Technical Memorandum

BUZZARDS BAY COASTAL DRAINAGE AREA 2005
DWM WATER QUALITY MONITORING DATA

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Massachusetts Department of Environmental Protection
Division of Watershed Management
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INTRODUCTION

In 2005 the watershed assessment process in Massachusetts was carried out on a 5-year cycle. In Year One, the Massachusetts Department of Environmental Protection (MassDEP), Division of Watershed Management (DWM) coordinates with watershed groups, gathers background information and begins to formulate sampling needs for rivers and lakes in pre-determined watersheds. During Year Two of the cycle, sampling sites and parameters are finalized and monitoring is conducted. In Year Three, the finalized data are used for assessment reporting to comply with Section 305(b) of the Clean Water Act (CWA). Implementation of specific projects or programs to address water quality problems, and post-project evaluation are conducted in Year Four and Year Five, respectively. In addition, data are collected to support Total Maximum Daily Load (TMDL) determinations, made in conformance with Section 303(d) of the Clean Water Act.

OBJECTIVES

The Buzzards Bay Coastal Drainage Area 2005 Survey focused on obtaining information (i.e., water quality, bacteria, benthic macroinvertebrate assemblages, and fish tissue toxics) at a total of 25 river stations plus six lakes and two fish toxics sites. The results of the lake sampling and fish toxics monitoring are reported in separate documents. The specific objectives of this monitoring were to:

- evaluate specific water bodies to determine if Massachusetts water quality standards are being met,
- provide quality-assured data for use by DWM in developing TMDLs,
- screen fish in two lakes (New Bedford Reservoir and Sampson Pond) to provide data to the Massachusetts Department of Public Health for public health risk assessment due to fish tissue contaminants (metals, PCBs and pesticides),
- provide quality-assured fecal coliform, *E. coli* and *Enterococcus* sp. bacteria data for the purpose of assessing Primary and Secondary Contact Recreation uses,
- provide quality-assured lake and river water quality data for MassDEP's Nutrient Criteria Development Project, and
- provide quality assured water quality data in support of the §319 grant project *Cranberry Bog Phosphorus Dynamics for TMDL Development*.

SAMPLING PLAN

In 2005 the DWM performed water quality monitoring in the Buzzards Bay Coastal Drainage Area (Table 1 and Figures 1, 2, and 3). Six total sampling rounds were conducted from May through September throughout the watershed. Attended multiprobe, nutrient, and bacteria surveys were conducted in May, June (2 surveys) and August (2 surveys) and one bacteria-only survey took place in September. Additionally, unattended dissolved oxygen and temperature probes were deployed to record over multiple days at the end of May, June, July and August. For more information regarding the 2005 Buzzards Bay Coastal Drainage Area survey, including sampling plan design and rationale, see the separate document, CN221.0 - *Sampling and Analysis Plan MassDEP 2005 Buzzards Bay Watershed* (MassDEP 2005a).

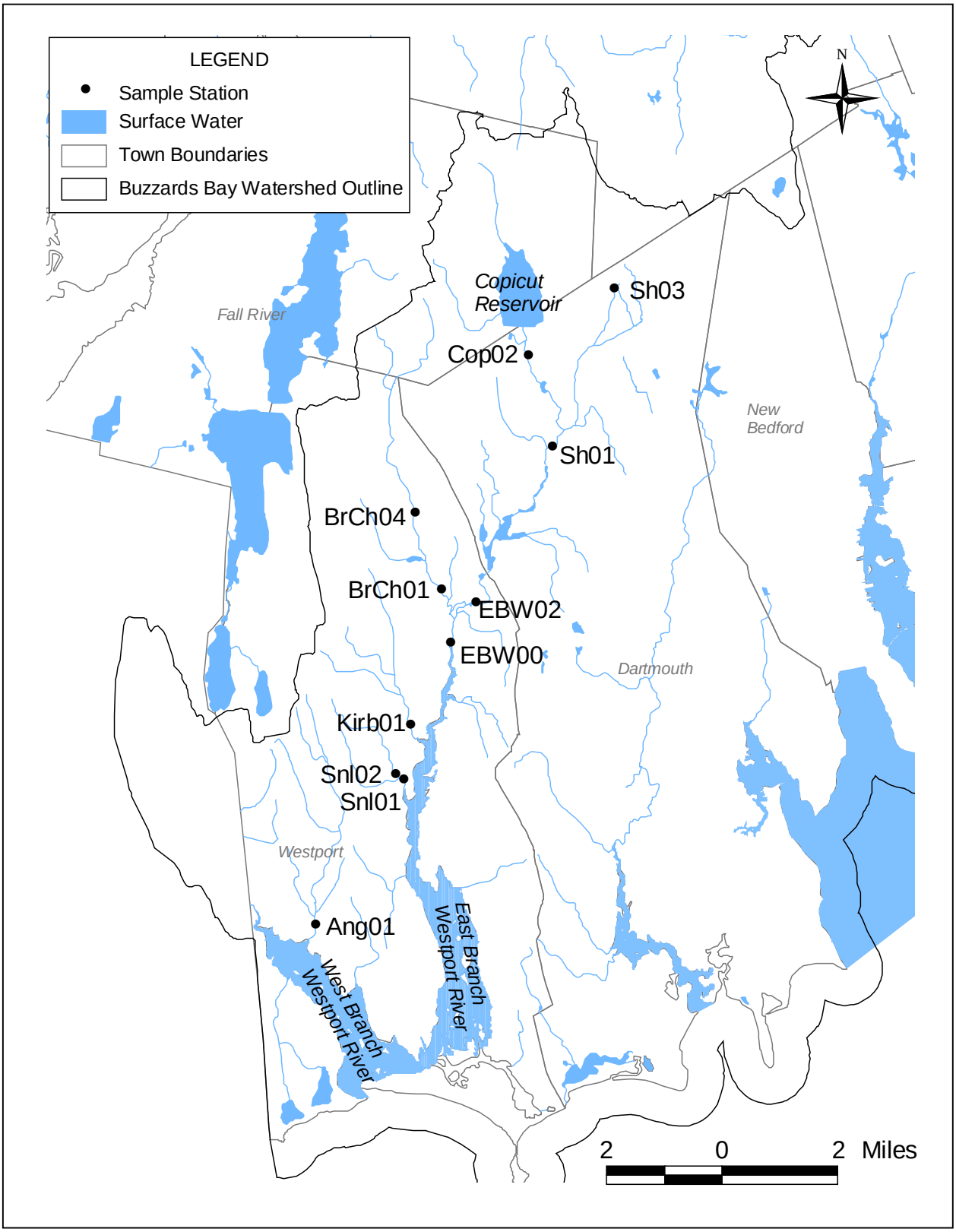


Figure 1. Westport River Drainage Area station locations.

