	5/11/2005	1050	35-1135		<i>E. coli</i>	CFU/100 mL	<6	no	--
W0686	OT03	6/14/2005	1035	35-1211		<i>E. coli</i>	CFU/100 mL	130	no	e
W0686	OT03	7/13/2005	1010	35-1460		<i>E. coli</i>	CFU/100 mL	90	no	--
W0686	OT03	8/9/2005	1025	35-1520		<i>E. coli</i>	CFU/100 mL	370	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W0686	OT03	9/14/2005	1006	35-1679		<i>E. coli</i>	CFU/100 mL	97	no	--
W0686	OT03	5/11/2005	1050	35-1135		Fecal Coliforms	CFU/100 mL	<6	no	--
W0686	OT03	6/14/2005	1035	35-1211		Fecal Coliforms	CFU/100 mL	100	no	e
W0686	OT03	7/13/2005	1010	35-1460		Fecal Coliforms	CFU/100 mL	150	no	--
W0686	OT03	8/9/2005	1025	35-1520		Fecal Coliforms	CFU/100 mL	570	no	--
W0686	OT03	9/14/2005	1006	35-1679		Fecal Coliforms	CFU/100 mL	120	no	--
W0686	OT03	5/11/2005	1050	35-1135		Turbidity	NTU	3.4	no	--
W0686	OT03	6/14/2005	1035	35-1211		Turbidity	NTU	8.0	no	--
W0686	OT03	7/13/2005	1010	35-1460		Turbidity	NTU	8.5	no	--
W0686	OT03	8/9/2005	1025	35-1520		Turbidity	NTU	8.7	no	--
W0686	OT03	9/14/2005	1006	35-1679		Turbidity	NTU	3.6	no	--
W0686	OT03	5/11/2005	1050	35-1135		Apparent color	PCU	60	no	--
W0686	OT03	6/14/2005	1035	35-1211		Apparent color	PCU	160	no	--
W0686	OT03	7/13/2005	1010	35-1460		Apparent color	PCU	240	no	--
W0686	OT03	8/9/2005	1025	35-1520		Apparent color	PCU	150	no	--
W0686	OT03	9/14/2005	1006	35-1679		Apparent color	PCU	80	no	--
W0686	OT03	5/11/2005	1050	35-1135		True Color	PCU	60	no	--
W0686	OT03	6/14/2005	1035	35-1211		True Color	PCU	140	no	--
W0686	OT03	7/13/2005	1010	35-1460		True Color	PCU	200	no	--
W0686	OT03	8/9/2005	1025	35-1520		True Color	PCU	100	no	--
W0686	OT03	9/14/2005	1006	35-1679		True Color	PCU	65	no	--
W0686	OT03	5/11/2005	1050	35-1135		Suspended Solids	mg/L	4.6	no	--
W0686	OT03	6/14/2005	1035	35-1211		Suspended Solids	mg/L	9.6	no	--
W0686	OT03	7/13/2005	1010	35-1460		Suspended Solids	mg/L	15	no	--
W0686	OT03	8/9/2005	1025	35-1520		Suspended Solids	mg/L	3.9	no	j
W0686	OT03	9/14/2005	1006	35-1679		Suspended Solids	mg/L	2.1	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Ammonia-N	mg/L	0.05	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Ammonia-N	mg/L	0.06	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Ammonia-N	mg/L	<0.02	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Ammonia-N	mg/L	0.03	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Ammonia-N	mg/L	0.04	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Total Nitrogen	mg/L	0.27	no	b,d
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Total Nitrogen	mg/L	0.34	no	b,d
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Total Nitrogen	mg/L	0.45	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Total Nitrogen	mg/L	0.46	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Total Nitrogen	mg/L	0.43	no	b
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Total Nitrogen	mg/L	0.40	no	b
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Total Nitrogen	mg/L	0.52	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Total Nitrogen	mg/L	0.58	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Total Nitrogen	mg/L	0.47	no	b

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Total Nitrogen	mg/L	0.49	no	b
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Total Phosphorus	mg/L	0.017	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Total Phosphorus	mg/L	0.016	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Total Phosphorus	mg/L	0.027	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Total Phosphorus	mg/L	0.028	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Total Phosphorus	mg/L	0.030	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Total Phosphorus	mg/L	0.027	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Total Phosphorus	mg/L	0.045	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Total Phosphorus	mg/L	0.044	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Total Phosphorus	mg/L	0.026	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Total Phosphorus	mg/L	0.026	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	<i>E. coli</i>	CFU/100 mL	97	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	<i>E. coli</i>	CFU/100 mL	200	no	e
W1311	MI202	6/14/2005	1202	35-1212	35-1213	<i>E. coli</i>	CFU/100 mL	130	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	<i>E. coli</i>	CFU/100 mL	130	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	<i>E. coli</i>	CFU/100 mL	150	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	<i>E. coli</i>	CFU/100 mL	140	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	<i>E. coli</i>	CFU/100 mL	300	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	<i>E. coli</i>	CFU/100 mL	380	no	e
W1311	MI202	9/14/2005	1035	35-1680	35-1681	<i>E. coli</i>	CFU/100 mL	120	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	<i>E. coli</i>	CFU/100 mL	170	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Fecal Coliforms	CFU/100 mL	170	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Fecal Coliforms	CFU/100 mL	180	no	e
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Fecal Coliforms	CFU/100 mL	160	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Fecal Coliforms	CFU/100 mL	190	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Fecal Coliforms	CFU/100 mL	190	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Fecal Coliforms	CFU/100 mL	150	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Fecal Coliforms	CFU/100 mL	420	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Fecal Coliforms	CFU/100 mL	300	no	e
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Fecal Coliforms	CFU/100 mL	150	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Fecal Coliforms	CFU/100 mL	180	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Turbidity	NTU	1.8	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Turbidity	NTU	1.7	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Turbidity	NTU	2.6	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Turbidity	NTU	2.2	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Turbidity	NTU	2.0	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Turbidity	NTU	2.4	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Turbidity	NTU	4.6	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Turbidity	NTU	3.8	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Turbidity	NTU	2.4	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Turbidity	NTU	2.4	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Apparent color	PCU	50	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Apparent color	PCU	60	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Apparent color	PCU	80	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Apparent color	PCU	75	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Apparent color	PCU	110	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Apparent color	PCU	120	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Apparent color	PCU	130	no	d
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Apparent color	PCU	100	no	d
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Apparent color	PCU	80	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Apparent color	PCU	80	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	True Color	PCU	45	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	True Color	PCU	50	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	True Color	PCU	50	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	True Color	PCU	55	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	True Color	PCU	95	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	True Color	PCU	100	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	True Color	PCU	100	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	True Color	PCU	100	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	True Color	PCU	60	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	True Color	PCU	70	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Alkalinity	mg/L	<2	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Alkalinity	mg/L	<2	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Alkalinity	mg/L	5	no	d
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Alkalinity	mg/L	<2	no	d
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Alkalinity	mg/L	<2	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Alkalinity	mg/L	3	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Alkalinity	mg/L	4	no	--
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Alkalinity	mg/L	3	no	--
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Alkalinity	mg/L	3	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Alkalinity	mg/L	3	no	--
W1311	MI202	5/11/2005	1115	35-1137	35-1138	Suspended Solids	mg/L	1.7	no	--
W1311	MI202	5/11/2005	1115	35-1138	35-1137	Suspended Solids	mg/L	1.7	no	--
W1311	MI202	6/14/2005	1202	35-1212	35-1213	Suspended Solids	mg/L	2.9	no	--
W1311	MI202	6/14/2005	1202	35-1213	35-1212	Suspended Solids	mg/L	3.3	no	--
W1311	MI202	7/13/2005	1040	35-1461	35-1462	Suspended Solids	mg/L	3.0	no	--
W1311	MI202	7/13/2005	1040	35-1462	35-1461	Suspended Solids	mg/L	2.8	no	--
W1311	MI202	8/9/2005	1058	35-1521	35-1522	Suspended Solids	mg/L	4.7	no	j
W1311	MI202	8/9/2005	1058	35-1522	35-1521	Suspended Solids	mg/L	4.1	no	j
W1311	MI202	9/14/2005	1035	35-1680	35-1681	Suspended Solids	mg/L	2.3	no	--
W1311	MI202	9/14/2005	1035	35-1681	35-1680	Suspended Solids	mg/L	2.5	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Ammonia-N	mg/L	0.05	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Ammonia-N	mg/L	0.04	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Ammonia-N	mg/L	<0.02	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Ammonia-N	mg/L	<0.02	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Total Nitrogen	mg/L	0.46	no	h
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Total Nitrogen	mg/L	0.49	no	h
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Total Nitrogen	mg/L	0.96	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Total Nitrogen	mg/L	0.83	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Total Nitrogen	mg/L	0.63	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Total Nitrogen	mg/L	0.62	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Total Nitrogen	mg/L	0.95	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Total Nitrogen	mg/L	0.96	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Total Nitrogen	mg/L	1.1	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Total Nitrogen	mg/L	1.1	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Total Phosphorus	mg/L	0.024	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Total Phosphorus	mg/L	0.026	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Total Phosphorus	mg/L	0.062	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Total Phosphorus	mg/L	0.063	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Total Phosphorus	mg/L	0.050	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Total Phosphorus	mg/L	0.050	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Total Phosphorus	mg/L	0.040	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Total Phosphorus	mg/L	0.041	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Total Phosphorus	mg/L	0.041	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Total Phosphorus	mg/L	0.042	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	<i>E. coli</i>	CFU/100 mL	6	no	d
W1312	MITOT	5/11/2005	950	35-1101	35-1100	<i>E. coli</i>	CFU/100 mL	13	no	d
W1312	MITOT	6/14/2005	920	35-1191	35-1190	<i>E. coli</i>	CFU/100 mL	100	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	<i>E. coli</i>	CFU/100 mL	90	no	e
W1312	MITOT	7/13/2005	845	35-1440	35-1441	<i>E. coli</i>	CFU/100 mL	32	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	<i>E. coli</i>	CFU/100 mL	46	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	<i>E. coli</i>	CFU/100 mL	52	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	<i>E. coli</i>	CFU/100 mL	71	no	e
W1312	MITOT	9/14/2005	849	35-1661	35-1660	<i>E. coli</i>	CFU/100 mL	47	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	<i>E. coli</i>	CFU/100 mL	45	no	e
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Fecal Coliforms	CFU/100 mL	19	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Fecal Coliforms	CFU/100 mL	13	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Fecal Coliforms	CFU/100 mL	110	no	j
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Fecal Coliforms	CFU/100 mL	71	no	j,e
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Fecal Coliforms	CFU/100 mL	58	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Fecal Coliforms	CFU/100 mL	53	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Fecal Coliforms	CFU/100 mL	77	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Fecal Coliforms	CFU/100 mL	26	no	e
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Fecal Coliforms	CFU/100 mL	73	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Fecal Coliforms	CFU/100 mL	39	no	e
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Turbidity	NTU	2.4	no	b
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Turbidity	NTU	1.7	no	b
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Turbidity	NTU	3.3	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Turbidity	NTU	3.1	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Turbidity	NTU	2.5	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Turbidity	NTU	2.3	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Turbidity	NTU	2.0	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Turbidity	NTU	2.0	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Turbidity	NTU	1.6	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Turbidity	NTU	1.6	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Apparent color	PCU	50	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Apparent color	PCU	50	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Apparent color	PCU	110	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Apparent color	PCU	100	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Apparent color	PCU	110	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Apparent color	PCU	120	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Apparent color	PCU	65	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Apparent color	PCU	65	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Apparent color	PCU	65	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Apparent color	PCU	65	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	True Color	PCU	40	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	True Color	PCU	45	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	True Color	PCU	80	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	True Color	PCU	70	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	True Color	PCU	90	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	True Color	PCU	95	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	True Color	PCU	60	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	True Color	PCU	60	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	True Color	PCU	65	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	True Color	PCU	65	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Alkalinity	mg/L	5	no	b
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Alkalinity	mg/L	3	no	b
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Alkalinity	mg/L	5	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Alkalinity	mg/L	6	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Alkalinity	mg/L	4	no	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Alkalinity	mg/L	4	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Alkalinity	mg/L	12	no	--
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Alkalinity	mg/L	12	no	--
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Alkalinity	mg/L	20	no	--
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Alkalinity	mg/L	20	no	--
W1312	MITOT	5/11/2005	945	35-1100	35-1101	Suspended Solids	mg/L	2.2	no	--
W1312	MITOT	5/11/2005	950	35-1101	35-1100	Suspended Solids	mg/L	2.4	no	--
W1312	MITOT	6/14/2005	915	35-1190	35-1191	Suspended Solids	mg/L	4.3	no	--
W1312	MITOT	6/14/2005	920	35-1191	35-1190	Suspended Solids	mg/L	4.6	no	--
W1312	MITOT	7/13/2005	845	35-1440	35-1441	Suspended Solids	mg/L	**	--	--
W1312	MITOT	7/13/2005	850	35-1441	35-1440	Suspended Solids	mg/L	4.0	no	--
W1312	MITOT	8/9/2005	915	35-1500	35-1501	Suspended Solids	mg/L	2.3	no	d,j
W1312	MITOT	8/9/2005	910	35-1501	35-1500	Suspended Solids	mg/L	1.5	no	d,j
W1312	MITOT	9/14/2005	845	35-1660	35-1661	Suspended Solids	mg/L	<1.0	no	d