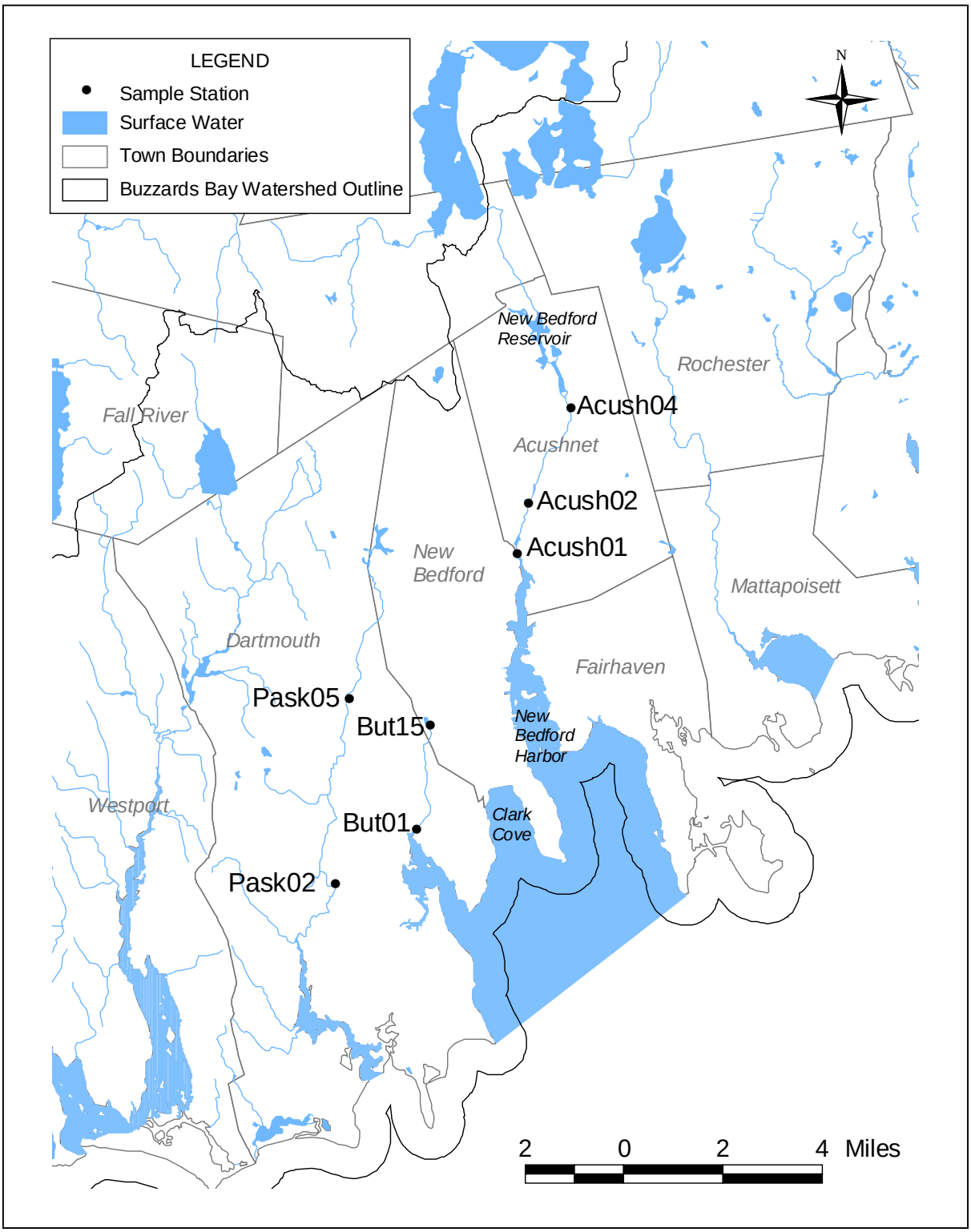


Figure 2. Slocum/Paskamanset and New Bedford Harbor drainage areas station locations.

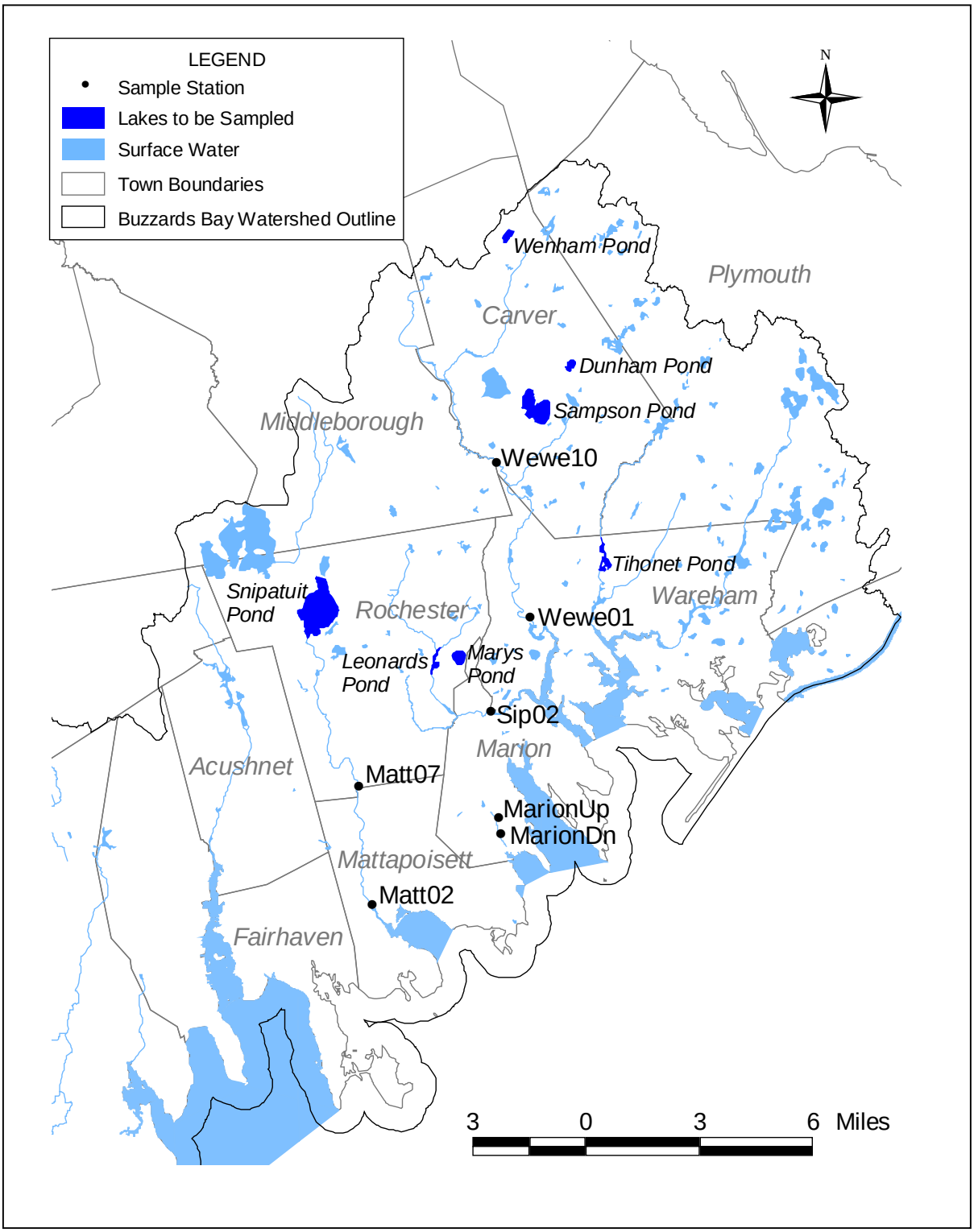


Figure 3. Mattapoisett River and Aucoot Cove drainage areas station locations.

Table 1. MassDEP 2005 Buzzards Bay Coastal Drainage Area water quality station locations and parameters.

Water Body Name	Station ID	Unique ID	Station Description	Parameters
East Branch Westport River Drainage Area (freshwater portions)				
Copicut River	Cop02 / Cop02A	W1365 / W1399	just downstream of the driveway to the Rod and Gun Club of New Bedford, east off North Hixville Road, Dartmouth (primary outlet at guardrail) and (secondary outlet 150 feet west of guardrails)	Bacteria, Continuous DO, Multiprobe, Nutrients
Shingle Island River	Sh03	W1366	Flag Swamp Road, Dartmouth	Bacteria, Multiprobe, Nutrients
	Sh01	W1367	Hixville Road, Dartmouth	Bacteria, Continuous DO, Multiprobe, Nutrients
East Branch Westport River	EBW02	W1368	upstream from Forge Pond, approximately 700 feet from Forge Road, Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
	EBW00	W1369	just upstream at Old County Road, Westport	Bacteria, Multiprobe, Nutrients
Bread and Cheese Brook	BrCh04	W1370	Route 6, Westport	Bacteria, Multiprobe, Nutrients
	BrCh01	W1371	American Legion Highway (Route 177), Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
Snell Creek	Snl02	W1372	Drift Road, Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
	Snl01	W1373	Marcus' Bridge (near Snell Corner), Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
Kirby Brook	Kirb01	W1374	Drift Road, Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
Angeline Brook	Ang01	W1375	Cornell Road, Westport	Bacteria, Continuous DO, Multiprobe, Nutrients
Slocum/Paskamanset Drainage Area (freshwater portions)				
Paskamanset River	Pask05	W1376	Route 6, Dartmouth	Bacteria, Multiprobe, Nutrients
	Pask02	W1377	Russells Mills Road, Dartmouth	Bacteria, Continuous DO, Multiprobe, Nutrients
New Bedford Harbor Drainage Area (freshwater portions)				
Acushnet River	Acush04	W1382	Leonard Street, Acushnet	Bacteria, Continuous DO, Multiprobe, Nutrients
	Acush02	W1381	Hamlin Street, Acushnet	Bacteria, Continuous DO, Multiprobe, Nutrients
	Acush01	W1380	just upstream at Tarkiln Hill Road/Main Street, New Bedford/Acushnet	Bacteria, Continuous DO, Multiprobe, Nutrients
Buttonwood Brook	But15	W1379	Walter Fuller Memorial Parkway (downstream of Buttonwood Park Pond), New Bedford	Bacteria, Multiprobe, Nutrients
	But01	W1378	Elm Street, Dartmouth	Bacteria, Continuous DO, Multiprobe, Nutrients

Bacteria = fecal coliform, *E. coli* and *Enterococcus* sp.
Multiprobe = dissolved oxygen, percent saturation, temperature, pH, and conductivity
Nutrients = total phosphorus, total nitrogen, and ammonia-nitrogen, color and turbidity

Table 1 (Cont.). MassDEP 2005 Buzzards Bay Coastal Drainage Area water quality station locations and parameters.

Water Body Name	Station ID	Unique ID	Station Description	Parameters
Mattapoisett River Drainage Area (freshwater portions)				
Mattapoisett River	Matt07	W1383	Wolf Island Road, Rochester	Bacteria, Continuous DO, Multiprobe, Nutrients
	Matt02	W1384	River Road, Mattapoisett	Bacteria, Continuous DO, Multiprobe, Nutrients
Weweantic River	Wewe10	W1385	Rochester Road, Carver	Bacteria, Continuous DO, Multiprobe, Nutrients
	Wewe01	W1386	Fearing Hill Road, Wareham	Bacteria, Continuous DO, Multiprobe, Nutrients
Sippican River	Sip02	W1387	upstream at County Road, Marion	Bacteria, Continuous DO, Multiprobe, Nutrients
Unnamed Tributary to Aucoot Creek	MarionUp	W1388	unnamed tributary to Aucoot Creek, Abels Way (approximately 450 feet upstream of Marion WWTP (MA0100030) discharge), Marion	Multiprobe, Nutrients
	MarionDn	W1389	unnamed tributary to Aucoot Creek, Olde Meadow Road (approximately 1200 feet downstream of Marion WWTF (MA0100030) discharge), Marion	Multiprobe, Nutrients

Bacteria = fecal coliform, *E. coli* and *Enterococcus* sp.
Multiprobe = dissolved oxygen, percent saturation, temperature, pH, and conductivity
Nutrients = Total phosphorus, total nitrogen, and ammonia-nitrogen, color and turbidity

METHODS AND QUALITY ASSURANCE/QUALITY CONTROL

Procedures used for water sampling and sample handling during the 2005 Buzzards Bay Coastal Drainage Area survey are described in the standard operating procedures (SOPs), 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). MassDEP's 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). Additional information regarding field and laboratory methods, method and reporting detection limits, data quality objectives can be found in the separate document, CN 225.0 - *Quality Assurance Program Plan - Surface Water Monitoring & Assessment MassDEP Division of Watershed Management 2005-2009* (MassDEP 2005b).

Monitoring was conducted by MassDEP DWM personnel and samples were labeled, preserved/acidified (when applicable) in the field and stored on ice. Station observations (clarity, odors, aquatic plant and periphyton growth, and other objectionable conditions) were recorded on field sheets at the time of sample collection. Samples were delivered from the field to Envirotech Laboratories in Sandwich or were carried back to the DWM office in Worcester for delivery to the Wall Experiment Station (WES), MassDEP's analytical laboratory in Lawrence, MA.

Field sheets, chain of custody forms, raw data files, lab reports and other metadata are maintained by the DWM in Worcester, MA and data are stored electronically in DWM's water quality database. 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 quality control (QC) sample results, analytical holding time compliance, QC sample frequency and related ancillary data/documentation (at a minimum). A complete summary of the review process for

all 2005 DWM data is provided in CN 280.0 – *Data Validation Report for Year 2005 Project Data* (MassDEP 2012b). The Appendix of this technical memorandum contains definitions for all data qualifiers. Specific validation criteria used for 2005 data include, but are not limited to: conformance to DWM's Quality Assurance Project Plan (QAPP), standard operating procedures, precision, accuracy, representativeness, holding times, sample preservation, frequency of field QC samples, contamination of field blanks, stability of multiprobe readings and documentation.

SURVEY CONDITIONS

Stream discharge and precipitation data are used to determine hydrologic conditions and, consequently, if water quality surveys should be described as dry or wet weather events. During dry weather trace amounts of precipitation may fall but there is no measurable change in stream flow. The USGS operates one stream gaging station (01105933) in the Buzzards Bay Coastal Drainage Area on the Paskamanset River at Russells Mills Road, Dartmouth.

Daily mean stream discharge for the survey dates at the gage is presented in Table 2 along with 7Q10 (the lowest 7-day average flow that occurs once every 10 years) and the August median flow, calculated using USGS Streamstats (USGS 2005 and 2013). Daily mean discharge recorded at the gage is presented in graphic format for April 15, 2005 through September 15, 2005 in Figure 4 (dates were chosen arbitrarily in order to bracket the survey season). Arrows on the graphs indicate the sampling rounds. Precipitation data are available from the National Weather Service from airports in New Bedford and Plymouth (NOAA 2012). Weather and hydrologic conditions at water quality stations in the Buzzards Bay Coastal Drainage Area were analyzed based on a station's proximity to the New Bedford or Plymouth airports and to the USGS gage. Total daily precipitation for the two airports is presented in Table 2.

May 3, 2005 - This survey was conducted during clear weather. There were significant rain events recorded 3 to 4 days prior to this survey. As a result of the rain, daily mean stream discharge at the gage increased on May 1st and 2nd. However, stream discharge began to decrease on May 3rd and more considerably on May 4th (104 cfs). Therefore, the May survey is more characteristic of a **dry weather** sampling event.

June 9, 2005 - This survey was conducted during a dry period, with no rain recorded at the New Bedford or Plymouth airports for at least 5 antecedent days. The stream discharge daily mean decreased 80% between the May and June surveys. This survey is characterized as a **dry weather** sampling event

June 27, 2005 - This survey of the Marion WWTP was conducted during a dry period, with almost no rain recorded at the New Bedford or Plymouth airports for at least 5 antecedent days. This survey is characterized as a **dry weather** sampling event

June 28, 2005 - This survey was conducted on an overcast day with some light rain and drizzle. The 5 day antecedent period experienced little to no rain. Despite a slight increase in flow at the gage, this survey is characterized as a **dry weather** sampling event.

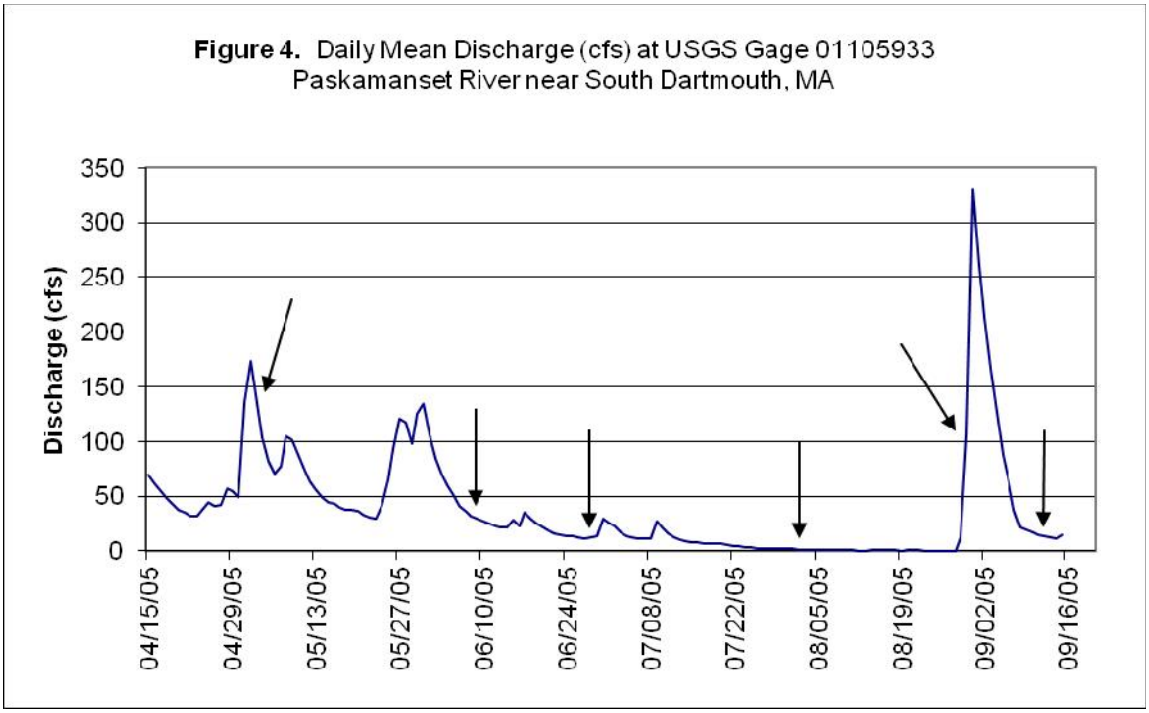
August 2, 2005 - This survey was conducted during a dry period, with little to no rain recorded at the New Bedford or Plymouth airports for the 5 antecedent days. Although small amounts of precipitation were recorded, stream discharge at the gage continued to decrease. This survey is characterized as a **dry weather** sampling event.

August 30, 2005 - This survey was conducted during a wet period, with close to two inches of rain falling on August 29th. On August 30th over 5 inches of rain was recorded at New Bedford Airport and over 2 inches of rain at Plymouth airport. This survey is characterized as a **wet weather** sampling event.

September 12, 2005 - This survey was conducted during a dry period, with little to no rain recorded at the New Bedford or Plymouth airports for the 5 antecedent days. Although small amounts of precipitation were recorded, stream discharge at the gage continued to decrease. This survey is characterized as a **dry weather** sampling event.

Table 2. Total Daily Precipitation at New Bedford (EWB) and Plymouth (PLY) airports and Daily Mean Discharge at USGS gage on the Paskamanset River for survey and five antecedent dates. Survey dates are in bold text.