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1312	MITOT	9/14/2005	849	35-1661	35-1660	Suspended Solids	mg/L	3.7	no	d
W1313	NM01	5/11/2005	1212	35-1143		Ammonia-N	mg/L	<0.02	no	--
W1313	NM01	6/14/2005	1130	35-1216		Ammonia-N	mg/L	0.02	no	--
W1313	NM01	7/13/2005	1136	35-1465		Ammonia-N	mg/L	<0.02	no	--
W1313	NM01	8/9/2005	1148	35-1525		Ammonia-N	mg/L	0.02	no	--
W1313	NM01	9/14/2005	1130	35-1684		Ammonia-N	mg/L	<0.02	no	--
W1313	NM01	5/11/2005	1212	35-1143		Total Nitrogen	mg/L	0.24	no	b
W1313	NM01	6/14/2005	1130	35-1216		Total Nitrogen	mg/L	0.31	no	--
W1313	NM01	7/13/2005	1136	35-1465		Total Nitrogen	mg/L	0.33	no	b
W1313	NM01	8/9/2005	1148	35-1525		Total Nitrogen	mg/L	0.38	no	--
W1313	NM01	9/14/2005	1130	35-1684		Total Nitrogen	mg/L	0.26	no	b
W1313	NM01	5/11/2005	1212	35-1143		Total Phosphorus	mg/L	0.011	no	--
W1313	NM01	6/14/2005	1130	35-1216		Total Phosphorus	mg/L	0.015	no	--
W1313	NM01	7/13/2005	1136	35-1465		Total Phosphorus	mg/L	0.010	no	--
W1313	NM01	8/9/2005	1148	35-1525		Total Phosphorus	mg/L	0.015	no	--
W1313	NM01	9/14/2005	1130	35-1684		Total Phosphorus	mg/L	0.010	no	--
W1313	NM01	5/11/2005	1212	35-1143		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1313	NM01	6/14/2005	1130	35-1216		<i>E. coli</i>	CFU/100 mL	19	no	e
W1313	NM01	7/13/2005	1136	35-1465		<i>E. coli</i>	CFU/100 mL	26	no	--
W1313	NM01	8/9/2005	1148	35-1525		<i>E. coli</i>	CFU/100 mL	19	no	--
W1313	NM01	9/14/2005	1130	35-1684		<i>E. coli</i>	CFU/100 mL	39	no	--
W1313	NM01	5/11/2005	1212	35-1143		Fecal Coliforms	CFU/100 mL	<6	no	--
W1313	NM01	6/14/2005	1130	35-1216		Fecal Coliforms	CFU/100 mL	13	no	e
W1313	NM01	7/13/2005	1136	35-1465		Fecal Coliforms	CFU/100 mL	58	no	--
W1313	NM01	8/9/2005	1148	35-1525		Fecal Coliforms	CFU/100 mL	97	no	--
W1313	NM01	9/14/2005	1130	35-1684		Fecal Coliforms	CFU/100 mL	45	no	--
W1313	NM01	5/11/2005	1212	35-1143		Turbidity	NTU	1.2	no	--
W1313	NM01	6/14/2005	1130	35-1216		Turbidity	NTU	1.3	no	--
W1313	NM01	7/13/2005	1136	35-1465		Turbidity	NTU	1.1	no	--
W1313	NM01	8/9/2005	1148	35-1525		Turbidity	NTU	1.7	no	--
W1313	NM01	9/14/2005	1130	35-1684		Turbidity	NTU	<0.5	no	--
W1313	NM01	5/11/2005	1212	35-1143		Apparent color	PCU	35	no	--
W1313	NM01	6/14/2005	1130	35-1216		Apparent color	PCU	30	no	--
W1313	NM01	7/13/2005	1136	35-1465		Apparent color	PCU	55	no	--
W1313	NM01	8/9/2005	1148	35-1525		Apparent color	PCU	40	no	--
W1313	NM01	9/14/2005	1130	35-1684		Apparent color	PCU	23	no	--
W1313	NM01	5/11/2005	1212	35-1143		True Color	PCU	35	no	--
W1313	NM01	6/14/2005	1130	35-1216		True Color	PCU	22	no	--
W1313	NM01	7/13/2005	1136	35-1465		True Color	PCU	39	no	--
W1313	NM01	8/9/2005	1148	35-1525		True Color	PCU	30	no	--
W1313	NM01	9/14/2005	1130	35-1684		True Color	PCU	23	no	--
W1313	NM01	5/11/2005	1212	35-1143		Suspended Solids	mg/L	1.4	no	--
W1313	NM01	6/14/2005	1130	35-1216		Suspended Solids	mg/L	1.5	no	--
W1313	NM01	7/13/2005	1136	35-1465		Suspended Solids	mg/L	1.6	no	--
W1313	NM01	8/9/2005	1148	35-1525		Suspended Solids	mg/L	<1.0	no	j

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1313	NM01	9/14/2005	1130	35-1684		Suspended Solids	mg/L	1.5	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Ammonia-N	mg/L	0.02	no	--
W1314	TUL01	6/14/2005	953	35-1201		Ammonia-N	mg/L	0.06	no	--
W1314	TUL01	7/13/2005	941	35-1450		Ammonia-N	mg/L	<0.02	no	--
W1314	TUL01	8/9/2005	902	35-1510		Ammonia-N	mg/L	<0.02	no	--
W1314	TUL01	9/14/2005	917	35-1669		Ammonia-N	mg/L	##	yes	b
W1314	TUL01	5/11/2005	1010	35-1117		Total Nitrogen	mg/L	0.23	no	--
W1314	TUL01	6/14/2005	953	35-1201		Total Nitrogen	mg/L	0.45	no	--
W1314	TUL01	7/13/2005	941	35-1450		Total Nitrogen	mg/L	0.43	no	--
W1314	TUL01	8/9/2005	902	35-1510		Total Nitrogen	mg/L	0.45	no	--
W1314	TUL01	9/14/2005	917	35-1669		Total Nitrogen	mg/L	0.36	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Total Phosphorus	mg/L	0.014	no	--
W1314	TUL01	6/14/2005	953	35-1201		Total Phosphorus	mg/L	0.020	no	--
W1314	TUL01	7/13/2005	941	35-1450		Total Phosphorus	mg/L	0.025	no	--
W1314	TUL01	8/9/2005	902	35-1510		Total Phosphorus	mg/L	0.024	no	--
W1314	TUL01	9/14/2005	917	35-1669		Total Phosphorus	mg/L	0.019	no	--
W1314	TUL01	5/11/2005	1010	35-1117		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1314	TUL01	6/14/2005	953	35-1201		<i>E. coli</i>	CFU/100 mL	64	no	e
W1314	TUL01	7/13/2005	941	35-1450		<i>E. coli</i>	CFU/100 mL	60	no	--
W1314	TUL01	8/9/2005	902	35-1510		<i>E. coli</i>	CFU/100 mL	110	no	e
W1314	TUL01	9/14/2005	917	35-1669		<i>E. coli</i>	CFU/100 mL	110	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Fecal Coliforms	CFU/100 mL	<6	no	--
W1314	TUL01	6/14/2005	953	35-1201		Fecal Coliforms	CFU/100 mL	39	no	d,e
W1314	TUL01	7/13/2005	941	35-1450		Fecal Coliforms	CFU/100 mL	60	no	--
W1314	TUL01	8/9/2005	902	35-1510		Fecal Coliforms	CFU/100 mL	100	no	e
W1314	TUL01	9/14/2005	917	35-1669		Fecal Coliforms	CFU/100 mL	120	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Turbidity	NTU	2.0	no	--
W1314	TUL01	6/14/2005	953	35-1201		Turbidity	NTU	3.9	no	--
W1314	TUL01	7/13/2005	941	35-1450		Turbidity	NTU	2.7	no	--
W1314	TUL01	8/9/2005	902	35-1510		Turbidity	NTU	2.5	no	--
W1314	TUL01	9/14/2005	917	35-1669		Turbidity	NTU	1.7	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Apparent color	PCU	45	no	--
W1314	TUL01	6/14/2005	953	35-1201		Apparent color	PCU	60	no	d
W1314	TUL01	7/13/2005	941	35-1450		Apparent color	PCU	90	no	--
W1314	TUL01	8/9/2005	902	35-1510		Apparent color	PCU	80	no	--
W1314	TUL01	9/14/2005	917	35-1669		Apparent color	PCU	50	no	--
W1314	TUL01	5/11/2005	1010	35-1117		True Color	PCU	35	no	--
W1314	TUL01	6/14/2005	953	35-1201		True Color	PCU	50	no	d
W1314	TUL01	7/13/2005	941	35-1450		True Color	PCU	80	no	--
W1314	TUL01	8/9/2005	902	35-1510		True Color	PCU	80	no	--
W1314	TUL01	9/14/2005	917	35-1669		True Color	PCU	45	no	--
W1314	TUL01	5/11/2005	1010	35-1117		Alkalinity	mg/L	3	no	--
W1314	TUL01	6/14/2005	953	35-1201		Alkalinity	mg/L	5	no	--
W1314	TUL01	7/13/2005	941	35-1450		Alkalinity	mg/L	4	no	--
W1314	TUL01	8/9/2005	902	35-1510		Alkalinity	mg/L	6	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1314	TUL01	9/14/2005	917	35-1669		Alkalinity	mg/L	6	no	--
W1315	BB02	5/11/2005	1000	35-1131		Ammonia-N	mg/L	0.02	no	--
W1315	BB02	6/14/2005	940	35-1209		Ammonia-N	mg/L	0.08	no	--
W1315	BB02	7/13/2005	923	35-1458		Ammonia-N	mg/L	0.06	no	--
W1315	BB02	8/9/2005	920	35-1518		Ammonia-N	mg/L	0.06	no	--
W1315	BB02	9/14/2005	916	35-1677		Ammonia-N	mg/L	0.04	no	--
W1315	BB02	5/11/2005	1000	35-1131		Total Nitrogen	mg/L	##	yes	h,b
W1315	BB02	6/14/2005	940	35-1209		Total Nitrogen	mg/L	0.67	no	--
W1315	BB02	7/13/2005	923	35-1458		Total Nitrogen	mg/L	0.65	no	b
W1315	BB02	8/9/2005	920	35-1518		Total Nitrogen	mg/L	0.52	no	--
W1315	BB02	9/14/2005	916	35-1677		Total Nitrogen	mg/L	0.40	no	b
W1315	BB02	5/11/2005	1000	35-1131		Total Phosphorus	mg/L	0.021	no	--
W1315	BB02	6/14/2005	940	35-1209		Total Phosphorus	mg/L	0.058	no	--
W1315	BB02	7/13/2005	923	35-1458		Total Phosphorus	mg/L	0.055	no	--
W1315	BB02	8/9/2005	920	35-1518		Total Phosphorus	mg/L	0.050	no	--
W1315	BB02	9/14/2005	916	35-1677		Total Phosphorus	mg/L	0.037	no	--
W1315	BB02	5/11/2005	1000	35-1131		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1315	BB02	6/14/2005	940	35-1209		<i>E. coli</i>	CFU/100 mL	190	no	--
W1315	BB02	7/13/2005	923	35-1458		<i>E. coli</i>	CFU/100 mL	39	no	e
W1315	BB02	8/9/2005	920	35-1518		<i>E. coli</i>	CFU/100 mL	46	no	--
W1315	BB02	9/14/2005	916	35-1677		<i>E. coli</i>	CFU/100 mL	130	no	--
W1315	BB02	5/11/2005	1000	35-1131		Fecal Coliforms	CFU/100 mL	13	no	--
W1315	BB02	6/14/2005	940	35-1209		Fecal Coliforms	CFU/100 mL	250	no	--
W1315	BB02	7/13/2005	923	35-1458		Fecal Coliforms	CFU/100 mL	19	no	e
W1315	BB02	8/9/2005	920	35-1518		Fecal Coliforms	CFU/100 mL	110	no	--
W1315	BB02	9/14/2005	916	35-1677		Fecal Coliforms	CFU/100 mL	130	no	--
W1315	BB02	5/11/2005	1000	35-1131		Turbidity	NTU	2.6	no	--
W1315	BB02	6/14/2005	940	35-1209		Turbidity	NTU	2.8	no	--
W1315	BB02	7/13/2005	923	35-1458		Turbidity	NTU	2.4	no	--
W1315	BB02	8/9/2005	920	35-1518		Turbidity	NTU	4.1	no	--
W1315	BB02	9/14/2005	916	35-1677		Turbidity	NTU	1.8	no	--
W1315	BB02	5/11/2005	1000	35-1131		Apparent color	PCU	60	no	--
W1315	BB02	6/14/2005	940	35-1209		Apparent color	PCU	190	no	--
W1315	BB02	7/13/2005	923	35-1458		Apparent color	PCU	160	no	--
W1315	BB02	8/9/2005	920	35-1518		Apparent color	PCU	90	no	--
W1315	BB02	9/14/2005	916	35-1677		Apparent color	PCU	70	no	--
W1315	BB02	5/11/2005	1000	35-1131		True Color	PCU	60	no	--
W1315	BB02	6/14/2005	940	35-1209		True Color	PCU	180	no	--
W1315	BB02	7/13/2005	923	35-1458		True Color	PCU	140	no	--
W1315	BB02	8/9/2005	920	35-1518		True Color	PCU	70	no	--
W1315	BB02	9/14/2005	916	35-1677		True Color	PCU	55	no	--
W1315	BB02	5/11/2005	1000	35-1131		Alkalinity	mg/L	3	no	--
W1315	BB02	6/14/2005	940	35-1209		Alkalinity	mg/L	6	no	--
W1315	BB02	7/13/2005	923	35-1458		Alkalinity	mg/L	5	no	--
W1315	BB02	8/9/2005	920	35-1518		Alkalinity	mg/L	6	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1315	BB02	9/14/2005	916	35-1677		Alkalinity	mg/L	6	no	--
W1316	MI20	5/11/2005	1145	35-1141		Ammonia-N	mg/L	<0.02	no	--
W1316	MI20	6/14/2005	1111	35-1215		Ammonia-N	mg/L	0.06	no	--
W1316	MI20	7/13/2005	1110	35-1464		Ammonia-N	mg/L	0.03	no	--
W1316	MI20	8/9/2005	1126	35-1524		Ammonia-N	mg/L	0.05	no	--
W1316	MI20	9/14/2005	1103	35-1683		Ammonia-N	mg/L	0.06	no	--
W1316	MI20	5/11/2005	1145	35-1141		Total Nitrogen	mg/L	0.29	no	b
W1316	MI20	6/14/2005	1111	35-1215		Total Nitrogen	mg/L	0.65	no	--
W1316	MI20	7/13/2005	1110	35-1464		Total Nitrogen	mg/L	0.59	no	b
W1316	MI20	8/9/2005	1126	35-1524		Total Nitrogen	mg/L	1.1	no	--
W1316	MI20	9/14/2005	1103	35-1683		Total Nitrogen	mg/L	0.93	no	b
W1316	MI20	5/11/2005	1145	35-1141		Total Phosphorus	mg/L	0.019	no	--
W1316	MI20	6/14/2005	1111	35-1215		Total Phosphorus	mg/L	0.050	no	--
W1316	MI20	7/13/2005	1110	35-1464		Total Phosphorus	mg/L	0.043	no	--
W1316	MI20	8/9/2005	1126	35-1524		Total Phosphorus	mg/L	0.10	no	--
W1316	MI20	9/14/2005	1103	35-1683		Total Phosphorus	mg/L	0.10	no	--
W1316	MI20	5/11/2005	1145	35-1141		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1316	MI20	6/14/2005	1111	35-1215		<i>E. coli</i>	CFU/100 mL	58	no	e
W1316	MI20	7/13/2005	1110	35-1464		<i>E. coli</i>	CFU/100 mL	19	no	e
W1316	MI20	8/9/2005	1126	35-1524		<i>E. coli</i>	CFU/100 mL	39	no	e
W1316	MI20	9/14/2005	1103	35-1683		<i>E. coli</i>	CFU/100 mL	77	no	e
W1316	MI20	5/11/2005	1145	35-1141		Fecal Coliforms	CFU/100 mL	<6	no	--
W1316	MI20	6/14/2005	1111	35-1215		Fecal Coliforms	CFU/100 mL	19	no	e
W1316	MI20	7/13/2005	1110	35-1464		Fecal Coliforms	CFU/100 mL	13	no	e
W1316	MI20	8/9/2005	1126	35-1524		Fecal Coliforms	CFU/100 mL	26	no	e
W1316	MI20	9/14/2005	1103	35-1683		Fecal Coliforms	CFU/100 mL	13	no	e
W1316	MI20	5/11/2005	1145	35-1141		Turbidity	NTU	1.9	no	--
W1316	MI20	6/14/2005	1111	35-1215		Turbidity	NTU	3.0	no	--
W1316	MI20	7/13/2005	1110	35-1464		Turbidity	NTU	1.9	no	--
W1316	MI20	8/9/2005	1126	35-1524		Turbidity	NTU	8.1	no	--
W1316	MI20	9/14/2005	1103	35-1683		Turbidity	NTU	8.2	no	--
W1316	MI20	5/11/2005	1145	35-1141		Apparent color	PCU	60	no	--
W1316	MI20	6/14/2005	1111	35-1215		Apparent color	PCU	130	no	--
W1316	MI20	7/13/2005	1110	35-1464		Apparent color	PCU	170	no	--
W1316	MI20	8/9/2005	1126	35-1524		Apparent color	PCU	200	no	--
W1316	MI20	9/14/2005	1103	35-1683		Apparent color	PCU	210	no	--
W1316	MI20	5/11/2005	1145	35-1141		True Color	PCU	55	no	--
W1316	MI20	6/14/2005	1111	35-1215		True Color	PCU	110	no	--
W1316	MI20	7/13/2005	1110	35-1464		True Color	PCU	160	no	--
W1316	MI20	8/9/2005	1126	35-1524		True Color	PCU	150	no	--
W1316	MI20	9/14/2005	1103	35-1683		True Color	PCU	150	no	--
W1316	MI20	5/11/2005	1145	35-1141		Suspended Solids	mg/L	2.3	no	--
W1316	MI20	6/14/2005	1111	35-1215		Suspended Solids	mg/L	4.6	no	--
W1316	MI20	7/13/2005	1110	35-1464		Suspended Solids	mg/L	4.3	no	--
W1316	MI20	8/9/2005	1126	35-1524		Suspended Solids	mg/L	19	no	j