Date	Precipitation (inches) from EWB	Precipitation (inches) from PLY	Discharge (cfs)	Date	Precipitation (inches) from EWB	Precipitation (inches) from PLY	Discharge (cfs)
04/28/05	0.06	0.04	57	07/28/05	0.00	0.00	2.3
04/29/05	0.00	0.00	55	07/29/05	0.00	0.00	2
04/30/05	1.20	1.14	49	07/30/05	0.02	0.00	1.8
05/01/05	0.42	0.32	136	07/31/05	0.01	0.00	1.8
05/02/05	Trace	Trace	173	08/01/05	0.00	Trace	1.7
05/03/05	**Trace**	**Trace**	**142**	**08/02/05**	**0.03**	**0.31**	**1.5**
05/04/05	Trace	Trace	104				
				08/25/05	0.01	0.01	0.28
06/04/05	0.00	0.00	60	08/26/05	0.00	0.00	0.21
06/05/05	0.00	0.00	51	08/27/05	0.01	0.00	0.18
06/06/05	0.00	0.00	41	08/28/05	Trace	0.01	0.16
06/07/05	0.00	0.00	36	08/29/05	1.82	2.00	12
06/08/05	0.00	0.00	32	**08/30/05**	**5.62**	**2.80**	**106**
06/09/05	**0.00**	**0.00**	**29**				
				09/07/05	0.00	0.00	38
06/22/05	0.07	0.02	16	09/08/05	0.01	0.01	22
06/23/05	0.00	0.00	15	09/09/05	0.00	0.00	19
06/24/05	0.01	Trace	14	09/10/05	0.01	0.01	17
06/25/05	0.00	0.00	13	09/11/05	Trace	0.00	15
06/26/05	0.00	0.00	12	**09/12/05**	**0.00**	**0.00**	**13**
06/27/05	**0.00**	**0.00**	**11**				
06/28/05	**0.35**	**0.07**	**12**	**7Q10** = 1.09 cfs, **August Median Flow** = 6.31 cfs			



STATION OBSERVATIONS

Station observations were recorded on field sheets for each water quality survey. This section summarizes information recorded for each station. Surveys discussed are limited to those where grab samples were collected and multiprobe readings recorded. Limited field observations were recorded for surveys where dissolved oxygen/temperature probes were deployed or retrieved and, therefore, were not reviewed for this memorandum. On the August 30th water quality survey a significant rainstorm prior to and during the survey dramatically increased flows throughout the entire Buzzards Bay Coastal Drainage Area. Over 7 inches of rain were recorded, the water levels were estimated to be feet above the annual high water line and the water was turbid at all stations. Because this survey was not typical for summertime low-flow conditions and because observations were difficult due to flooding, it is excluded in the survey observation discussions. Therefore the following observations are limited to five survey dates (May 3, June 9, June 28, August 2 and September 12, 2005).

East Branch Westport River Drainage Area (freshwater portions)

Stations Cop02 and Cop02A – Copicut River just downstream of the driveway to the Rod and Gun Club of New Bedford, east off North Hixville Road, Dartmouth (primary outlet at guardrail) and (secondary outlet 150 feet west of guardrails)

The Copicut River flows from the outlet of Copicut Reservoir to the inlet of Cornell Pond. This station was accessed downstream from the driveway to the New Bedford Rod and Gun Club. The river is impounded on the upstream side of the road and is culverted under the driveway in two locations. The primary outlet (Station Cop02) is east of the secondary outlet and was sampled on the first three water quality surveys and first two DO probe deployment surveys. By the end of July the water level in the impoundment was too low to flow over the primary outlet structure. The secondary outlet was chosen as an alternate site for the remainder of the season. Data for this new station can be found in the tables as Station Cop02A.

The river channel at Station Cop02 was approximately 20 feet wide. The water level on the May survey was higher than the estimated annual high water line and the velocity was visually approximated at 3-4 fps. On the next water quality survey (June 9) the level was slightly below the annual high water line and the velocity was approximately 1-3 fps. On the June 28th survey the water level was approximately 2 feet below the annual high water line and the velocity was <1 fps. The water level and velocity at Station Cop02A was relatively constant during all of the surveys at that station (depth approximately 0.5 feet and velocity approximately 3-4 fps). All samples at both stations were collected using a manual grab technique in the center of the river, with the exception of the May survey at Station Cop02 when the sample was collected towards the left bank.

The water column was clear on the first two water quality survey dates at Station Cop02, but highly turbid on the late June survey date. Turbidity was most likely due to the decrease in flow at the outlet and productivity in the impoundment. There were no water odors and only a sparse amount of floating aquatic plant coverage was noted on the first two survey dates. Moderate coverage of moss on bottom substrates was noted on all survey dates in addition to sparse coverage of thin film periphyton (June 9) and very dense coverage of loose floc (June 28). By the end of July water at the outlet structure for Station Cop02 was no longer flowing and the river was stagnant. Rust-colored periphyton covered 100% of the substrates and the water column was opaque and had pollen scum on the surface. The station was moved to the secondary outlet for the July 29th DO probe deployment and all subsequent surveys.

The water column was described as turbid/cloudy at Station Cop02A on all of the survey dates. The river channel is approximately 5 to 10 feet wide at this station. The river was flowing swiftly over the outlet structure and in the river channel, therefore aquatic plant and periphyton densities were unobservable. However, a slimy coating and some rust-colored floc were noted on the river substrates. There were no water odors, scums, or other objectionable conditions on any of the survey dates.

Station Sh03 – Shingle Island River at Flag Swamp Road, Dartmouth

The Shingle Island River originates in Shingle Island Swamp east of Flag Swamp Road and south of Pine Island Road in Dartmouth. A large cranberry bog operation is located on the upstream side of Flag Swamp Road. The majority of samples were collected on the downstream side of the road with an extension pole. The river was sampled on the upstream side of Flag Swamp Road during last survey (September 12) in order to avoid pollen scum on the surface of the river (more abundant on the downstream side).

The river channel was 20 to 30 feet wide at this station. The depth was greater than 2 feet on the first two survey dates (May 3 and June 9) and samples were collected towards the left bank. By the late June survey the river water level had dropped by more than 1 foot. Samples were again collected towards the left bank because the substrate was soft so the river was not wadeable. Samples were collected in the center of the river from the road crossing with an extension pole for the remaining surveys (August 2 and September 12). The water velocity was less than 1 fps for all survey dates. The river channel was mostly full with no exposed substrates on all survey dates.

The water column was described as clear on three of the surveys dates (May 3, June 28, August 2), but turbid on two other dates (June 9 and September 12). There were no water odors or objectionable deposits, but a pollen scum was present on the majority of surveys. Aquatic plant and periphyton densities were unobservable due to the water depth and naturally dark-colored water.

Station Sh01 – Shingle Island River at Hixville Road, Dartmouth

From Station Sh03 the Shingle Island River flows in a southwest direction through Shingle Island and Colebrook swamps for approximately 3 miles to Station Sh01. A cattle farm is located on the right bank of the upstream side of Hixville Road. Cows were noted grazing on a couple of occasions, but they appeared to be fenced out of the water. This station was accessed from the left bank on the downstream side of the road. Samples were collected using a manual grab technique towards the left bank on the first two surveys (May 3 and June 9) and in the center of the stream on the remaining surveys.

The river channel was 20 to 30 feet wide at this station. The depth was greater than 2 feet on the May survey and the velocity was approximately 3 fps. By early June the depth had dropped approximately 1 foot and the velocity was approximately 1-2 fps. The velocity remained relatively constant for the remainder of the surveys and the water level continued to drop slightly on each survey. The river channel was mostly full with no exposed substrates on all survey dates.

The water column was slightly turbid on the first four water quality surveys and clear on the September survey. Heavy rain at the end of August may have contributed to flushing solids contributing to turbidity out of the river. There were no water odors, scums, or other objectionable conditions on the survey dates. Aquatic plant and periphyton densities were unobservable due to the water depth and naturally dark-colored water.

Station EBW02 – East Branch Westport River upstream from Forge Pond, approximately 700 feet from Forge Road, Westport

The East Branch Westport River begins at the outlet of Noquochoke Lake. Station EBW02 is located approximately 1 mile downstream from the outlet. The station was accessed via paths from a dirt parking area on Reed Road. Samples were collected by manual grab technique towards the left bank except for the bacteria survey on September 12th when sampling was in the center of the channel. All samples were collected in the main flow of the river, so all sampling locations are representative of water quality conditions at this station

The river channel was approximately 20 feet wide at this station. The river had ample gradient with fast riffles in this reach and was well-mixed throughout the channel. The depths were variable in this reach (1 to 2 feet) during the surveys. The river water level was high compared to the annual high water line on

the May survey and the velocity was approximately 5 fps. The water level decreased for the June surveys, and the velocity slowed slightly to 3-4 fps. During the last two survey dates (August 2 and September 12) the water level was approximately 1 foot below the annual high water line, velocity was 1-3 fps, yet the only exposed substrates were large cobbles mostly along the shoreline.

The water was dark-colored, sometimes referred to as naturally "tea-stained" from tannins and lignins dissolved in the water, and slightly turbid on the survey dates with no odors, scums, or other objectionable conditions. There were no aquatic plants observed but moss was present on the bottom substrates. Periphyton densities were unobservable due to the dark-colored water,

Station EBW00 – East Branch Westport River just upstream at Old County Road, Westport

From Station EBW02 the East Branch Westport River flows southwest through Forge Pond, which has two outlets at Forge Road. Both channels flow into an unnamed impoundment. Out of the impoundment, the river flows south to Station EBW00 at Old County Road. The total distance between stations is approximately 1 mile. Samples were collected on the upstream side of the road via a basket-drop in the center of the channel and multiprobe readings were recorded in the same location. A stormwater outfall is located on the downstream side of the road that has been identified as a source of bacteria from agriculture. The river is tidal at this road crossing, but only one survey (August) was sampled with salt-water influence.

The river was channelized at Station EBW00, was approximately 35-40 feet wide, and was characterized as a deep run. The river water level was slightly above the annual high water line on the May survey and the velocity was approximately 5 fps. The water level dropped slightly between the May and early June surveys, but the water depth was at least 3 feet during the first June survey. The velocity decreased more significantly to approximately 1-2 fps in early June and remained relatively constant for the remainder of the surveys. The water level continued to decrease on each subsequent survey; however, there were no exposed substrates.

The water column was slightly turbid on most survey dates and highly turbid during the August survey. There were no water odors, scums, or other objectionable conditions on the survey dates. Aquatic plant and periphyton densities were unobservable due to the water depth and dark-colored water.

Station BrCh04 – Bread and Cheese Brook at Route 6, Westport

Bread and Cheese Brook originates in a wetland on the Westport/Fall River town boundary. It flows south through forested areas and under I-195 for approximately 2.5 miles to Station BrCh04. The riparian zone is forested, but medium-density residential and agricultural areas are located in the sub-watershed. Samples were collected on the upstream side of the road via a basket-drop in the center of the channel and multiprobe readings were recorded in the same location.

The brook was 10 to 15 feet wide at this station with more run habitat than riffles. The depth was at least 2 feet during the May survey and decreased to less than 1 foot for the remainder of the surveys. The river water level was slightly above the annual high water line on the May survey and the velocity was approximately 1-3 fps. The water level dropped slightly between the May and early June surveys, but the velocity was about the same as in May. By late June, the water level was 1 to 2 feet below the annual high water line and the velocity was <1 fps. These levels continued through the remaining surveys.

The water column was clear on most survey dates (slightly turbid on June 9th) with no odor. Pollen scum on the surface was noted on two surveys and an objectionable amount of trash thrown in stream was noted on most surveys. There was no visible aquatic plant coverage. Periphyton presence is unknown because this station was sampled from the road crossing.

Station BrCh01 – Bread and Cheese Brook at American Legion Highway (Route 177), Westport

From Station BrCh04 Bread and Cheese Brook flows south for approximately 1.5 miles to Station BrCh01. This station is approximately 0.5 miles upstream from the confluence with the East Branch Westport River. The station was accessed from the left bank on the upstream side of Route 177 and samples were collected using a manual grab technique in the main flow of the brook on all surveys.

The brook was 10 to 15 feet wide at this station with cobble, gravel, and sand substrates and had ample riffle habitat mixed with runs. The depth was less than 1 foot on all surveys. The river water level was slightly above the annual high water line on the May survey and the velocity was approximately 3-5 fps. The water level dropped slightly between the May and early June surveys, but the velocity was about the same as in May. By late June the water level was 2 feet low compared to the annual high water line and the velocity slowed to 1-3 fps. These levels continued for the remainder of the surveys. A large portion of the bottom substrates was exposed in the middle of the streambed on these late summer surveys. However, riffle areas approximately 3 feet wide were still present.

The water column was clear on most survey dates (slightly turbid on May 3rd) with no odor. There were no scums or other objectionable conditions on the survey dates. Naturally occurring organic foam was present on the first three survey dates. There were no aquatic plants observed other than moderate to dense coverage of moss. Periphyton density was not recorded for the majority of surveys because of the dark-colored water. However, sparse coverage of film periphyton was noted on the September survey.

Station Snl02 – Snell Creek at Drift Road, Westport

Snell Creek originates out of wetlands west of Main Street in Westport. The creek flows east and then southeast for approximately 1.5 miles to Station Snl02. The riparian zone is forested with some residential and agricultural areas. Because access is limited on the upstream side of Drift Road, the station was sampled on the downstream side. Samples were collected by manual grab technique in the center of the channel on all surveys. Station Snl02 is located adjacent to (but slightly upstream) from an agricultural property that formerly was permitted by the EPA as a Concentrated Animal Feeding Operation (CAFO). Prior to the 2005 MassDEP survey the farm changed ownership and is no longer operating as a CAFO.

The creek was approximately 5 to 10 feet wide at this station and the bottom substrates were composed of sand, gravel and large cobbles. The depth was less than 0.5 feet for all surveys. Velocity was estimated at 3-4 fps for the first survey, but slowed to 1-3 fps for the June surveys. During the early August and September surveys the velocity was less than 1 fps. Large cobbles were the only substrates exposed during the surveys.

The water column was clear on all surveys except June 28th when it was moderately turbid. There were no water odors, scums, or other objectionable conditions on the survey dates. There were no aquatic plants or periphyton other than moss on cobbles.

Station Snl01 – Snell Creek at Marcus' Bridge (near Snell Corner), Westport

From Station Snl02 Snell Creek flows southeast for approximately 1000 feet to Station Snl01. This station is located adjacent to and slightly downstream from a cornfield on the farm property described in Station Snl02. The station was accessed via a private dirt driveway along the creek and sampled at a wooden bridge. Samples were collected on the upstream side of the bridge by manual grab technique in the center of the channel on all surveys.

The creek was approximately 5 to 10 feet wide at this station and the bottom substrates were composed of sand, gravel and small cobbles. The depth was less than 0.5 feet for all surveys. The velocity was estimated at 3-4 fps for the first survey, but slowed to 1-3 fps for the June surveys. During the early August and September surveys the velocity was less than 1 fps. Cobbles were the only substrates exposed during the surveys.

The water column was clear on all surveys except June 28th when it was slightly turbid. There were no water odors, scums, or other objectionable conditions on the survey dates, except for a sheen of unknown origin and composition noted during the August 2nd survey. There were no aquatic plants or periphyton other than moss on cobbles.

Station Kirb01 – Kirby Brook at Drift Road, Westport

Kirby Brook originates as an intermittent stream north of the American Legion Highway in Westport. The brook flows south for approximately 2.5 miles to Station Kirb01. The riparian zone is forested with some residential areas. Samples were collected on most dates upstream from Drift Road. During the August survey the samples were collected downstream from the road and downstream from the abandoned bridge. During all surveys samples were collected by manual grab technique in the center of the channel. Station Kirb01 is located adjacent to (but slightly upstream) from a large farm.

The brook was approximately 20 feet wide at this station and the bottom substrates were mostly cobble with sand, gravel and some boulders. The depth ranged from 0.5 to 1 foot on all surveys. The velocity was visually estimated at 3-4 fps for the first survey and slowed to 1-3 fps for the June surveys. During the early August and September surveys the water level was low with some exposed substrates and the velocity was less than 1 fps. During the September survey the brook was continuous with very low velocity and small riffles were present.

The water column was clear with no odors or other objectionable deposits on all surveys. During the late June survey a soap-like scum was noted around some aquatic plants and during the August survey there was a film present on the water and some brown foam collected in a pool. These observations were not noted as objectionable with regard to aesthetics. There was a sparse amount of aquatic plants, no phytoplankton, and a moderate amount of moss on the substrates.

Station Ang01 – Angeline Brook at Cornell Road, Westport

Angeline Brook originates as an intermittent stream in a wetlands area south of Charlotte White Road and west of Sodom Road in Westport. The brook flows south for approximately 4.5 miles to Station Ang01. The riparian zone is mostly forested with some agricultural use approximately 0.75 to 1 mile upstream from Cornell Road. The station was accessed from a path along the right bank. Samples were collected by manual grab technique downstream from Cornell Road on all surveys. Most samples were collected in the center of the channel. On June 9th samples were collected from the left bank and on June 28th from the right bank, but all samples were collected in the main flow of the brook.

The brook was approximately 20 feet wide at this station and the substrates were mostly cobble and gravel with some boulders and sand. The depth ranged from 2 to 4 inches on all surveys. The velocity was visually estimated at 3-4 fps for the first survey, slowed to 1-3 fps for the June surveys, and to less than 1 fps for the August and September surveys.

The water column was clear with no odors, scums, or other objectionable deposits on all surveys. Only during the May survey was some localized brown foam noted. There were no aquatic plants, phytoplankton, or periphyton, but there was a moderate amount of moss on the substrates.

Slocum/Paskamanset Drainage Area (freshwater portions)

Station Pask05 – Paskamanset River at Route 6, Dartmouth

The Paskamanset River originates at the outlet of Turner Pond and flows south for approximately 3.3 miles to Station Pask05. The river flows through Apponagansett Swamp in its upper reaches and after exiting the swamp the river flows approximately 0.5 miles along commercial development on the west side of the river and dense residential development on the east side until reaching the sample station at Route 6. During the May survey samples were collected using a basket bottle drop on the upstream side of the bridge into the center of the river. For the remaining surveys the samples were collected by wading

into the river and by manual grab technique or a sampling pole (on June 9th). Samples were collected in the center of the stream or towards one of the banks. The river flow at this station was well mixed throughout the channel; therefore samples collected towards the banks are considered representative.