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1316	MI20	9/14/2005	1103	35-1683		Suspended Solids	mg/L	33	no	--
W1334	LYB01	5/11/2005	1005	35-1104		Ammonia-N	mg/L	<0.02	no	--
W1334	LYB01	6/14/2005	945	35-1193		Ammonia-N	mg/L	<0.02	no	--
W1334	LYB01	7/13/2005	910	35-1443		Ammonia-N	mg/L	<0.02	no	--
W1334	LYB01	8/9/2005	930	35-1503		Ammonia-N	mg/L	<0.02	no	--
W1334	LYB01	9/14/2005	900	35-1663		Ammonia-N	mg/L	<0.02	no	--
W1334	LYB01	5/11/2005	1005	35-1104		Total Nitrogen	mg/L	0.15	no	--
W1334	LYB01	6/14/2005	945	35-1193		Total Nitrogen	mg/L	0.35	no	--
W1334	LYB01	7/13/2005	910	35-1443		Total Nitrogen	mg/L	0.32	no	--
W1334	LYB01	8/9/2005	930	35-1503		Total Nitrogen	mg/L	0.28	no	--
W1334	LYB01	9/14/2005	900	35-1663		Total Nitrogen	mg/L	0.23	no	--
W1334	LYB01	5/11/2005	1005	35-1104		Total Phosphorus	mg/L	<0.005	no	--
W1334	LYB01	6/14/2005	945	35-1193		Total Phosphorus	mg/L	0.021	no	--
W1334	LYB01	7/13/2005	910	35-1443		Total Phosphorus	mg/L	0.018	no	--
W1334	LYB01	8/9/2005	930	35-1503		Total Phosphorus	mg/L	0.008	no	--
W1334	LYB01	9/14/2005	900	35-1663		Total Phosphorus	mg/L	0.008	no	--
W1334	LYB01	5/11/2005	1005	35-1104		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1334	LYB01	6/14/2005	945	35-1193		<i>E. coli</i>	CFU/100 mL	100	no	--
W1334	LYB01	7/13/2005	910	35-1443		<i>E. coli</i>	CFU/100 mL	66	no	e
W1334	LYB01	8/9/2005	930	35-1503		<i>E. coli</i>	CFU/100 mL	39	no	--
W1334	LYB01	9/14/2005	900	35-1663		<i>E. coli</i>	CFU/100 mL	170	no	e
W1334	LYB01	5/11/2005	1005	35-1104		Fecal Coliforms	CFU/100 mL	<6	no	--
W1334	LYB01	6/14/2005	945	35-1193		Fecal Coliforms	CFU/100 mL	160	no	--
W1334	LYB01	7/13/2005	910	35-1443		Fecal Coliforms	CFU/100 mL	45	no	e
W1334	LYB01	8/9/2005	930	35-1503		Fecal Coliforms	CFU/100 mL	39	no	--
W1334	LYB01	9/14/2005	900	35-1663		Fecal Coliforms	CFU/100 mL	160	no	e
W1334	LYB01	5/11/2005	1005	35-1104		Turbidity	NTU	1.2	no	b
W1334	LYB01	6/14/2005	945	35-1193		Turbidity	NTU	1.0	no	--
W1334	LYB01	7/13/2005	910	35-1443		Turbidity	NTU	0.5	no	--
W1334	LYB01	8/9/2005	930	35-1503		Turbidity	NTU	0.7	no	--
W1334	LYB01	9/14/2005	900	35-1663		Turbidity	NTU	<0.5	no	--
W1334	LYB01	5/11/2005	1005	35-1104		Apparent color	PCU	30	no	--
W1334	LYB01	6/14/2005	945	35-1193		Apparent color	PCU	40	no	--
W1334	LYB01	7/13/2005	910	35-1443		Apparent color	PCU	75	no	--
W1334	LYB01	8/9/2005	930	35-1503		Apparent color	PCU	35	no	--
W1334	LYB01	9/14/2005	900	35-1663		Apparent color	PCU	20	no	--
W1334	LYB01	5/11/2005	1005	35-1104		True Color	PCU	30	no	--
W1334	LYB01	6/14/2005	945	35-1193		True Color	PCU	40	no	--
W1334	LYB01	7/13/2005	910	35-1443		True Color	PCU	70	no	--
W1334	LYB01	8/9/2005	930	35-1503		True Color	PCU	35	no	--
W1334	LYB01	9/14/2005	900	35-1663		True Color	PCU	20	no	--
W1334	LYB01	5/11/2005	1005	35-1104		Alkalinity	mg/L	<2	no	b
W1334	LYB01	6/14/2005	945	35-1193		Alkalinity	mg/L	<2	no	--
W1334	LYB01	7/13/2005	910	35-1443		Alkalinity	mg/L	3	no	--
W1334	LYB01	8/9/2005	930	35-1503		Alkalinity	mg/L	4	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1334	LYB01	9/14/2005	900	35-1663		Alkalinity	mg/L	7	no	--
W1335	MH01	5/11/2005	1030	35-1106		Ammonia-N	mg/L	<0.02	no	--
W1335	MH01	6/14/2005	1000	35-1194		Ammonia-N	mg/L	<0.02	no	--
W1335	MH01	7/13/2005	930	35-1444		Ammonia-N	mg/L	<0.02	no	--
W1335	MH01	8/9/2005	940	35-1504		Ammonia-N	mg/L	<0.02	no	--
W1335	MH01	9/14/2005	915	35-1664		Ammonia-N	mg/L	<0.02	no	--
W1335	MH01	5/11/2005	1030	35-1106		Total Nitrogen	mg/L	0.13	no	--
W1335	MH01	6/14/2005	1000	35-1194		Total Nitrogen	mg/L	0.39	no	--
W1335	MH01	7/13/2005	930	35-1444		Total Nitrogen	mg/L	0.25	no	--
W1335	MH01	8/9/2005	940	35-1504		Total Nitrogen	mg/L	0.32	no	--
W1335	MH01	9/14/2005	915	35-1664		Total Nitrogen	mg/L	0.21	no	--
W1335	MH01	5/11/2005	1030	35-1106		Total Phosphorus	mg/L	<0.005	no	--
W1335	MH01	6/14/2005	1000	35-1194		Total Phosphorus	mg/L	0.010	no	--
W1335	MH01	7/13/2005	930	35-1444		Total Phosphorus	mg/L	0.008	no	--
W1335	MH01	8/9/2005	940	35-1504		Total Phosphorus	mg/L	0.011	no	--
W1335	MH01	9/14/2005	915	35-1664		Total Phosphorus	mg/L	0.007	no	--
W1335	MH01	5/11/2005	1030	35-1106		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1335	MH01	6/14/2005	1000	35-1194		<i>E. coli</i>	CFU/100 mL	6	no	--
W1335	MH01	7/13/2005	930	35-1444		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1335	MH01	8/9/2005	940	35-1504		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1335	MH01	9/14/2005	915	35-1664		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1335	MH01	5/11/2005	1030	35-1106		Fecal Coliforms	CFU/100 mL	<6	no	--
W1335	MH01	6/14/2005	1000	35-1194		Fecal Coliforms	CFU/100 mL	26	no	--
W1335	MH01	7/13/2005	930	35-1444		Fecal Coliforms	CFU/100 mL	<6	no	--
W1335	MH01	8/9/2005	940	35-1504		Fecal Coliforms	CFU/100 mL	13	no	--
W1335	MH01	9/14/2005	915	35-1664		Fecal Coliforms	CFU/100 mL	<6	no	--
W1335	MH01	5/11/2005	1030	35-1106		Turbidity	NTU	<0.5	no	b
W1335	MH01	6/14/2005	1000	35-1194		Turbidity	NTU	<0.5	no	--
W1335	MH01	7/13/2005	930	35-1444		Turbidity	NTU	<0.5	no	--
W1335	MH01	8/9/2005	940	35-1504		Turbidity	NTU	<0.5	no	--
W1335	MH01	9/14/2005	915	35-1664		Turbidity	NTU	<0.5	no	--
W1335	MH01	5/11/2005	1030	35-1106		Apparent color	PCU	25	no	--
W1335	MH01	6/14/2005	1000	35-1194		Apparent color	PCU	55	no	--
W1335	MH01	7/13/2005	930	35-1444		Apparent color	PCU	50	no	--
W1335	MH01	8/9/2005	940	35-1504		Apparent color	PCU	30	no	--
W1335	MH01	9/14/2005	915	35-1664		Apparent color	PCU	20	no	--
W1335	MH01	5/11/2005	1030	35-1106		True Color	PCU	25	no	--
W1335	MH01	6/14/2005	1000	35-1194		True Color	PCU	50	no	--
W1335	MH01	7/13/2005	930	35-1444		True Color	PCU	47	no	--
W1335	MH01	8/9/2005	940	35-1504		True Color	PCU	30	no	--
W1335	MH01	9/14/2005	915	35-1664		True Color	PCU	18	no	--
W1335	MH01	5/11/2005	1030	35-1106		Alkalinity	mg/L	3	no	b
W1335	MH01	6/14/2005	1000	35-1194		Alkalinity	mg/L	<2	no	--
W1335	MH01	7/13/2005	930	35-1444		Alkalinity	mg/L	<2	no	--
W1335	MH01	8/9/2005	940	35-1504		Alkalinity	mg/L	3	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1335	MH01	9/14/2005	915	35-1664		Alkalinity	mg/L	3	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Ammonia-N	mg/L	<0.02	no	--
W1336	WET 01	6/14/2005	1100	35-1197		Ammonia-N	mg/L	0.07	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Ammonia-N	mg/L	<0.02	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Ammonia-N	mg/L	<0.02	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Ammonia-N	mg/L	<0.02	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Total Nitrogen	mg/L	0.050	no	--
W1336	WET 01	6/14/2005	1100	35-1197		Total Nitrogen	mg/L	0.18	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Total Nitrogen	mg/L	0.18	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Total Nitrogen	mg/L	0.22	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Total Nitrogen	mg/L	0.11	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Total Phosphorus	mg/L	<0.005	no	--
W1336	WET 01	6/14/2005	1100	35-1197		Total Phosphorus	mg/L	0.009	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Total Phosphorus	mg/L	0.013	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Total Phosphorus	mg/L	0.015	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Total Phosphorus	mg/L	0.008	no	--
W1336	WET 01	5/11/2005	1115	35-1110		<i>E. coli</i>	CFU/100 mL	13	no	--
W1336	WET 01	6/14/2005	1100	35-1197		<i>E. coli</i>	CFU/100 mL	32	no	--
W1336	WET 01	7/13/2005	1030	35-1446		<i>E. coli</i>	CFU/100 mL	6	no	--
W1336	WET 01	8/9/2005	1045	35-1506		<i>E. coli</i>	CFU/100 mL	45	no	--
W1336	WET 01	9/14/2005	1015	35-1666		<i>E. coli</i>	CFU/100 mL	6	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Fecal Coliforms	CFU/100 mL	520	no	--
W1336	WET 01	6/14/2005	1100	35-1197		Fecal Coliforms	CFU/100 mL	58	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Fecal Coliforms	CFU/100 mL	32	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Fecal Coliforms	CFU/100 mL	140	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Fecal Coliforms	CFU/100 mL	13	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Turbidity	NTU	1.0	no	b
W1336	WET 01	6/14/2005	1100	35-1197		Turbidity	NTU	0.5	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Turbidity	NTU	<0.5	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Turbidity	NTU	1.0	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Turbidity	NTU	<0.5	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Apparent color	PCU	<15	no	--
W1336	WET 01	6/14/2005	1100	35-1197		Apparent color	PCU	42	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Apparent color	PCU	40	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Apparent color	PCU	45	no	--
W1336	WET 01	9/14/2005	1015	35-1666		Apparent color	PCU	30	no	--
W1336	WET 01	5/11/2005	1115	35-1110		True Color	PCU	**	--	--
W1336	WET 01	6/14/2005	1100	35-1197		True Color	PCU	42	no	--
W1336	WET 01	7/13/2005	1030	35-1446		True Color	PCU	34	no	--
W1336	WET 01	8/9/2005	1045	35-1506		True Color	PCU	35	no	--
W1336	WET 01	9/14/2005	1015	35-1666		True Color	PCU	21	no	--
W1336	WET 01	5/11/2005	1115	35-1110		Alkalinity	mg/L	<2	no	b
W1336	WET 01	6/14/2005	1100	35-1197		Alkalinity	mg/L	<2	no	--
W1336	WET 01	7/13/2005	1030	35-1446		Alkalinity	mg/L	<2	no	--
W1336	WET 01	8/9/2005	1045	35-1506		Alkalinity	mg/L	3	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1336	WET 01	9/14/2005	1015	35-1666		Alkalinity	mg/L	4	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Ammonia-N	mg/L	<0.02	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Ammonia-N	mg/L	0.04	no	--
W1337	WBT01	7/13/2005	1035	35-1452		Ammonia-N	mg/L	<0.02	no	--
W1337	WBT01	8/9/2005	951	35-1512		Ammonia-N	mg/L	<0.02	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Ammonia-N	mg/L	##	yes	b
W1337	WBT01	5/11/2005	1050	35-1121		Total Nitrogen	mg/L	0.19	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Total Nitrogen	mg/L	0.44	no	--
W1337	WBT01	7/13/2005	1035	35-1452		Total Nitrogen	mg/L	0.31	no	--
W1337	WBT01	8/9/2005	951	35-1512		Total Nitrogen	mg/L	0.36	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Total Nitrogen	mg/L	0.29	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Total Phosphorus	mg/L	0.010	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Total Phosphorus	mg/L	0.020	no	--
W1337	WBT01	7/13/2005	1035	35-1452		Total Phosphorus	mg/L	0.017	no	--
W1337	WBT01	8/9/2005	951	35-1512		Total Phosphorus	mg/L	0.017	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Total Phosphorus	mg/L	0.010	no	--
W1337	WBT01	5/11/2005	1050	35-1121		<i>E. coli</i>	CFU/100 mL	26	no	e
W1337	WBT01	6/14/2005	1037	35-1203		<i>E. coli</i>	CFU/100 mL	71	no	--
W1337	WBT01	7/13/2005	1035	35-1452		<i>E. coli</i>	CFU/100 mL	6	no	--
W1337	WBT01	8/9/2005	951	35-1512		<i>E. coli</i>	CFU/100 mL	39	no	--
W1337	WBT01	9/14/2005	1005	35-1671		<i>E. coli</i>	CFU/100 mL	19	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Fecal Coliforms	CFU/100 mL	13	no	e
W1337	WBT01	6/14/2005	1037	35-1203		Fecal Coliforms	CFU/100 mL	120	no	d
W1337	WBT01	7/13/2005	1035	35-1452		Fecal Coliforms	CFU/100 mL	6	no	--
W1337	WBT01	8/9/2005	951	35-1512		Fecal Coliforms	CFU/100 mL	58	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Fecal Coliforms	CFU/100 mL	39	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Turbidity	NTU	1.3	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Turbidity	NTU	2.6	no	--
W1337	WBT01	7/13/2005	1035	35-1452		Turbidity	NTU	1.5	no	--
W1337	WBT01	8/9/2005	951	35-1512		Turbidity	NTU	2.4	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Turbidity	NTU	1.0	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Apparent color	PCU	30	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Apparent color	PCU	55	no	d
W1337	WBT01	7/13/2005	1035	35-1452		Apparent color	PCU	55	no	--
W1337	WBT01	8/9/2005	951	35-1512		Apparent color	PCU	40	no	--
W1337	WBT01	9/14/2005	1005	35-1671		Apparent color	PCU	30	no	--
W1337	WBT01	5/11/2005	1050	35-1121		True Color	PCU	25	no	--
W1337	WBT01	6/14/2005	1037	35-1203		True Color	PCU	40	no	d
W1337	WBT01	7/13/2005	1035	35-1452		True Color	PCU	44	no	--
W1337	WBT01	8/9/2005	951	35-1512		True Color	PCU	30	no	--
W1337	WBT01	9/14/2005	1005	35-1671		True Color	PCU	20	no	--
W1337	WBT01	5/11/2005	1050	35-1121		Alkalinity	mg/L	4	no	--
W1337	WBT01	6/14/2005	1037	35-1203		Alkalinity	mg/L	6	no	--
W1337	WBT01	7/13/2005	1035	35-1452		Alkalinity	mg/L	5	no	--
W1337	WBT01	8/9/2005	951	35-1512		Alkalinity	mg/L	6	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1337	WBT01	9/14/2005	1005	35-1671		Alkalinity	mg/L	8	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Ammonia-N	mg/L	<0.02	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Ammonia-N	mg/L	<0.02	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Ammonia-N	mg/L	0.06	no	--
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Ammonia-N	mg/L	0.07	no	--
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Ammonia-N	mg/L	0.03	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Ammonia-N	mg/L	0.02	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Ammonia-N	mg/L	0.04	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Ammonia-N	mg/L	0.04	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Ammonia-N	mg/L	##	yes	b
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Ammonia-N	mg/L	##	yes	b
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Total Nitrogen	mg/L	0.25	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Total Nitrogen	mg/L	0.24	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Total Nitrogen	mg/L	0.73	no	--
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Total Nitrogen	mg/L	0.66	no	--
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Total Nitrogen	mg/L	0.57	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Total Nitrogen	mg/L	0.57	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Total Nitrogen	mg/L	0.74	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Total Nitrogen	mg/L	0.69	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Total Nitrogen	mg/L	0.68	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Total Nitrogen	mg/L	0.68	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Total Phosphorus	mg/L	0.018	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Total Phosphorus	mg/L	0.017	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Total Phosphorus	mg/L	0.064	no	--
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Total Phosphorus	mg/L	0.058	no	--
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Total Phosphorus	mg/L	0.046	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Total Phosphorus	mg/L	0.047	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Total Phosphorus	mg/L	0.056	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Total Phosphorus	mg/L	0.055	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Total Phosphorus	mg/L	0.043	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Total Phosphorus	mg/L	0.044	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	<i>E. coli</i>	CFU/100 mL	6	no	d
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	<i>E. coli</i>	CFU/100 mL	13	no	d,e
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	<i>E. coli</i>	CFU/100 mL	20	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	<i>E. coli</i>	CFU/100 mL	13	no	e
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	<i>E. coli</i>	CFU/100 mL	<6	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	<i>E. coli</i>	CFU/100 mL	6	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	<i>E. coli</i>	CFU/100 mL	6	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	<i>E. coli</i>	CFU/100 mL	<6	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	<i>E. coli</i>	CFU/100 mL	<6	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	<i>E. coli</i>	CFU/100 mL	6	no	e
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Fecal Coliforms	CFU/100 mL	<6	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Fecal Coliforms	CFU/100 mL	<6	no	e
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Fecal Coliforms	CFU/100 mL	27	no	d
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Fecal Coliforms	CFU/100 mL	<6	no	d,e

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Fecal Coliforms	CFU/100 mL	13	no	d
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Fecal Coliforms	CFU/100 mL	6	no	d
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Fecal Coliforms	CFU/100 mL	6	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Fecal Coliforms	CFU/100 mL	<6	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Fecal Coliforms	CFU/100 mL	<6	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Fecal Coliforms	CFU/100 mL	<6	no	e
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Turbidity	NTU	1.1	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Turbidity	NTU	1.2	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Turbidity	NTU	3.1	no	--
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Turbidity	NTU	3.8	no	--
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Turbidity	NTU	0.9	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Turbidity	NTU	0.9	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Turbidity	NTU	1.7	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Turbidity	NTU	1.3	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Turbidity	NTU	0.5	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Turbidity	NTU	0.5	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Apparent color	PCU	65	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Apparent color	PCU	65	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Apparent color	PCU	130	no	d
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Apparent color	PCU	95	no	d,e
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Apparent color	PCU	180	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Apparent color	PCU	180	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Apparent color	PCU	150	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Apparent color	PCU	150	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Apparent color	PCU	85	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Apparent color	PCU	100	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	True Color	PCU	50	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	True Color	PCU	60	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	True Color	PCU	##	yes	d
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	True Color	PCU	##	yes	d,e
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	True Color	PCU	120	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	True Color	PCU	130	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	True Color	PCU	130	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	True Color	PCU	150	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	True Color	PCU	85	no	--
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	True Color	PCU	100	no	--
W1338	LAW01	5/11/2005	1125	35-1123	35-1124	Alkalinity	mg/L	<2	no	--
W1338	LAW01	5/11/2005	1125	35-1124	35-1123	Alkalinity	mg/L	<2	no	--
W1338	LAW01	6/14/2005	1104	35-1204	35-1205	Alkalinity	mg/L	3	no	--
W1338	LAW01	6/14/2005	1111	35-1205	35-1204	Alkalinity	mg/L	<2	no	--
W1338	LAW01	7/13/2005	1109	35-1453	35-1454	Alkalinity	mg/L	<2	no	--
W1338	LAW01	7/13/2005	1109	35-1454	35-1453	Alkalinity	mg/L	3	no	--
W1338	LAW01	8/9/2005	1017	35-1513	35-1514	Alkalinity	mg/L	4	no	--
W1338	LAW01	8/9/2005	1022	35-1514	35-1513	Alkalinity	mg/L	3	no	--
W1338	LAW01	9/14/2005	1035	35-1672	35-1673	Alkalinity	mg/L	<2	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1338	LAW01	9/14/2005	1035	35-1673	35-1672	Alkalinity	mg/L	<2	no	--
W1338	LAW01	8/9/2005	1017	35-1513		Suspended Solids	mg/L	2.4	no	j
W1339	BOY01	5/11/2005	1155	35-1127		Ammonia-N	mg/L	<0.02	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Ammonia-N	mg/L	0.13	no	--
W1339	BOY01	7/13/2005	1130	35-1456		Ammonia-N	mg/L	<0.02	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Ammonia-N	mg/L	<0.02	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Ammonia-N	mg/L	##	yes	b
W1339	BOY01	5/11/2005	1155	35-1127		Total Nitrogen	mg/L	0.11	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Total Nitrogen	mg/L	0.65	no	--
W1339	BOY01	7/13/2005	1130	35-1456		Total Nitrogen	mg/L	0.29	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Total Nitrogen	mg/L	0.55	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Total Nitrogen	mg/L	0.30	no	--
W1339	BOY01	5/11/2005	1155	35-1127		Total Phosphorus	mg/L	0.007	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Total Phosphorus	mg/L	0.045	no	--
W1339	BOY01	7/13/2005	1130	35-1456		Total Phosphorus	mg/L	0.020	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Total Phosphorus	mg/L	0.036	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Total Phosphorus	mg/L	0.020	no	--
W1339	BOY01	5/11/2005	1155	35-1127		<i>E. coli</i>	CFU/100 mL	6	no	e
W1339	BOY01	6/14/2005	1132	35-1207		<i>E. coli</i>	CFU/100 mL	13	no	--
W1339	BOY01	7/13/2005	1130	35-1456		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1339	BOY01	8/9/2005	1040	35-1516		<i>E. coli</i>	CFU/100 mL	60	no	--
W1339	BOY01	9/14/2005	1105	35-1675		<i>E. coli</i>	CFU/100 mL	160	no	e
W1339	BOY01	5/11/2005	1155	35-1127		Fecal Coliforms	CFU/100 mL	<6	no	e
W1339	BOY01	6/14/2005	1132	35-1207		Fecal Coliforms	CFU/100 mL	26	no	d
W1339	BOY01	7/13/2005	1130	35-1456		Fecal Coliforms	CFU/100 mL	19	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Fecal Coliforms	CFU/100 mL	67	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Fecal Coliforms	CFU/100 mL	130	no	e
W1339	BOY01	5/11/2005	1155	35-1127		Turbidity	NTU	0.6	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Turbidity	NTU	2.9	no	--
W1339	BOY01	7/13/2005	1130	35-1456		Turbidity	NTU	0.6	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Turbidity	NTU	2.5	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Turbidity	NTU	0.6	no	--
W1339	BOY01	5/11/2005	1155	35-1127		Apparent color	PCU	40	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Apparent color	PCU	190	no	d
W1339	BOY01	7/13/2005	1130	35-1456		Apparent color	PCU	80	no	--
W1339	BOY01	8/9/2005	1040	35-1516		Apparent color	PCU	150	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Apparent color	PCU	65	no	--
W1339	BOY01	5/11/2005	1155	35-1127		True Color	PCU	30	no	--
W1339	BOY01	6/14/2005	1132	35-1207		True Color	PCU	150	no	d
W1339	BOY01	7/13/2005	1130	35-1456		True Color	PCU	65	no	--
W1339	BOY01	8/9/2005	1040	35-1516		True Color	PCU	100	no	--
W1339	BOY01	9/14/2005	1105	35-1675		True Color	PCU	55	no	--
W1339	BOY01	5/11/2005	1155	35-1127		Alkalinity	mg/L	<2	no	--
W1339	BOY01	6/14/2005	1132	35-1207		Alkalinity	mg/L	<2	no	--
W1339	BOY01	7/13/2005	1130	35-1456		Alkalinity	mg/L	<2	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1339	BOY01	8/9/2005	1040	35-1516		Alkalinity	mg/L	3	no	--
W1339	BOY01	9/14/2005	1105	35-1675		Alkalinity	mg/L	4	no	--
W1340	EBT01	5/11/2005	1031	35-1119		Ammonia-N	mg/L	<0.02	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Ammonia-N	mg/L	0.06	no	--
W1340	EBT01	7/13/2005	1009	35-1451		Ammonia-N	mg/L	0.03	no	--
W1340	EBT01	8/9/2005	930	35-1511		Ammonia-N	mg/L	0.03	no	--
W1340	EBT01	9/14/2005	940	35-1670		Ammonia-N	mg/L	##	yes	b
W1340	EBT01	5/11/2005	1031	35-1119		Total Nitrogen	mg/L	0.44	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Total Nitrogen	mg/L	0.41	no	--
W1340	EBT01	7/13/2005	1009	35-1451		Total Nitrogen	mg/L	0.45	no	--
W1340	EBT01	8/9/2005	930	35-1511		Total Nitrogen	mg/L	0.53	no	--
W1340	EBT01	9/14/2005	940	35-1670		Total Nitrogen	mg/L	0.48	no	--
W1340	EBT01	5/11/2005	1031	35-1119		Total Phosphorus	mg/L	0.014	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Total Phosphorus	mg/L	0.019	no	--
W1340	EBT01	7/13/2005	1009	35-1451		Total Phosphorus	mg/L	0.029	no	--
W1340	EBT01	8/9/2005	930	35-1511		Total Phosphorus	mg/L	0.029	no	--
W1340	EBT01	9/14/2005	940	35-1670		Total Phosphorus	mg/L	0.018	no	--
W1340	EBT01	5/11/2005	1031	35-1119		<i>E. coli</i>	CFU/100 mL	<6	no	--
W1340	EBT01	6/14/2005	1016	35-1202		<i>E. coli</i>	CFU/100 mL	97	no	--
W1340	EBT01	7/13/2005	1009	35-1451		<i>E. coli</i>	CFU/100 mL	52	no	--
W1340	EBT01	8/9/2005	930	35-1511		<i>E. coli</i>	CFU/100 mL	230	no	--
W1340	EBT01	9/14/2005	940	35-1670		<i>E. coli</i>	CFU/100 mL	160	no	e
W1340	EBT01	5/11/2005	1031	35-1119		Fecal Coliforms	CFU/100 mL	6	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Fecal Coliforms	CFU/100 mL	97	no	d
W1340	EBT01	7/13/2005	1009	35-1451		Fecal Coliforms	CFU/100 mL	52	no	--
W1340	EBT01	8/9/2005	930	35-1511		Fecal Coliforms	CFU/100 mL	230	no	--
W1340	EBT01	9/14/2005	940	35-1670		Fecal Coliforms	CFU/100 mL	130	no	e
W1340	EBT01	5/11/2005	1031	35-1119		Turbidity	NTU	2.4	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Turbidity	NTU	2.7	no	--
W1340	EBT01	7/13/2005	1009	35-1451		Turbidity	NTU	2.1	no	--
W1340	EBT01	8/9/2005	930	35-1511		Turbidity	NTU	3.2	no	--
W1340	EBT01	9/14/2005	940	35-1670		Turbidity	NTU	2.2	no	--
W1340	EBT01	5/11/2005	1031	35-1119		Apparent color	PCU	50	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Apparent color	PCU	60	no	d
W1340	EBT01	7/13/2005	1009	35-1451		Apparent color	PCU	130	no	--
W1340	EBT01	8/9/2005	930	35-1511		Apparent color	PCU	90	no	--
W1340	EBT01	9/14/2005	940	35-1670		Apparent color	PCU	85	no	--
W1340	EBT01	5/11/2005	1031	35-1119		True Color	PCU	45	no	--
W1340	EBT01	6/14/2005	1016	35-1202		True Color	PCU	55	no	d
W1340	EBT01	7/13/2005	1009	35-1451		True Color	PCU	90	no	--
W1340	EBT01	8/9/2005	930	35-1511		True Color	PCU	90	no	--
W1340	EBT01	9/14/2005	940	35-1670		True Color	PCU	55	no	--
W1340	EBT01	5/11/2005	1031	35-1119		Alkalinity	mg/L	3	no	--
W1340	EBT01	6/14/2005	1016	35-1202		Alkalinity	mg/L	3	no	--
W1340	EBT01	7/13/2005	1009	35-1451		Alkalinity	mg/L	4	no	--