Approximately 150 feet upstream from Route 6 a dam creates a small impoundment of the river. The river is then channelized to Route 6 and is about 20 feet wide with stone walls. The bottom substrates were boulder and sand. The depth was greater than 1 foot on the May survey and decreased to approximately 6 inches for the June surveys and 3 inches for the August survey. Some substrates were exposed during the last three surveys. The velocity decreased with each survey. It was visually estimated at greater than 5 fps during the May survey, 3 to 5 fps on June 9th, 1 to 3 fps on June 28th, and less than 1 fps on August 2nd. Riffles were still present during the August survey. By the September survey the velocity had returned to 3 to 5 fps.

During the first three surveys the water column was clear with no scums or objectionable deposits other than foam generated from the fast moving water over the dam. During the first survey a stormwater outfall was flowing clear and estimated at 3 fps. White foam was collecting under the outfall, but was not objectionable with regard to aesthetics. Water odor was noted during the late June 28 and August surveys. In June it was described as rotting vegetables and in August a very strong sulfide odor was noted in the water sample. The August survey also noted a change to the water color to rusty (orange) from reddish on all of the other surveys. Rust floc covered 100% of the substrates during the August survey.

Station Pask02 – Paskamanset River at Russells Mills Road, Dartmouth

From station Pask05 the river flows south for approximately 4.9 miles through a large wetland resource area to Station Pask02. The station was accessed from the left bank adjacent to the USGS gage on the upstream side of the road. Samples were collected by manual grab technique from the shore on the May and September surveys and by wading into the river on the June and August surveys. The river flow at this station was well mixed throughout the channel, therefore samples collected towards the banks are considered representative.

The river was approximately 60 feet wide and narrowed to about 30 feet at the road crossing and could be characterized as a deep run. The river water level was at the annual high water line on the first survey (May 3) and the velocity was visually estimated at 1-3 fps. The water level dropped about 2 feet between the May and June surveys and the velocity decreased to approximately 1 fps in early June yet the river continued to fill the channel. The river water level remained relatively constant for the remainder of the surveys with the velocity decreasing slightly.

The water column was clear on the May and late June surveys, slightly turbid in early June and September, and moderately turbid on the August survey. There were no odors or other objectionable deposits noted on any of the survey dates. The aquatic plant coverage was unobservable due to the depth of the water and the dark water column, but is believed to be minimal if any. Moss was noted on the bottom substrates.

New Bedford Harbor Drainage Area (freshwater portions)

Station Acush04 – Acushnet River at Leonard Street, Acushnet

The Acushnet River originates at the outlet of New Bedford Reservoir and flows south for less than half of a mile to Station Acush04. A large agricultural area (cropland or a plant nursery) spans most of this reach of the river on the east side. The station was accessed by a set of stone steps along the right bank upstream from the road crossing. Samples were collected using a manual grab technique from the shore during the May and September surveys and by wading into the river during the June and August surveys. The river flow at this station was well mixed throughout the channel, therefore samples collected towards the banks are considered representative.

The river was approximately 10 to 15 feet wide at this station and the substrates were boulder, cobble, gravel, and sand. The water level was slightly higher than the annual high water line (AHWL) during the May survey (approximately 1.5 feet deep). The depth decreased over the sampling season to 1 foot in early June, 6 inches in late June, and a few inches in August and September. The velocity was visually estimated at 3 to 4 fps in May, 1 to 3 fps in June and August, and in September there was a mix of 1 to 3 fps riffles and less than 1 fps runs. Substrates were not exposed until the August and September surveys and were mainly large rocks.

The water column was clear with no odors, scums, or other objectionable deposits on all surveys. In May the aquatic plant coverage was sparse with some moss on rocks and film on the stream bed. In early June a moderate amount of film periphyton was noted on the rocks in the riffle and run areas and a sparse amount of green filamentous periphyton was present on the rocks in the runs. By the early August survey the moss was dense and dense coverage of loose floc was noted on the rocks in the riffle and run areas. During the September survey date all of the periphyton was gone.

Station Acush02 – Acushnet River at Hamlin Street, Acushnet

From Station Acush04 the river flows southwest through a large wetland resource area for approximately 2.2 miles to Hamlin Street. Land uses along this stretch include cranberry bogs and a golf course. The river is culverted under Hamlin Street in two locations approximately 80 feet from each other. A canoe and fisherman's access with parking is located adjacent to the eastern outlet that is upstream from the 2nd outlet. Sampling was conducted on the upstream side of the road using a manual grab technique in the main flow of the river from the shore or by wade-in from the access point.

The river channel through this large wetland area was wide yet variable. At the sampling point the river was 30 to 50 feet wide and the depth was 2 to 3 feet or greater on all of the survey dates and the substrates were gravel and sand. During the May survey the water level was high compared to the annual high water line (AHWL), decreased to normal for the June surveys, and was low compared to the AWHL during the August and September surveys but with no exposed substrates. The velocity was visually estimated as 1 to 3 fps on the first survey (May 3), less than 1 fps on the June surveys, almost stagnant during the August survey, and then increased back to less than 1 fps during the September survey.

The water column was clear during the May survey, moderately turbid during the June and August surveys, and slightly turbid during the September survey. It was noted that although there was slight turbidity during the September survey, the bottom of the river was visible. The aquatic plant, periphyton, and phytoplankton coverage was mostly unobservable due to the depth and dark color of the water. Although by the August survey, moderate coverage of loose floc and moss on rocks was observed, that coverage changed to a sparse amount of film on the September survey. During the May, late June, and September surveys no odors, scums, or other objectionable conditions were observed. During the June 9th survey, geese droppings and remnants of filleted fish were on the shore and in August it was noted that oil was released from the sediment when stepped upon.

Station Acush01 – Acushnet River just upstream at Tarkiln Hill Road/Main Street, New Bedford/Acushnet

From Station Acush02 the Acushnet River flows south for approximately 1.2 miles through a wooded swamp, past a cranberry bog, and through an unnamed impoundment to Station Acush01. The station was accessed from a parking lot on the left bank. Samples were collected by manual grab technique in the center of the river. During the May survey the multiprobe was deployed from the road crossing in the center of the channel.

The river channel was 30 to 35 feet wide in the reach of the river from the impoundment downstream to station Acush01. The depth was at least 6 inches on all surveys and the bottom substrates were composed of boulder, cobble, gravel, and sand. Tidal influence was apparent at this station. During the May survey the water level was normal compared to the annual high water line (AHWL) and the velocity

was visually estimated as 3 to 4 fps. The water level was normal again for the first June survey, but the velocity slowed to less than 1 fps. During the late June survey the water level was low with some exposed substrates along the banks, but the velocity had increased to 1 to 3 fps. The water level increased to normal during the August survey while the velocity slowed again to less than 1 fps. The water level was low again during the September survey, but with no exposed substrates and the velocity increased to 1 to 3 fps. Note that the June 9th survey caught some of the incoming tide as the conductivity was high.

The water column was clear during the May and late June surveys, slightly turbid during the early June and September surveys and moderately turbid during the August survey. There were no aquatic plants, periphyton, or phytoplankton noted except for sparse loose floc noted on the substrates in August and a sparse amount of filamentous algae was present during the September survey. There were no water odors or scums noted on any of the survey dates. Trash was noted in stream on three of the surveys. Geese were nesting in the parking area on the left bank. During the May survey three nests with eight or nine geese were present, but no geese droppings were observed. Pigeons were also roosting under the bridge. During the early June survey, some geese droppings were present, but all of the geese were gone.

Station But15 – Buttonwood Brook at Walter Fuller Memorial Parkway (downstream of Buttonwood Park Pond), New Bedford.

Buttonwood Brook originates in a wetland area north of Route 6 and west of Alfred Bessette Memorial Highway. The brook flows south for almost one mile to Buttonwood Park Pond. The land uses adjacent to the brook upstream of the pond are a cemetery and multi-family and high density residential. During all surveys, except August when the pond outlet was not flowing, the station was accessed from the right bank on the downstream side of Fuller Parkway. Samples were collected using a manual grab technique in the center of the brook. During the August survey samples were collected at the outlet of the pond on the upstream side of Fuller Parkway. The multiprobe was not deployed during the August survey because of the lack of brook flow.

The channel was 40 feet wide at Station But15 and the brook flowed for about 200 feet to a small impoundment that is just upstream from the Buttonwood Park Zoo. The water depth at the sampling point was less than 6 inches on all survey dates and the substrate was boulder and sand. The water level was normal compared to the annual high water line (AWHL) during the May survey and low compared to the AWHL on the remaining surveys. Larger substrates were exposed for the late June, August, and September surveys. The velocity was visually estimated as 1 to 3 fps during the May and first June survey, slowed to 1 fps during the late June survey and was stagnant during the August survey. By the September survey the pond outlet was flowing again and the brook was a slow run (1 fps) mixed with riffle areas (1-3 fps).