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Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1340	EBT01	8/9/2005	930	35-1511		Alkalinity	mg/L	4	no	--
W1340	EBT01	9/14/2005	940	35-1670		Alkalinity	mg/L	7	no	--
W1344	KEY01	5/11/2005	1055	35-1108		Ammonia-N	mg/L	<0.02	no	--
W1344	KEY01	6/14/2005	1040	35-1196		Ammonia-N	mg/L	<0.02	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Ammonia-N	mg/L	<0.02	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Ammonia-N	mg/L	<0.02	no	--
W1344	KEY01	9/14/2005	955	35-1665		Ammonia-N	mg/L	<0.02	no	--
W1344	KEY01	5/11/2005	1055	35-1108		Total Nitrogen	mg/L	##	yes	h
W1344	KEY01	6/14/2005	1040	35-1196		Total Nitrogen	mg/L	0.29	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Total Nitrogen	mg/L	0.19	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Total Nitrogen	mg/L	0.33	no	--
W1344	KEY01	9/14/2005	955	35-1665		Total Nitrogen	mg/L	0.28	no	--
W1344	KEY01	5/11/2005	1055	35-1108		Total Phosphorus	mg/L	<0.005	no	--
W1344	KEY01	6/14/2005	1040	35-1196		Total Phosphorus	mg/L	0.017	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Total Phosphorus	mg/L	0.013	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Total Phosphorus	mg/L	0.017	no	--
W1344	KEY01	9/14/2005	955	35-1665		Total Phosphorus	mg/L	0.016	no	--
W1344	KEY01	5/11/2005	1055	35-1108		<i>E. coli</i>	CFU/100 mL	100	no	e
W1344	KEY01	6/14/2005	1040	35-1196		<i>E. coli</i>	CFU/100 mL	170	no	--
W1344	KEY01	7/13/2005	1010	35-1445		<i>E. coli</i>	CFU/100 mL	270	no	--
W1344	KEY01	8/9/2005	1020	35-1505		<i>E. coli</i>	CFU/100 mL	64	no	--
W1344	KEY01	9/14/2005	955	35-1665		<i>E. coli</i>	CFU/100 mL	190	no	e
W1344	KEY01	5/11/2005	1055	35-1108		Fecal Coliforms	CFU/100 mL	84	no	e
W1344	KEY01	6/14/2005	1040	35-1196		Fecal Coliforms	CFU/100 mL	190	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Fecal Coliforms	CFU/100 mL	360	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Fecal Coliforms	CFU/100 mL	71	no	--
W1344	KEY01	9/14/2005	955	35-1665		Fecal Coliforms	CFU/100 mL	97	no	e
W1344	KEY01	5/11/2005	1055	35-1108		Turbidity	NTU	0.9	no	b
W1344	KEY01	6/14/2005	1040	35-1196		Turbidity	NTU	1.1	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Turbidity	NTU	0.6	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Turbidity	NTU	1.1	no	--
W1344	KEY01	9/14/2005	955	35-1665		Turbidity	NTU	0.6	no	--
W1344	KEY01	5/11/2005	1055	35-1108		Apparent color	PCU	20	no	--
W1344	KEY01	6/14/2005	1040	35-1196		Apparent color	PCU	65	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Apparent color	PCU	50	no	--
W1344	KEY01	8/9/2005	1020	35-1505		Apparent color	PCU	55	no	--
W1344	KEY01	9/14/2005	955	35-1665		Apparent color	PCU	48	no	--
W1344	KEY01	5/11/2005	1055	35-1108		True Color	PCU	20	no	--
W1344	KEY01	6/14/2005	1040	35-1196		True Color	PCU	55	no	--
W1344	KEY01	7/13/2005	1010	35-1445		True Color	PCU	42	no	--
W1344	KEY01	8/9/2005	1020	35-1505		True Color	PCU	50	no	--
W1344	KEY01	9/14/2005	955	35-1665		True Color	PCU	43	no	--
W1344	KEY01	5/11/2005	1055	35-1108		Alkalinity	mg/L	<2	no	b
W1344	KEY01	6/14/2005	1040	35-1196		Alkalinity	mg/L	4	no	--
W1344	KEY01	7/13/2005	1010	35-1445		Alkalinity	mg/L	3	no	--

Table 5. 2005 MassDEP DWM Millers River Watershed water quality data

Unique ID	Station ID	Date	Time	OWMID	Duplicate	Analyte	Units	Result	Censor	Qualifier*
W1344	KEY01	8/9/2005	1020	35-1505		Alkalinity	mg/L	5	no	--
W1344	KEY01	9/14/2005	955	35-1665		Alkalinity	mg/L	8	no	--

*see Appendix 1 for a complete list of data qualifiers

Table 6. Geometric mean* of *E. coli* results for each sampling station.

Station ID	Unique ID	Sample Count	Geometric Mean (CFU/100 ml)
BB01	W0685	5	23
BB02	W1315	5	48
BOY01	W1339	5	21
EBT01	W1340	5	64
KEY01	W1344	5	141
LAW01	W1338	5	8
LYB01	W1334	5	48
M01	W0051	5	52
MH01	W1335	5	6
MI05A	W0682	5	67
MI08	W0684	5	43
MI20	W1316	5	29
MI202	W1311	5	178
MITOT	W1312	5	33
NM01	W1313	5	19
OT03	W0686	5	76
TUL01	W1314	5	49
WBT01	W1337	5	24
WET 01	W1336	5	15
*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 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W0051	M01	35-1130	5/11/05	9:37	0.4	14.4	--	5.6	--	226	--	147	--	8.1	--	80	--
W0051	M01	35-1312	6/13/05	16:42	0.1	27.3	--	6.2	--	265	--	170	--	4.3	i	56	i
W0051	M01	35-1183	6/14/05	9:10	0.2	25.2	--	5.8	--	250	--	160	--	2.5	--	31	--
W0051	M01	35-1313	6/15/05	12:47	0.1	19.3	--	5.9	--	230	--	147	--	3.0	--	33	--
W0051	M01	35-1392	7/11/05	17:28	0.4	24.5	--	5.6	--	213	--	136	--	4.5	--	55	--
W0051	M01	35-1393	7/13/05	12:13	0.2	23.5	--	5.8	--	241	--	154	--	3.5	--	42	--
W0051	M01	35-1432	7/13/05	8:53	0.4	22.7	--	5.7	--	227	--	145	--	3.2	--	38	--
W0051	M01	35-1652	8/8/05	16:15	0.1	25.9	--	5.9	--	340	--	218	--	3.4	--	43	--
W0051	M01	35-1542	8/9/05	8:53	0.5	23.9	--	5.9	--	327	--	209	--	1.6	--	19	--
W0051	M01	35-1653	8/10/05	12:24	0.1	24.0	--	5.9	--	376	--	240	--	2.3	i	28	i
W0051	M01	35-1595	9/12/05	19:11	0.1	21.2	--	5.9	--	370	--	237	--	3.8	--	43	--
W0051	M01	35-1596	9/14/05	14:07	0.2	23.0	--	5.8	--	362	--	232	--	3.4	--	40	--
W0051	M01	35-1712	9/14/05	8:44	0.9	21.3	--	6.4	--	363	--	232	--	1.2	--	14	--
W0682	MI05A	35-1113	5/11/05	11:51	0.4	15.0	--	6.5	--	137	--	88	--	9.9	u	100	u
W0682	MI05A	35-1276	6/10/05	11:46	0.4	22.5	--	6.2	--	139	--	88	--	##	i	##	i
W0682	MI05A	35-1277	6/13/05	10:18	0.3	24.8	--	6.6	--	140	--	89	--	6.8	i	83	i
W0682	MI05A	35-1176	6/14/05	11:21	0.2	25.9	--	6.4	--	136	--	89	--	7.0	--	87	--
W0682	MI05A	35-1357	7/11/05	11:09	0.2	21.6	--	6.2	--	117	--	75	--	8.2	--	95	--
W0682	MI05A	35-1425	7/13/05	10:49	0.3	23.7	--	6.4	--	129	--	84	--	7.5	--	88	--
W0682	MI05A	35-1616	8/5/05	11:36	0.3	25.1	--	6.8	--	171	--	109	--	7.1	--	88	--
W0682	MI05A	35-1617	8/8/05	10:49	0.3	24.6	--	6.6	--	171	--	110	--	7.4	--	90	--
W0682	MI05A	35-1535	8/9/05	11:02	0.1	24.2	--	6.7	--	172	--	112	--	7.4	--	89	--
W0682	MI05A	35-1239	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W0682	MI05A	35-1240	9/12/05	12:21	0.2	20.0	--	7.1	--	227	--	146	--	9.2	--	103	--
W0682	MI05A	35-1705	9/14/05	10:35	0.1	21.2	--	6.9	--	199	--	129	--	8.9	--	100	--
W0684	MI08	35-1116	5/11/05	9:48	0.8	14.1	--	6.2	u	112	--	73	--	10.6	--	103	--
W0684	MI08	35-1177	6/14/05	9:32	0.7	24.3	--	6.1	--	128	--	83	--	7.9	--	94	--
W0684	MI08	35-1426	7/13/05	9:24	0.7	22.6	--	6.4	--	94	--	61	--	7.9	--	91	--
W0684	MI08	35-1536	8/9/05	8:52	0.4	24.1	--	6.7	--	148	--	96	--	7.8	--	93	--
W0684	MI08	35-1706	9/14/05	9:00	0.5	20.8	--	6.8	--	185	--	120	--	8.7	--	97	--
W0685	BB01	35-1134	5/11/05	10:30	0.6	14.1	--	5.9	--	193	--	125	--	10.4	--	101	--
W0685	BB01	35-1306	6/13/05	15:43	0.1	23.8	--	6.0	--	164	--	105	--	7.1	i	85	i

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W0685	BB01	35-1185	6/14/05	10:15	0.7	22.9	--	5.8	--	169	--	108	--	6.7	--	80	--
W0685	BB01	35-1307	6/15/05	11:27	0.1	19.2	--	6.1	--	168	--	108	--	7.5	--	83	--
W0685	BB01	35-1386	7/11/05	16:41	0.2	22.5	--	5.6	--	142	--	91	--	7.8	--	92	--
W0685	BB01	35-1387	7/13/05	11:28	0.2	21.2	--	6.0	--	156	--	100	--	7.5	--	85	--
W0685	BB01	35-1434	7/13/05	9:55	0.5	21.0	--	6.0	--	153	--	98	--	6.7	--	76	--
W0685	BB01	35-1646	8/8/05	15:23	0.2	25.2	--	6.2	--	277	--	177	--	6.6	i	81	i
W0685	BB01	35-1544	8/9/05	10:02	0.1	22.5	--	6.2	--	272	--	174	--	6.5	--	76	--
W0685	BB01	35-1647	8/10/05	11:06	0.3	22.3	--	6.4	--	273	--	175	--	6.6	i	77	i
W0685	BB01	35-1589	9/12/05	18:25	0.1	19.9	--	6.3	--	290	--	186	--	7.7	--	86	--
W0685	BB01	35-1590	9/14/05	13:20	**	20.7	--	6.3	--	303	--	194	--	7.5	--	85	--
W0685	BB01	35-1714	9/14/05	9:44	**	18.1	--	6.1	--	303	--	194	--	6.8	--	73	--
W0686	OT03	35-1136	5/11/05	10:56	0.6	15.8	--	6.6	--	305	--	198	--	10.5	--	106	--
W0686	OT03	35-1156	5/19/05	10:45	0.4	13.6	--	6.9	--	338	--	217	--	10.2	u	100	u
W0686	OT03	35-1159	5/23/05	9:32	0.4	12.3	--	6.5	--	340	--	218	--	10.3	u	99	u
W0686	OT03	35-1300	6/13/05	14:50	0.2	25.1	--	6.9	--	285	--	182	--	7.4	i	91	i
W0686	OT03	35-1186	6/14/05	10:44	0.3	24.8	--	6.6	--	320	--	205	--	7.0	--	87	--
W0686	OT03	35-1301	6/15/05	12:17	0.1	19.5	--	6.7	--	329	--	211	--	8.1	--	90	--
W0686	OT03	35-1380	7/11/05	15:36	0.4	23.8	--	6.5	--	240	--	154	--	7.7	--	93	--
W0686	OT03	35-1381	7/13/05	11:05	0.2	23.0	--	6.8	--	312	--	200	--	7.4	--	87	--
W0686	OT03	35-1435	7/13/05	10:18	0.1	22.8	--	6.8	--	304	--	195	--	7.8	--	91	--
W0686	OT03	35-1640	8/8/05	14:39	0.3	26.4	--	7.1	--	632	--	405	--	6.0	--	75	--
W0686	OT03	35-1545	8/9/05	10:32	**	23.7	--	7.0	--	588	--	376	--	6.2	--	75	--
W0686	OT03	35-1641	8/10/05	10:41	0.4	23.8	--	7.1	--	629	--	403	--	6.3	i	75	i
W0686	OT03	35-1583	9/12/05	17:27	0.1	20.9	--	7.2	--	789	--	505	--	7.4	--	84	--
W0686	OT03	35-1584	9/14/05	9:11	0.1	20.5	--	7.0	--	854	--	546	--	6.8	--	77	--
W0686	OT03	35-1715	9/14/05	10:09	0.4	21.0	--	7.1	--	859	--	550	--	6.6	--	75	--
W0692	MI10A	35-1157	5/19/05	11:38	0.4	13.9	--	6.5	--	161	--	103	--	9.6	u	94	u
W0692	MI10A	35-1160	5/23/05	10:33	0.5	12.6	--	6.3	--	160	--	102	--	10.0	u	96	u
W0692	MI10A	35-1303	6/13/05	15:18	0.2	24.7	--	6.5	--	157	--	100	--	7.0	i	86	i
W0692	MI10A	35-1304	6/15/05	11:07	0.1	21.3	--	6.4	--	166	--	106	--	7.5	--	87	--
W0692	MI10A	35-1383	7/11/05	16:15	0.6	22.4	--	6.0	--	139	--	89	--	7.8	--	91	--
W0692	MI10A	35-1369	7/13/05	8:40	0.4	23.4	--	6.1	--	149	--	95	--	6.9	--	82	--

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W0692	MI10A	35-1643	8/8/05	15:04	**	25.5	--	6.8	--	218	--	140	--	7.8	i	96	i
W0692	MI10A	35-1644	8/10/05	11:28	0.2	24.7	--	6.7	--	218	--	139	--	7.3	i	89	i
W0692	MI10A	35-1586	9/12/05	17:57	0.2	20.0	--	6.8	--	206	--	132	--	8.1	--	90	--
W0692	MI10A	35-1587	9/14/05	12:59	**	21.9	--	6.7	--	205	--	131	--	8.4	--	97	--
W0694	MI14	35-1297	6/13/05	14:05	0.1	24.9	--	6.3	--	94	--	60	--	7.4	i	90	i
W0694	MI14	35-1298	6/15/05	10:00	0.1	20.9	--	6.2	--	94	--	60	--	7.9	--	91	--
W0694	MI14	35-1377	7/11/05	14:57	0.4	22.8	--	6.0	--	97	--	62	--	8.6	--	101	--
W0694	MI14	35-1378	7/13/05	10:32	0.2	22.7	--	6.1	--	94	--	60	--	7.6	--	89	--
W0694	MI14	35-1637	8/8/05	14:05	0.3	23.8	--	6.3	--	124	--	79	--	7.5	--	89	--
W0694	MI14	35-1638	8/10/05	10:09	0.4	22.5	--	6.4	--	123	--	79	--	5.6	u,i	66	u,i
W0694	MI14	35-1580	9/12/05	16:39	0.8	20.2	--	6.3	--	118	--	76	--	7.7	--	87	--
W0694	MI14	35-1581	9/14/05	12:14	0.4	20.8	--	6.2	--	117	--	75	--	7.2	--	82	--
W1311	MI202	35-1140	5/11/05	11:25	0.3	14.1	--	5.8	--	98	--	63	--	10.4	--	102	--
W1311	MI202	35-1155	5/19/05	9:35	0.2	14.4	--	6.2	--	97	--	62	--	9.9	u	98	u
W1311	MI202	35-1158	5/23/05	9:58	0.3	13.5	--	6.2	--	100	--	64	--	10.0	--	98	--
W1311	MI202	35-1294	6/13/05	13:31	0.2	25.1	--	6.2	--	89	--	57	--	7.5	i	92	i
W1311	MI202	35-1187	6/14/05	12:09	0.1	25.3	--	6.1	--	91	--	58	--	7.4	--	92	--
W1311	MI202	35-1295	6/15/05	9:36	**	22.5	--	6.2	--	93	--	59	--	7.9	--	93	--
W1311	MI202	35-1374	7/11/05	14:27	0.2	22.0	--	6.0	--	97	--	62	--	8.4	--	97	--
W1311	MI202	35-1375	7/13/05	10:12	0.3	23.6	--	6.1	--	92	--	59	--	7.7	--	92	--
W1311	MI202	35-1436	7/13/05	10:49	0.3	23.5	--	6.2	--	90	--	58	--	8.1	--	96	--
W1311	MI202	35-1634	8/8/05	13:41	0.1	26.2	--	6.3	--	119	--	76	--	7.6	i	95	i
W1311	MI202	35-1546	8/9/05	11:02	0.2	24.8	--	6.6	--	114	--	73	--	7.2	--	87	--
W1311	MI202	35-1635	8/10/05	9:46	0.2	24.1	--	6.4	--	115	--	74	--	7.2	i	87	i
W1311	MI202	35-1257	9/12/05	16:13	0.2	21.5	--	6.3	--	108	--	69	--	8.0	--	92	--
W1311	MI202	35-1258	9/14/05	11:50	0.1	22.4	--	6.3	--	--	--	--	--	8.0	--	93	--
W1311	MI202	35-1716	9/14/05	10:37	0.3	21.8	--	6.4	--	107	--	69	--	7.7	--	89	--
W1312	MITOT	35-1103	5/11/05	9:35	0.3	14.4	--	6.9	--	135	--	87	--	10.5	--	104	--
W1312	MITOT	35-1261	6/10/05	9:20	0.3	21.8	--	6.6	--	150	--	96	--	##	i	##	i
W1312	MITOT	35-1262	6/13/05	8:34	0.1	23.5	--	6.9	--	143	--	91	--	7.8	i	94	i
W1312	MITOT	35-1170	6/14/05	9:11	0.4	24.2	--	6.6	--	148	--	96	--	8.2	--	98	--
W1312	MITOT	35-1341	7/8/05	9:06	0.2	19.5	--	6.7	--	99	--	63	--	8.4	--	92	--

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W1312	MITOT	35-1342	7/11/05	9:23	0.7	21.5	--	6.6	--	110	--	70	--	8.4	--	96	--
W1312	MITOT	35-1420	7/13/05	8:44	0.4	22.3	--	6.9	--	130	--	84	--	8.7	--	100	--
W1312	MITOT	35-1601	8/5/05	9:31	0.1	24.3	--	7.4	--	208	--	133	--	7.7	--	93	--
W1312	MITOT	35-1602	8/8/05	9:11	**	23.0	--	7.1	--	206	--	133	--	8.2	--	96	--
W1312	MITOT	35-1530	8/9/05	9:04	1.2	24.0	--	7.2	--	196	--	128	--	8.3	--	99	--
W1312	MITOT	35-1224	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1312	MITOT	35-1225	9/12/05	10:28	0.2	17.5	--	7.5	--	285	--	183	--	9.9	--	105	--
W1312	MITOT	35-1700	9/14/05	8:43	0.4	20.7	--	7.2	--	259	--	168	--	8.4	--	93	--
W1313	NM01	35-1144	5/11/05	12:18	0.2	15.7	--	5.8	--	83	--	54	--	9.9	--	100	--
W1313	NM01	35-1189	6/14/05	11:40	0.3	25.6	--	6.0	--	81	--	52	--	7.1	--	89	--
W1313	NM01	35-1438	7/13/05	11:36	0.3	23.7	--	6.0	--	84	--	54	--	7.0	m,u	84	m,u
W1313	NM01	35-1548	8/9/05	11:54	0.2	23.8	--	6.1	--	97	--	62	--	6.0	--	71	--
W1313	NM01	35-1718	9/14/05	11:27	0.3	22.1	--	5.9	--	92	--	59	--	7.1	--	82	--
W1314	TUL01	35-1118	5/11/05	10:08	0.9	13.2	--	5.9	u	53	--	34	--	10.1	--	97	--
W1314	TUL01	35-1164	5/23/05	11:53	0.2	13.0	--	6.3	--	57	--	36	--	9.4	u	91	u
W1314	TUL01	35-1167	5/25/05	9:53	**	11.8	--	--	--	--	--	--	--	9.6	--	90	--
W1314	TUL01	35-1279	6/10/05	12:50	0.5	21.2	--	6.0	--	50	--	32	--	##	i	##	i
W1314	TUL01	35-1280	6/13/05	10:44	0.4	22.4	--	6.4	--	52	--	33	--	6.8	i	80	i
W1314	TUL01	35-1178	6/14/05	9:52	1.0	##	m	##	m	##	m	##	m	##	m	##	m
W1314	TUL01	35-1360	7/11/05	12:02	0.2	22.6	--	5.8	--	43	--	28	--	6.9	u	82	u
W1314	TUL01	35-1427	7/13/05	9:51	0.9	22.4	--	6.1	--	47	--	31	--	7.3	--	84	--
W1314	TUL01	35-1604	8/5/05	10:00	**	19.8	--	6.6	--	43	--	28	--	7.9	i	88	i
W1314	TUL01	35-1619	8/5/05	12:05	0.4	24.1	--	6.4	--	55	--	35	--	6.6	--	79	--
W1314	TUL01	35-1605	8/8/05	9:35	0.3	17.9	--	6.6	--	56	--	36	--	8.5	i	91	i
W1314	TUL01	35-1620	8/8/05	11:15	0.3	22.8	--	6.3	--	60	--	39	--	7.1	--	83	--
W1314	TUL01	35-1537	8/9/05	9:14	0.7	23.4	--	6.3	--	59	--	38	--	6.9	--	81	--
W1314	TUL01	35-1242	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1314	TUL01	35-1243	9/12/05	13:32	0.3	17.1	--	6.4	--	73	--	47	--	8.0	--	84	--
W1314	TUL01	35-1707	9/14/05	9:19	0.6	18.4	--	6.4	--	75	--	49	--	7.2	--	77	--
W1315	BB02	35-1132	5/11/05	10:04	0.7	12.6	--	5.5	--	251	--	163	--	7.0	--	66	--
W1315	BB02	35-1309	6/13/05	16:15	0.1	23.8	--	5.8	--	162	--	103	--	4.1	i, u	50	i, u
W1315	BB02	35-1184	6/14/05	9:47	0.8	20.9	--	5.6	--	221	--	141	--	3.7	--	43	--

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W1315	BB02	35-1310	6/15/05	11:55	**	16.2	--	5.8	--	236	--	151	--	5.5	--	57	--
W1315	BB02	35-1389	7/11/05	17:01	0.2	23.5	--	5.6	--	156	--	100	--	5.5	--	66	--
W1315	BB02	35-1390	7/13/05	11:49	0.1	19.3	--	5.7	--	221	--	141	--	4.7	--	52	--
W1315	BB02	35-1433	7/13/05	9:30	0.3	18.9	--	5.7	--	230	--	147	--	5.0	--	54	--
W1315	BB02	35-1649	8/8/05	15:51	0.2	21.8	--	6.0	--	385	--	246	--	4.4	--	50	--
W1315	BB02	35-1543	8/9/05	9:33	0.1	21.9	m	6.0	m	353	m, u	226	m, u	3.0	m	34	m
W1315	BB02	35-1650	8/10/05	11:55	0.2	20.8	u	5.9	--	352	--	225	--	2.6	i	30	i
W1315	BB02	35-1592	9/12/05	18:46	0.1	17.4	--	5.9	--	182	--	117	--	4.0	--	43	--
W1315	BB02	35-1593	9/14/05	13:42	**	19.2	--	5.9	--	252	--	161	--	4.2	--	46	--
W1315	BB02	35-1713	9/14/05	9:16	0.2	17.7	--	5.8	--	##	u	##	u	3.6	u	38	u
W1316	MI20	35-1142	5/11/05	11:57	0.6	14.9	--	5.0	--	94	--	61	--	9.9	--	98	--
W1316	MI20	35-1291	6/13/05	13:06	0.3	24.0	--	5.5	--	81	--	52	--	6.7	i	81	i
W1316	MI20	35-1188	6/14/05	11:17	0.3	23.8	--	5.2	--	93	--	59	--	6.6	--	80	--
W1316	MI20	35-1292	6/15/05	9:14	0.3	19.6	--	5.2	--	97	--	62	--	7.1	--	80	--
W1316	MI20	35-1371	7/11/05	14:06	0.5	22.7	--	5.1	--	81	--	52	--	6.8	--	80	--
W1316	MI20	35-1372	7/13/05	9:50	0.4	21.7	--	5.3	--	87	--	56	--	6.2	u	72	u
W1316	MI20	35-1437	7/13/05	11:16	0.2	22.0	--	5.4	--	88	--	56	--	7.1	--	82	--
W1316	MI20	35-1631	8/8/05	13:18	0.3	23.8	--	5.4	--	109	--	70	--	4.5	--	53	--
W1316	MI20	35-1547	8/9/05	11:32	0.2	23.5	--	5.5	--	112	--	72	--	3.8	--	45	--
W1316	MI20	35-1632	8/10/05	9:23	0.5	22.0	--	5.5	--	98	--	63	--	1.9	u,i	22	u,i
W1316	MI20	35-1254	9/12/05	15:48	0.3	16.6	--	5.5	--	108	--	69	--	2.7	--	28	--
W1316	MI20	35-1255	9/14/05	11:21	**	13.3	u	6.1	--	105	--	67	--	<0.2	u	<2	u
W1316	MI20	35-1717	9/14/05	11:05	0.1	19.0	u	5.5	--	132	--	85	--	3.1	u	34	u
W1334	LYB01	35-1105	5/11/05	10:07	0.2	11.9	--	6.6	--	38	--	24	--	10.9	u	102	u
W1334	LYB01	35-1166	5/23/05	13:59	0.4	10.7	--	6.3	--	39	--	25	--	10.8	u	100	u
W1334	LYB01	35-1169	5/25/05	11:17	**	9.0	--	--	--	--	--	--	--	11.0	--	97	--
W1334	LYB01	35-1264	6/10/05	9:51	0.2	18.0	--	6.2	--	38	--	25	--	##	i	##	i
W1334	LYB01	35-1265	6/13/05	8:58	0.2	19.8	--	6.4	--	37	--	24	--	8.6	i	96	i
W1334	LYB01	35-1171	6/14/05	9:46	0.1	19.8	--	6.1	--	46	--	30	--	9.0	--	99	--
W1334	LYB01	35-1344	7/8/05	9:30	0.3	16.4	--	6.2	--	34	--	22	--	9.3	m	96	m
W1334	LYB01	35-1345	7/11/05	9:46	0.4	17.9	--	6.0	--	35	--	23	--	9.1	--	98	--
W1334	LYB01	35-1421	7/13/05	9:15	0.1	17.8	--	6.4	--	45	--	29	--	9.5	--	100	--