The water column was moderately turbid with no odor during the May survey. There was moderate coverage of emergent aquatic plants (pickerelweed and lily pads), very dense coverage of brown film periphyton on the plants and substrates, and some green filamentous algae attached to the plants. Iron floc was also present in groundwater seepage along the left bank of the brook. The plant and algae coverage was present again in the early June survey along with some oil sheens and pollen blankets. The water was clear with no odor. The late June survey noted an algae odor to the water and dense aquatic plant coverage, but the periphyton and algae were gone. The water at the outlet of the pond on the August survey was moderately turbid with no odor. The aquatic plant, periphyton, and phytoplankton coverage was unobservable due to the depth of the pond. Floating scum was noted on the pond along with a large geese population. Geese droppings were observed on the shore. In September the aquatic plant and periphyton coverage was gone downstream from the road. The brook was clear with no odors, scums, or other objectionable conditions.

Station But01 – Buttonwood Brook at Elm Street, Dartmouth, MA.

From Station But15 Buttonwood Brook flows south through Buttonwood Park Zoo and for about 2.5 miles through medium and high density residential areas to Elm Street. The station was accessed through a residential yard and samples were collected by manual grab technique on the downstream side of Elm Street in the center of the brook. There are three culverts under Elm Street that carry the brook.

The channel was 10 to 15 feet wide at Station But01 and the substrate was composed of boulder, cobble, gravel, and sand. During the May survey and early June surveys the water level was normal as compared to the annual high water line (AWHL) and the velocity was visually estimated as 1 to 3 fps. During the June survey it was noted that some substrates were slightly exposed on the margins. By late June the water level was 2 feet below the AWHL with some exposed substrates, but the velocity was still estimated as 1 to 3 fps. During the August survey the water level was estimated at 1 foot below the AWHL yet the velocity had slowed to 1 fps, but good riffles were present and only two of the culverts were carrying flow. The September survey had flow conditions similar to August with a mix of slow shallow runs and riffles.

The water was clear with no odor, scums, or other objectionable conditions on the survey dates, except that the brook was slightly turbid during the June 28th survey. Ducks were observed on four of the surveys. During the May survey there were no aquatic plants or phytoplankton, but dense coverage of green film periphyton was present on the bottom of the stream. By the early June survey the periphyton coverage was only sparse and it was gone by the late June survey. Dense brown periphyton covering the rocks returned for the August survey, but was gone again by the September survey.

Mattapoisett River Drainage Area (freshwater portions)

Station Matt07 - Mattapoisett River at Wolf Island Road, Rochester

Mattapoisett River originates at the outlet of Snipatuit Pond in Rochester. The river flows south for 5.5 miles through the Rochester Wildlife Management Area and large wetland areas while passing cranberry bogs, low density residential and agricultural areas before reaching the station at Wolf Island Road. The station was sampled on the upstream side of Wolf Island Road. The river flows around a small island and enters two culverts under Wolf Island Road. The samples were collected by manual grab technique from the shore. The center of stream and main flow could be reached without wading in-stream.

The river channel was about 20 feet wide at this station and the substrates were sand with some boulders. During the May survey the water level was about 0.5 feet high as compared to the annual high water line (AWHL) and the velocity was visually estimated as 1 to 3 fps. The water level decreased to normal during the June 9 survey, but the velocity was the same. For the June 28th survey the level continued to drop (1 foot below the AWHL) and the velocity slowed to 1 fps. During the early August and September surveys the river was described as low and moving very slowly but still had about 2 feet of depth with no exposed substrates.

The water was clear with no odor, scums, or other objectionable conditions noted on the survey dates, except that the brook was slightly turbid on the August survey and pollen was observed on the June 28th survey. Only on the September survey was a sparse amount of duckweed noted along with some film periphyton.

Station Matt02 - Mattapoisett River at River Road, Mattapoisett

From Station Matt07 the Mattapoisett River flows south through large wetland resource areas for approximately 8.5 miles to station Matt02. The riparian zone is relatively undeveloped with two small and one large cranberry bog, a sand and gravel pit, and some low density residential areas. The station was accessed from the right bank on the upstream side of the road. Samples were collected by manual grab technique or a sampling pole either from the shore or by wading into the river. All samples were collected

in the main flow of the river. During the first two surveys the multiprobe was deployed from the road crossing. During the remaining surveys it was placed in-stream by wading into the river.

The river channel was about 50 feet wide and the bottom substrate was mostly unobservable due to the depth and dark color of the water, but during the May survey cement and sand were noted. During the May survey the water level was normal as compared to the annual high water line (AWHL) and the velocity was visually estimated as 1 to 3 fps. In early June the water level was normal, but the velocity had decreased to less than 1 fps and the river was described as a slow, smooth run. During the rest of the surveys the water level was at least 6 inches below the AWHL and the river was described as "still" and hardly moving. The river still had about 2 feet of depth with no exposed substrates.

The water was clear during the May and late June surveys and slightly turbid on the rest of the survey dates. There were no odors, scums, or other objectionable conditions noted except that, during the August survey, pollen was observed on the river. Aquatic plant, phytoplankton, and periphyton growth was mostly unobservable due to the depth of the water. However, during the May survey a moderate amount of moss was noted along with some filamentous algae on rocks on the bottom of the river. During the August survey the density of aquatic plants was not determined, but they were present and filamentous algae was observed attached to the plants.

Station Wewe10 - Weweantic River at Rochester Road, Middleborough/Carver

The Weweantic River originates at the outlet of the Weweantic River North Pond at the confluence of Rocky Meadow and South Meadow Brooks. The river flows south for approximately 3.1 miles through an area dense with cranberry bogs to Station Wewe10. Samples were collected from the left bank on the upstream side of the road by either manual grab technique or with a sampling pole. All samples were collected in the main flow of the river. The multiprobe was deployed from the road crossing into the center of the river.

The river channel was wide and not clearly defined at this station. The bottom substrate was not clearly visible but appeared to be composed of boulder and sand. During the May survey the water level was high as compared to the annual high water line (AWHL) and the velocity was visually estimated as 1 to 3 fps. The water level decreased over the season but was never low enough to expose substrates. By the late June survey the velocity had decreased to less than 1 fps and in August was described as moving very slowly and closer to 0 fps. The velocity had increased slightly by the September survey.

There were no odors, scums, or other objectionable conditions noted on any of the survey dates. The river was dark colored, so clarity was not easily determined, but the river was noted as only slightly turbid during two surveys. Aquatic plant, phytoplankton, and periphyton densities were unobservable due to the water depth and dark-colored water. However, during the September survey a dense amount of film periphyton was noted along with sparse coverage of moss.

Station Wewe01 - Weweantic River at Fearing Hill Road, Wareham

From Station Wewe10, the Weweantic River flows south approximately 6 miles through extensive wetlands, cranberry bogs, and low density residential areas to Station Wewe01 The station was accessed from the left bank of the downstream side of Fearing Hill Road. Samples were collected from the shore by either manual grab technique or with a sampling pole. All samples were collected in the main flow of the river. The multiprobe was deployed from the road crossing into the center of the river.

The river channel was at least 50 feet wide at this station. The bottom substrate was not clearly visible but appeared to be made up of boulder and sand. During the May survey the water level was high as compared to the annual high water line (AWHL) and the velocity was visually estimated as 3 to 5 fps. The water level decreased over the season but was never low enough to expose substrates. By the late June survey the velocity had decreased to 1 to 3 fps where it remained for the remainder of the surveys.

There were no odors, scums, or other objectionable conditions noted during any of the survey dates. The water was noted as moderately turbid in late June but only slightly turbid during the August and September surveys. Aquatic plant, phytoplankton, and periphyton densities were mostly unobservable due to the water depth and dark-colored water. However, during the late June survey and August surveys some duckweed was noted on the shoreline. Sparse amounts of moss and film periphyton were also noted late in the season.

Station Sip02 – Sippican River upstream at County Road, Marion

The Sippican River originates at the outlet of Leonard's Pond, which forms at the confluence of the East Branch and West Branch Sippican Rivers in Rochester. The river flows southeast for approximately 2.5 miles to Station Sip02 through forest, wetlands, and past cranberry bogs. The station was accessed from the right bank of the downstream side of the road. Samples were collected using a manual grab technique in the main flow of the river.

The river channel was 30 to 40 feet wide at this station. The bottom substrate was mostly boulder and sand. During the May survey the water level was high as compared to the annual high water line (AWHL) and the velocity was visually estimated as 3 to 5 fps. By early June the water level had declined to a normal level and the velocity slowed to about 3 fps. By the late June survey the water level was low as compared to the AWHL and the velocity was estimated at 1 to 3 fps. Some substrates were exposed along the river banks. During the August survey the velocity slowed even more to about 1 fps but by September had increased back to the June conditions.

There were no odors, scums, or other objectionable conditions noted on any of the survey dates. The water was noted as slightly turbid only on two survey dates. Aquatic plant, phytoplankton, and periphyton densities were unobservable due to the water depth and dark-colored water. However, some moss was noted during the surveys. Most notably a dense coverage of moss was noted in September.