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W1334	LYB01	35-1531	8/9/05	9:29	0.1	18.7	--	6.7	--	57	--	37	--	9.4	--	101	--
W1334	LYB01	35-1227	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1334	LYB01	35-1228	9/12/05	10:56	0.2	13.6	--	6.8	--	64	--	41	--	9.7	--	95	--
W1334	LYB01	35-1701	9/14/05	9:03	0.3	16.3	--	6.8	u	68	--	44	--	9.8	--	100	--
W1335	MH01	35-1107	5/11/05	10:32	0.1	11.1	--	6.1	--	--	--	--	--	10.9	--	101	--
W1335	MH01	35-1165	5/23/05	13:33	0.5	9.2	--	5.9	--	--	--	--	--	11.3	u	101	u
W1335	MH01	35-1168	5/25/05	11:46	**	8.1	--	--	--	--	--	--	--	11.2	--	97	--
W1335	MH01	35-1267	6/10/05	10:13	0.2	17.1	--	5.7	--	--	--	--	--	##	i	##	i
W1335	MH01	35-1268	6/13/05	9:15	0.4	18.6	--	5.9	--	25	--	16	--	8.7	i	95	i
W1335	MH01	35-1172	6/14/05	10:04	0.1	18.8	--	5.6	--	28	--	18	--	9.2	--	99	--
W1335	MH01	35-1348	7/11/05	10:02	0.3	18.5	--	5.3	--	--	--	--	--	9.1	--	98	--
W1335	MH01	35-1422	7/13/05	9:30	0.2	18.1	--	5.9	--	26	--	17	--	9.4	--	100	--
W1335	MH01	35-1607	8/5/05	10:20	**	19.1	--	6.3	--	28	--	18	--	8.4	i	92	i
W1335	MH01	35-1608	8/8/05	9:50	**	17.8	--	6.2	--	36	--	23	--	8.7	i	92	i
W1335	MH01	35-1532	8/9/05	9:45	0.1	18.6	--	6.4	--	37	--	24	--	9.4	--	100	--
W1335	MH01	35-1230	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1335	MH01	35-1231	9/12/05	11:13	0.1	13.3	--	6.5	--	38	--	24	--	9.8	--	95	--
W1335	MH01	35-1702	9/14/05	9:20	0.1	16.3	--	6.6	--	41	--	27	--	9.6	--	98	--
W1336	WET 01	35-1111	5/11/05	11:24	0.3	11.7	--	6.2	--	--	--	--	--	10.7	u	100	u
W1336	WET 01	35-1273	6/10/05	11:20	0.6	17.3	--	5.7	--	--	--	--	--	##	i	##	i
W1336	WET 01	35-1274	6/13/05	10:01	0.5	19.1	--	6.1	--	--	--	--	--	8.0	i	89	i
W1336	WET 01	35-1175	6/14/05	11:05	0.6	19.8	--	5.9	--	--	--	--	--	8.9	--	98	--
W1336	WET 01	35-1354	7/11/05	10:51	0.6	18.3	--	5.6	--	--	--	--	--	8.2	u	89	u
W1336	WET 01	35-1424	7/13/05	10:33	0.8	18.2	--	6.0	--	--	--	--	--	9.3	--	99	--
W1336	WET 01	35-1613	8/5/05	11:14	**	19.5	--	6.1	--	--	--	--	--	8.2	--	91	--
W1336	WET 01	35-1614	8/8/05	10:31	0.2	18.2	--	6.0	--	--	--	--	--	8.7	--	93	--
W1336	WET 01	35-1534	8/9/05	10:45	0.5	18.9	--	6.3	--	--	--	--	--	9.2	--	99	--
W1336	WET 01	35-1236	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1336	WET 01	35-1237	9/12/05	12:01	0.3	13.0	--	6.3	--	--	--	--	--	10.0	--	96	--
W1336	WET 01	35-1704	9/14/05	10:18	0.5	16.5	--	6.5	u	--	--	--	--	9.7	--	99	--
W1337	WBT01	35-1122	5/11/05	10:52	0.3	15.3	--	6.2	--	49	--	32	--	9.8	--	97	--
W1337	WBT01	35-1285	6/10/05	13:54	0.5	23.1	--	6.1	--	47	--	30	--	##	i	##	i

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W1337	WBT01	35-1286	6/13/05	11:32	0.8	23.7	--	6.6	--	53	--	34	--	6.6	i	79	i
W1337	WBT01	35-1180	6/14/05	10:42	0.1	24.2	--	6.1	--	38	--	25	--	6.9	--	83	--
W1337	WBT01	35-1366	7/11/05	12:47	0.3	22.2	--	6.1	--	41	--	26	--	7.6	--	89	--
W1337	WBT01	35-1429	7/13/05	10:40	0.4	23.4	--	6.4	--	47	--	31	--	7.5	--	88	--
W1337	WBT01	35-1625	8/5/05	12:55	0.4	24.6	--	6.5	--	45	--	29	--	6.3	--	76	--
W1337	WBT01	35-1626	8/8/05	11:55	0.3	23.3	--	6.3	--	56	--	36	--	7.0	i	83	i
W1337	WBT01	35-1539	8/9/05	10:00	0.3	23.0	--	6.5	--	56	--	36	--	7.4	--	86	--
W1337	WBT01	35-1248	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1337	WBT01	35-1249	9/12/05	14:21	0.5	19.5	--	6.4	--	57	--	36	--	8.2	--	90	--
W1337	WBT01	35-1709	9/14/05	10:11	0.6	18.0	--	6.2	--	63	--	41	--	7.5	--	79	--
W1338	LAW01	35-1126	5/11/05	11:20	0.4	15.8	--	5.4	--	54	--	35	--	9.5	--	95	--
W1338	LAW01	35-1181	6/14/05	11:10	0.3	25.8	--	5.4	--	59	--	38	--	5.3	--	65	--
W1338	LAW01	35-1430	7/13/05	11:14	0.4	23.7	--	5.5	--	51	--	33	--	5.7	--	67	--
W1338	LAW01	35-1540	8/9/05	10:29	0.3	23.7	--	5.7	--	58	--	38	--	5.6	--	66	--
W1338	LAW01	35-1710	9/14/05	10:40	0.3	19.7	--	5.7	--	74	--	48	--	7.0	--	77	--
W1339	BOY01	35-1128	5/11/05	12:01	0.4	14.0	--	5.8	--	29	--	19	--	10.9	--	106	--
W1339	BOY01	35-1182	6/14/05	11:37	0.2	21.9	--	5.6	--	34	--	22	--	8.4	--	96	--
W1339	BOY01	35-1368	7/11/05	13:28	0.2	20.1	--	5.3	--	26	--	17	--	8.9	--	100	--
W1339	BOY01	35-1384	7/13/05	9:13	0.1	19.7	--	5.5	--	28	--	18	--	8.6	--	95	--
W1339	BOY01	35-1431	7/13/05	11:36	0.2	20.1	--	5.8	--	30	--	19	--	9.1	--	100	--
W1339	BOY01	35-1541	8/9/05	10:55	0.1	20.5	--	6.1	--	28	--	18	--	8.9	--	98	--
W1339	BOY01	35-1251	9/12/05	15:03	0.1	17.0	--	6.4	--	29	--	18	--	9.2	--	96	--
W1339	BOY01	35-1711	9/14/05	11:08	0.1	17.5	--	6.2	--	31	--	20	--	9.5	--	99	--
W1340	EBT01	35-1120	5/11/05	10:33	0.4	12.7	--	5.7	--	50	--	32	--	10.4	--	98	--
W1340	EBT01	35-1282	6/10/05	13:16	0.2	21.2	--	5.8	--	47	--	30	--	###	i	###	i
W1340	EBT01	35-1283	6/13/05	11:13	0.2	22.4	--	6.2	--	49	--	31	--	7.1	i	84	i
W1340	EBT01	35-1179	6/14/05	10:21	0.5	22.9	--	5.7	--	52	--	34	--	7.2	--	84	--
W1340	EBT01	35-1363	7/11/05	12:26	0.4	23.2	--	5.7	--	42	--	27	--	7.5	--	89	--
W1340	EBT01	35-1428	7/13/05	10:14	0.8	22.2	--	6.0	--	45	--	29	--	7.6	--	87	--
W1340	EBT01	35-1622	8/5/05	12:30	0.1	24.2	--	6.1	--	51	--	33	--	5.8	i	70	i
W1340	EBT01	35-1623	8/8/05	11:36	0.4	22.9	--	6.0	--	55	--	35	--	6.2	i	73	i
W1340	EBT01	35-1538	8/9/05	9:41	0.4	23.6	--	6.1	--	55	--	35	--	6.4	--	75	--

Table 7. 2005 MassDEP DWM Millers River Watershed attended multi-probe data

Unique ID	Station ID	OWMID	Date	Time	Sample Depth (m)	Temperature (deg. C)	Temperature Qualifiers	pH (SU)	pH Qualifiers	Specific Conductivity (uS/cm)	Specific Conductivity Qualifiers	Total Dissolved Solids (mg/l)	Total Dissolved Solids Qualifiers	Dissolved Oxygen (mg/l)	Dissolved Oxygen Qualifiers	Saturation (%)	Saturation Qualifiers
W1340	EBT01	35-1245	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1340	EBT01	35-1246	9/12/05	13:56	0.2	17.5	--	6.2	--	67	--	43	--	7.4	--	79	--
W1340	EBT01	35-1708	9/14/05	9:44	0.4	19.7	--	6.2	--	75	--	49	--	7.2	--	79	--
W1344	KEY01	35-1109	5/11/05	10:59	0.4	11.4	--	6.8	--	33	--	21	--	10.9	--	102	--
W1344	KEY01	35-1270	6/10/05	10:45	0.4	17.4	--	6.3	--	31	--	20	--	##	i	##	i
W1344	KEY01	35-1271	6/13/05	9:41	0.2	18.8	--	6.7	--	34	--	22	--	8.4	i	92	i
W1344	KEY01	35-1174	6/14/05	10:44	0.2	19.6	--	6.5	--	38	--	25	--	9.1	--	99	--
W1344	KEY01	35-1351	7/11/05	10:26	0.2	17.9	--	6.2	--	27	--	18	--	9.1	--	97	--
W1344	KEY01	35-1423	7/13/05	10:12	0.1	17.8	--	6.6	--	32	--	20	--	9.7	--	102	--
W1344	KEY01	35-1610	8/5/05	10:46	**	20.0	--	6.8	--	30	--	20	--	8.1	i	90	i
W1344	KEY01	35-1611	8/8/05	10:12	0.1	19.0	--	6.6	--	39	--	25	--	8.4	i	92	i
W1344	KEY01	35-1533	8/9/05	10:28	0.2	20.1	--	6.9	--	41	--	27	--	9.1	--	100	--
W1344	KEY01	35-1233	9/9/2005	**	--	**	--	**	--	**	--	**	--	**	--	**	--
W1344	KEY01	35-1234	9/12/05	11:37	**	14.6	--	6.9	--	47	--	30	--	9.6	--	95	--
W1344	KEY01	35-1703	9/14/05	9:59	0.5	17.7	--	7.0	u	49	--	32	--	9.3	--	97	--
W1411	EBT05	35-1288	6/13/05	12:20	0.1	21.9	--	5.7	--	28	--	18	--	7.1	i	83	i
W1411	EBT05	35-1289	6/15/05	10:41	0.1	18.3	--	5.6	--	29	--	18	--	7.5	--	82	--
W1411	EBT05	35-1628	8/8/05	12:41	0.1	21.5	--	5.7	--	31	--	20	--	7.1	i	81	i
W1411	EBT05	35-1629	8/10/05	8:42	0.2	20.7	--	5.7	--	30	--	19	--	6.4	i	73	i

Table 8. 2005 MassDEP DWM Millers River Watershed unattended probe data

Deploy Information				Temperature					Dissolved Oxygen										
Station ID	Unique ID	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	Average (mg/L)	Minimum (mg/L)	Amount of Time < 3.0 mg/L (Hours)	Percentage of Time < 3.0 mg/L	Amount of Time < 5.0 mg/L (Hours)	Percentage of Time < 5.0 mg/L	Amount of Time < 6.0 mg/L (Hours)	Percentage of Time < 6.0 mg/L	Average Saturation (%)	Minimum Saturation (%)	Maximum Saturation (%)
BB01	W0685	06/13/05	43.0	22.6	24.0	24.0	39.1	91%	7.0	6.8	0.0	0.0%	0.0	0%	0.0	0%	82	81	85
BB01	W0685	07/11/05	42.0	21.7	23.2	23.2	42.0	100%	7.3	7.0	0.0	0.0%	0.0	0%	0.0	0%	84	82	87
BB01	W0685	08/08/05	43.5	23.0	25.2	24.8	43.5	100%	6.6	6.3	0.0	0.0%	0.0	0%	0.0	0%	78	74	85
BB01	W0685	09/12/05	42.5	19.0	21.8	21.8	10.4	24%	7.2	6.6	0.0	0.0%	0.0	0%	0.0	0%	79	71	89
BB02	W1315	06/13/05	43.0	21.0	23.9	23.2	32.3	75%	4.1	2.9	4.3	10.0%	41.8	97%	43.0	100%	46	34	57
BB02	W1315	07/11/05	42.0	20.9	23.5	23.2	25.6	61%	4.9	4.3	0.0	0.0%	28.4	68%	42.0	100%	55	49	65
BB02	W1315	08/08/05	43.5	22.2	23.4	23.3	43.5	100%	3.5	2.6	7.7	17.8%	43.5	100%	43.5	100%	41	30	50
BB02	W1315	09/12/05	42.5	18.0	19.1	19.1	0.0	0%	3.8	3.1	0.0	0.0%	42.5	100%	42.5	100%	40	34	46
BOY01	W1339	07/11/05	43.5	20.5	21.7	21.3	31.5	72%	8.3	8.1	0.0	0.0%	0.0	0%	0.0	0%	93	92	96
EBT01	W1340	06/10/05	69.5	22.7	24.8	24.3	69.5	100%	7.3	6.7	0.0	0.0%	0.0	0%	0.0	0%	85	77	98
EBT01	W1340	07/08/05	72.0	21.0	23.5	22.7	59.2	82%	7.6	7.2	0.0	0.0%	0.0	0%	0.0	0%	86	81	92
EBT01	W1340	08/05/05	70.5	23.5	25.1	24.4	70.5	100%	6.3	5.7	0.0	0.0%	0.0	0%	16.3	23%	75	67	84
EBT01	W1340	09/09/05	76.5	18.1	20.5	19.0	8.0	10%	6.5	6.1	0.0	0.0%	0.0	0%	0.0	0%	70	65	77
EBT05	W1411	06/13/05	46.0	22.0	23.7	23.5	40.0	87%	6.7	6.2	0.0	0.0%	0.0	0%	0.0	0%	77	72	86
EBT05	W1411	08/08/05	43.5	22.0	22.7	22.7	43.5	100%	6.6	6.3	0.0	0.0%	0.0	0%	0.0	0%	76	72	83
KEY01	W1344	06/10/05	70.5	19.6	21.9	21.4	25.5	36%	8.5	8.0	0.0	0.0%	0.0	0%	0.0	0%	94	92	98
KEY01	W1344	07/08/05	71.5	16.5	18.9	17.8	0.0	0%	9.2	8.7	0.0	0.0%	0.0	0%	0.0	0%	95	94	96
KEY01	W1344	08/05/05	71.0	19.9	21.7	20.9	36.3	51%	8.6	8.2	0.0	0.0%	0.0	0%	0.0	0%	95	94	98
KEY01	W1344	09/09/05	72.0	14.8	18.5	16.1	0.0	0%	8.5	6.9	0.0	0.0%	0.0	0%	0.0	0%	85	73	97
LYB01	W1334	05/23/05	45.0	9.8	10.9	10.4	0.0	0%	10.3	10.0	0.0	0.0%	0.0	0%	0.0	0%	92	90	93
LYB01	W1334	06/10/05	70.5	19.3	20.6	20.2	12.9	18%	8.3	8.0	0.0	0.0%	0.0	0%	0.0	0%	91	89	94
LYB01	W1334	07/08/05	71.5	17.0	18.9	18.2	0.0	0%	8.6	8.3	0.0	0.0%	0.0	0%	0.0	0%	90	89	94
LYB01	W1334	08/08/05	71.0	18.7	21.6	19.8	10.6	15%	8.7	8.2	0.0	0.0%	0.0	0%	0.0	0%	95	93	97
LYB01	W1334	09/09/05	71.5	14.0	16.8	15.0	0.0	0%	9.4	8.7	0.0	0.0%	0.0	0%	0.0	0%	93	91	95
M01	W0051	06/13/05	43.5	24.4	27.6	26.6	40.2	93%	2.8	2.0	30.0	69.0%	43.5	100%	43.5	100%	34	23	53

Table 8. 2005 MassDEP DWM Millers River Watershed unattended probe data

Deploy Information				Temperature					Dissolved Oxygen										
Station ID	Unique ID	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	Average (mg/L)	Minimum (mg/L)	Amount of Time < 3.0 mg/L (Hours)	Percentage of Time < 3.0 mg/L	Amount of Time < 5.0 mg/L (Hours)	Percentage of Time < 5.0 mg/L	Amount of Time < 6.0 mg/L (Hours)	Percentage of Time < 6.0 mg/L	Average Saturation (%)	Minimum Saturation (%)	Maximum Saturation (%)
M01	W0051	07/11/05	42.5	23.9	26.2	26.2	42.5	100%	4.1	3.2	0.0	0.0%	41.3	97%	42.5	100%	49	37	63
M01	W0051	08/08/05	43.5	24.8	26.6	26.0	43.5	100%	2.5	2.0	35.1	80.6%	43.5	100%	43.5	100%	31	24	44
M01	W0051	09/12/05	42.5	21.1	23.4	22.3	34.5	81%	3.5	2.8	5.1	12.1%	42.5	100%	42.5	100%	40	31	46
MH01	W1335	05/23/05	45.5	8.7	9.4	9.2	0.0	0%	10.6	10.3	0.0	0.0%	0.0	0%	0.0	0%	91	90	92
MH01	W1335	06/10/05	70.5	18.4	19.0	18.9	0.0	0%	8.9	8.7	0.0	0.0%	0.0	0%	0.0	0%	96	94	97
MH01	W1335	07/08/05	72.0	16.9	20.0	18.5	1.3	2%	9.0	8.3	0.0	0.0%	0.0	0%	0.0	0%	93	92	95
MH01	W1335	08/05/05	71.0	18.2	20.2	18.7	2.9	4%	8.7	8.3	0.0	0.0%	0.0	0%	0.0	0%	94	93	96
MH01	W1335	09/09/05	72.0	13.5	15.9	14.0	0.0	0%	9.7	9.1	0.0	0.0%	0.0	0%	0.0	0%	94	92	96
MI05A	W0682	06/10/05	70.0	24.2	25.0	24.7	70.0	100%	6.8	6.4	0.0	0.0%	0.0	0%	0.0	0%	82	78	86
MI05A	W0682	07/08/05	72.0	19.8	21.9	20.4	28.5	40%	8.2	7.7	0.0	0.0%	0.0	0%	0.0	0%	91	85	95
MI05A	W0682	08/05/05	70.5	25.1	27.0	26.7	70.5	100%	7.2	6.1	0.0	0.0%	0.0	0%	0.0	0%	88	74	108
MI05A	W0682	09/09/05	72.0	20.0	22.1	21.5	35.5	49%	8.4	7.3	0.0	0.0%	0.0	0%	0.0	0%	94	79	108
MI10A	W0692	05/19/05	94.5	13.9	14.8	14.7	0.0	0%	9.1	8.9	0.0	0.0%	0.0	0%	0.0	0%	89	87	92
MI10A	W0692	06/13/05	43.5	24.5	25.7	25.7	43.5	100%	6.7	6.5	0.0	0.0%	0.0	0%	0.0	0%	81	79	83
MI10A	W0692	07/11/05	40.0	23.2	24.0	23.9	40.0	100%	7.6	7.5	0.0	0.0%	0.0	0%	0.0	0%	90	88	92
MI10A	W0692	08/08/05	43.5	24.8	25.7	25.7	43.5	100%	7.2	7.0	0.0	0.0%	0.0	0%	0.0	0%	88	84	93
MI10A	W0692	09/12/05	42.5	20.2	21.6	21.5	24.8	58%	8.1	7.7	0.0	0.0%	0.0	0%	0.0	0%	91	87	96
MI14	W0694	06/13/05	43.5	23.9	25.8	25.1	43.5	100%	6.9	6.6	0.0	0.0%	0.0	0%	0.0	0%	82	79	89
MI14	W0694	07/11/05	43.5	22.8	24.8	24.8	43.5	100%	7.4	7.0	0.0	0.0%	0.0	0%	0.0	0%	87	82	94
MI14	W0694	08/08/05	43.5	23.7	24.6	24.5	43.5	100%	6.7	5.9	0.0	0.0%	0.0	0%	5.5	13%	80	70	94
MI14	W0694	09/12/05	43.0	20.7	22.1	22.1	34.6	81%	6.9	6.4	0.0	0.0%	0.0	0%	0.0	0%	78	73	88
MI20	W1316	06/13/05	43.5	23.1	24.8	24.0	41.8	96%	6.5	6.2	0.0	0.0%	0.0	0%	0.0	0%	76	74	82
MI20	W1316	07/11/05	43.0	22.4	23.8	23.8	43.0	100%	6.5	6.1	0.0	0.0%	0.0	0%	0.0	0%	75	70	80
MI20	W1316	08/08/05	43.5	23.4	24.8	24.5	43.5	100%	3.9	3.0	0.0	0.0%	43.5	100%	43.5	100%	46	35	57
MI20	W1316	09/12/05	43.0	12.2	12.7	12.7	0.0	0%	0.2	0.2	43.0	100%	43.0	100%	43.0	100%	2	2	2

Table 8. 2005 MassDEP DWM Millers River Watershed unattended probe data

Deploy Information				Temperature					Dissolved Oxygen										
Station ID	Unique ID	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	Average (mg/L)	Minimum (mg/L)	Amount of Time < 3.0 mg/L (Hours)	Percentage of Time < 3.0 mg/L	Amount of Time < 5.0 mg/L (Hours)	Percentage of Time < 5.0 mg/L	Amount of Time < 6.0 mg/L (Hours)	Percentage of Time < 6.0 mg/L	Average Saturation (%)	Minimum Saturation (%)	Maximum Saturation (%)
MI202	W1311	05/19/05	95.5	14.7	16.4	15.9	0.0	0%	9.2	8.9	0.0	0.0%	0.0	0%	0.0	0%	92	89	97
MI202	W1311	06/13/05	43.5	24.7	25.5	25.5	43.5	100%	7.4	7.1	0.0	0.0%	0.0	0%	0.0	0%	90	87	96
MI202	W1311	07/11/05	43.5	23.2	24.9	24.9	43.5	100%	7.7	7.5	0.0	0.0%	0.0	0%	0.0	0%	92	90	93
MI202	W1311	08/08/05	43.5	25.4	27.0	26.4	43.5	100%	7.1	6.8	0.0	0.0%	0.0	0%	0.0	0%	87	84	93
MI202	W1311	09/12/05	43.0	21.4	22.9	22.9	43.0	100%	7.8	7.5	0.0	0.0%	0.0	0%	0.0	0%	89	87	93
MITOT	W1312	06/10/05	71.0	24.3	27.0	27.0	71.0	100%	8.0	7.5	0.0	0.0%	0.0	0%	0.0	0%	96	92	101
MITOT	W1312	07/08/05	71.5	19.6	22.3	21.1	21.6	30%	8.7	8.3	0.0	0.0%	0.0	0%	0.0	0%	96	94	99
MITOT	W1312	08/05/05	71.0	24.9	28.2	27.3	71.0	100%	7.9	7.2	0.0	0.0%	0.0	0%	0.0	0%	96	90	107
OT03	W0686	05/19/05	94.5	14.0	16.6	15.5	0.0	0%	9.0	8.4	0.0	0.0%	0.0	0%	0.0	0%	88	82	99
OT03	W0686	06/13/05	45.0	23.7	25.6	25.2	42.9	95%	7.1	6.9	0.0	0.0%	0.0	0%	0.0	0%	85	83	89
OT03	W0686	07/11/05	43.0	23.2	25.0	25.0	43.0	100%	7.6	7.3	0.0	0.0%	0.0	0%	0.0	0%	89	87	92
OT03	W0686	08/08/05	43.5	24.7	27.4	26.2	43.5	100%	6.7	6.2	0.0	0.0%	0.0	0%	0.0	0%	81	76	91
OT03	W0686	09/12/05	39.5	21.1	23.2	23.2	31.0	79%	6.8	6.1	0.0	0.0%	0.0	0%	0.0	0%	78	69	88
TUL01	W1314	06/10/05	69.5	22.9	24.2	24.1	69.5	100%	7.1	6.5	0.0	0.0%	0.0	0%	0.0	0%	83	76	91
TUL01	W1314	07/08/05	72.5	20.3	22.6	21.5	36.9	51%	7.2	6.7	0.0	0.0%	0.0	0%	0.0	0%	81	77	85
TUL01	W1314	08/05/05	70.5	23.0	25.4	23.8	70.5	100%	6.8	6.4	0.0	0.0%	0.0	0%	0.0	0%	81	76	87
TUL01	W1314	09/09/05	72.5	17.6	20.6	19.0	6.3	9%	7.6	7.1	0.0	0.0%	0.0	0%	0.0	0%	81	74	89
WBT01	W1337	06/10/05	69.5	23.7	24.9	24.7	69.5	100%	6.7	6.3	0.0	0.0%	0.0	0%	0.0	0%	80	75	88
WBT01	W1337	07/08/05	72.0	19.9	23.0	21.7	27.4	38%	7.2	6.6	0.0	0.0%	0.0	0%	0.0	0%	80	76	87
WBT01	W1337	08/05/05	70.5	23.1	25.1	24.1	70.5	100%	6.8	6.5	0.0	0.0%	0.0	0%	0.0	0%	81	77	88
WBT01	W1337	09/09/05	77.0	16.9	20.5	18.1	4.9	6%	7.5	7.0	0.0	0.0%	0.0	0%	0.0	0%	79	72	90
WET 01	W1336	06/10/05	70.5	18.9	20.0	19.8	0.0	0%	8.5	8.2	0.0	0.0%	0.0	0%	0.0	0%	93	90	97
WET 01	W1336	07/08/05	71.5	16.4	18.5	17.6	0.0	0%	9.1	8.6	0.0	0.0%	0.0	0%	0.0	0%	94	92	96
WET 01	W1336	08/05/05	71.0	18.7	20.9	19.4	10.4	15%	8.6	8.0	0.0	0.0%	0.0	0%	0.0	0%	94	90	100
WET 01	W1336	09/09/05	72.5	13.6	16.9	14.4	0.0	0%	9.5	8.8	0.0	0.0%	0.0	0%	0.0	0%	92	89	99

References

- MassDEP. 2001. *Laboratory Quality Assurance Plan and Standard Operating Procedures*. Massachusetts Department of Environmental Protection, Division of Environmental Analysis, Senator William X. Wall Experiment Station. Lawrence, MA.
- MassDEP. 2004a. CN 1.21 - *Sample Collection Techniques for DWM Surface Water Quality Monitoring SOP*. December 2004. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP. 2004b. CN 4.2 - *Water Quality Multi-probe Instrument Use*. April 2004. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP 2004c. CN 4.4 - *Multi-probe Deployments for Unattended Logging Data Collection*. November 2004. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP. 2005a. CN 225.0 - *QUALITY ASSURANCE PROGRAM PLAN, Surface Water Monitoring & Assessment, MassDEP-Division of Watershed Management, 2005-2009*. April 2005. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP. 2005b. CN 222.0 - *Millers River Watershed Sampling and Analysis Plan 2005*. April 2005. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP. 2005c. Open File. *DWM Water quality river fieldsheets 2005*. Massachusetts Department of Environmental Protection, Central Region Office. Worcester, MA.
- NOAA. 2012. [Online]. *Precipitation Data*. November 2008. National Oceanic and Atmospheric Administration, National Climatic Data Center. Asheville, NC. <http://www.ncdc.noaa.gov/oa/ncdc.html>
- USGS. 2012a. [Online]. *Discharge Data from Real-time Gage Stations*. June 2012. United States Geological Service. Reston, VA. <http://www.usgs.gov/>
- USGS. 2012b. [Online]. *USGS Station Statistics*. July 2012. United States Geological Service. Reston, VA. <http://water.usgs.gov/osw/streamstats/>
- MassDEP. 2012a. CN 56.15 - *DWM Water Quality Data Validation Process (Summary)*. May 2012. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.
- MassDEP. 2012b. CN 280.0 – *DATA VALIDATION REPORT for Year 2005 Project Data*. May 2012. Massachusetts Department of Environmental Protection, Division of Watershed Management. Worcester, MA.

Appendix 1: 2005 Data Symbols and Qualifiers

Excerpted from: Data Validation Report for Year 2005 Project Data (CN 280.0)

Department of Environmental Protection
Division of Watershed Management

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). *NOTE: Prior to 2001 data, “***” denoted either censored or missing data.*

“ ** ” = Missing data (i.e., data that should have been reported). See NOTE above.

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

* = Analysis performed by Laboratory OTHER than DEP’s Wall Experiment Station (WES)

[] = A result reported inside brackets has been “censored”, but is shown for informational purposes (e.g., high blank results).

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.

Qualification Criteria for Depth (i):

General Depth Criteria: Apply to each OWMID#

- Clearly erroneous readings due to faulty depth sensor: Censor (i)
- Negative and zero depth readings: Censor (i); (likely in error)
- 0.1 m depth readings: Qualify (i); (potentially in error)
- 0.2 and greater depth readings: Accept without qualification; (likely accurate)

Specific Depth Criteria: Apply to entirety of depth data for survey date

- If zero and/or negative depth readings occur more than once per survey date, censor all negative/zero depth data, and qualify all other depth data for that survey (indicates that erroneous depth readings were not recognized in the field and that corrective action (field calibration of the depth sensor) was not taken, i.e., that all positive readings may be in error.)

“ 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.

“ ? ” = Light interference on Turbidity sensor (Hydrolab error message). Data is typically censored.

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).

Misc. abbrev./symbols:

TY= tygon tubing

AF= ambient field blank

VD= van dorn bottle