Station MarionUp – Unnamed Tributary to Aucoot Creek, Abels Way (approximately 450 feet upstream of Marion WWTP (MA0100030) discharge), Marion

This unnamed tributary originates in a forested area west of Route 6 in Marion and southeast of the Marion WWTP facility. The tributary flows in a southeasterly direction under Route 6 for approximately one-quarter of a mile to Station MarionUp at Abel's Way. This station is approximately 200 meters upstream from the Marion WWTP outfall. The immediate surrounding watershed is forested and residential with the sewage disposal ponds for Marion just upstream from where the tributary originates. The bottom substrate is mostly sand with some gravel. Samples were collected during the May and June surveys by manual grab technique from the center of the channel on the upstream side of Abels Way.

The tributary channel is approximately two feet wide at this station and the depth was approximately three inches. During the first two surveys the velocity was visually approximated at 1 to 2 fps with small riffles. The velocity slowed to 1 fps for the late June survey.

The water column was clear during all surveys and colored reddish, most likely from wetland drainage. There were no scums or other objectionable conditions. Moderate to dense coverage of green filamentous algae and green algae mats were present during reconnaissance on April 20, 2005. The density of periphyton is common in springtime in small drainage ditches along roads with enough nutrients and sunlight to allow growth. Sparse coverage of filamentous green algae was noted during the May 3rd survey. Coverage most likely decreased from April to May due to large amounts of rain that could have scoured the channel and because of the natural decay process. By the next survey (June 9th) the filamentous algae was gone and sparse coverage of film periphyton was noted. Only during the June 9th survey was an odor described as "rotting vegetables" noted in the water column. Most likely this odor was from periphyton that had decayed since the previous survey. The percent of open sky at this station was approximately 25% open.

Station MarionDn – Unnamed Tributary to Aucoot Creek, Olde Meadow Road (approximately 1200 feet downstream of Marion WWTF (MA0100030) discharge), Marion

From Station MarionUp the tributary flows south for approximately 200 meters, receives the discharge from the Marion WWTP, and continues south for another 370 meters to station MarionDn. The bottom substrate is mostly sand with some gravel. Samples were collected by manual grab technique in the center of the tributary on the upstream side of Olde Meadow Road. Samples were collected on the same dates as the upstream station and were collected before the upstream samples.

The channel was approximately two feet wide and the depth was approximately six inches, twice that of the upstream station. The velocity was estimated at 1 to 3 fps on all surveys. The velocity did not decrease on the third survey as it did at the upstream location.

The water was moderately turbid during the first two surveys and slightly turbid on the last survey date. The color of the brook was dark tan during the May survey and light yellow during the June surveys. The water column smelled of treated wastewater. The differentiation in depth, velocity, color, and odor clearly indicate that the majority of the water column at this station is treated wastewater. There were no scums or other objectionable conditions and no aquatic plants or periphyton were noted at this station. During the June 27 survey, bacteria samples were collected at two additional sites downstream from this station, at the outfall itself, and from Aucoot Creek, which runs adjacent to this tributary. Slight turbidity at those stations was also noted, but the water column was described as smelling like algae. Station MarionDn is fairly shaded with the percent of open sky estimated as 50% at the road crossing, and with more shade farther upstream and downstream from the road.

The outfall is an approximately 18" concrete pipe on the left bank of the tributary. Half of the pipe was submerged. The effluent was moderately turbid and grayish. The streambed had an abundance of small snails at the outfall location. A clear delineation between the clear, reddish water of the tributary and the effluent was evident at the outfall.

WATER QUALITY DATA

All MassDEP DWM water quality data are managed and maintained in the Water Quality Data Access Database. Tables 3 through 6 below are 2005 data exports for the Buzzards Bay Coastal Drainage Area. The procedures used to accept, accept with qualification or censor data are based on the DWM SOP for data validation and usability (MassDEP 2012a) and are in addition to separate quality assurance activities and laboratory validation steps undertaken by the WES. Data qualifier explanations are listed in the Appendix.

Table 3 presents bacteria (fecal coliform, *E. coli* and *Enterococcus* sp.) and nutrient series data (color, turbidity, total nitrogen, total phosphorus, and ammonia-nitrogen). Results from field duplicates are identified in the table QA/QC OWMIDs and paired with the original OWMID. Table 4 contains the geometric mean of *E. coli* and *Enterococci* results for each sampling station. Table 5 presents the attended multiprobe data and Table 6 contains unattended temperature and dissolved oxygen data.

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
See the Appendix at the end of this technical memorandum for definitions of result qualifiers.

Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Copicut River, Station Cop02, Unique ID W1365						
05/03/05	1222	95-0021	--	*E. coli*	5 e	CFU/100mL
06/09/05	1220	95-0147	--	*E. coli*	< 5	CFU/100mL
06/28/05	1225	95-0203	--	*E. coli*	170	CFU/100mL
05/03/05	1222	95-0021	--	*Enterococci*	< 5	CFU/100mL
06/09/05	1220	95-0147	--	*Enterococci*	< 5	CFU/100mL
06/28/05	1225	95-0203	--	*Enterococci*	270	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
See the Appendix at the end of this technical memorandum for definitions of result qualifiers.

Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
05/03/05	1222	95-0021	--	Fecal Coliforms	< 5 e	CFU/100mL
06/09/05	1220	95-0147	--	Fecal Coliforms	5	CFU/100mL
06/28/05	1225	95-0203	--	Fecal Coliforms	370	CFU/100mL
05/03/05	1222	95-0021	--	Apparent color	65	PCU
06/09/05	1220	95-0147	--	Apparent color	130	PCU
06/28/05	1225	95-0203	--	Apparent color	110	PCU
05/03/05	1222	95-0021	--	True Color	**	PCU
06/09/05	1220	95-0147	--	True Color	50	PCU
06/28/05	1225	95-0203	--	True Color	60	PCU
05/03/05	1222	95-0021	--	Turbidity	2.1	NTU
06/09/05	1220	95-0147	--	Turbidity	4.5	NTU
06/28/05	1225	95-0203	--	Turbidity	10.5	NTU
05/03/05	1222	95-0021	--	Total Nitrogen	0.41	mg/L
06/09/05	1220	95-0147	--	Total Nitrogen	0.45	mg/L
06/28/05	1225	95-0203	--	Total Nitrogen	0.58	mg/L
05/03/05	1222	95-0021	--	Total Phosphorus	0.036	mg/L
06/09/05	1220	95-0147	--	Total Phosphorus	0.036	mg/L
06/28/05	1225	95-0203	--	Total Phosphorus	0.052	mg/L
05/03/05	1222	95-0021	--	Ammonia-N	0.04	mg/L
06/09/05	1220	95-0147	--	Ammonia-N	0.04 d	mg/L
06/28/05	1225	95-0203	--	Ammonia-N	0.09	mg/L
Copicut River, Station Cop02A, Unique ID W1399						
08/30/05	1215	95-0449	--	*E. coli*	## b	CFU/100mL
09/12/05	1017	95-0482	--	*E. coli*	5	CFU/100mL
08/30/05	1215	95-0449	--	*Enterococci*	## b	CFU/100mL
08/30/05	1215	95-0449	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	1017	95-0482	--	Fecal Coliforms	10	CFU/100mL
08/30/05	1215	95-0449	--	Apparent color	130	PCU
08/30/05	1215	95-0449	--	True Color	110	PCU
08/30/05	1215	95-0449	--	Turbidity	8.0	NTU
08/30/05	1215	95-0449	--	Total Nitrogen	1.2	mg/L
08/30/05	1215	95-0449	--	Total Phosphorus	0.18	mg/L
08/30/05	1215	95-0449	--	Ammonia-N	0.05	mg/L
Shingle Island River, Station Sh03, Unique ID W1366						
05/03/05	1307	95-0023	95-0024	*E. coli*	5	CFU/100mL
05/03/05	1307	95-0024	95-0023	*E. coli*	5	CFU/100mL
06/09/05	1245	95-0149	95-0150	*E. coli*	30 e	CFU/100mL
06/09/05	1245	95-0150	95-0149	*E. coli*	20	CFU/100mL
06/28/05	1253	95-0205	95-0206	*E. coli*	45 e	CFU/100mL
06/28/05	1253	95-0206	95-0205	*E. coli*	30	CFU/100mL
08/02/05	1255	95-0312	95-0313	*E. coli*	10	CFU/100mL
08/02/05	1255	95-0313	95-0312	*E. coli*	30	CFU/100mL
08/30/05	1245	95-0451	--	*E. coli*	## b	CFU/100mL
09/12/05	1033	95-0483	--	*E. coli*	35	CFU/100mL
05/03/05	1307	95-0023	95-0024	*Enterococci*	< 5	CFU/100mL
05/03/05	1307	95-0024	95-0023	*Enterococci*	10	CFU/100mL
06/09/05	1245	95-0149	95-0150	*Enterococci*	< 5	CFU/100mL
06/09/05	1245	95-0150	95-0149	*Enterococci*	5	CFU/100mL
06/28/05	1253	95-0205	95-0206	*Enterococci*	20	CFU/100mL
06/28/05	1253	95-0206	95-0205	*Enterococci*	20	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/02/05	1255	95-0312	95-0313	*Enterococci*	150	CFU/100mL
08/02/05	1255	95-0313	95-0312	*Enterococci*	155	CFU/100mL
08/30/05	1245	95-0451	--	*Enterococci*	## b	CFU/100mL
05/03/05	1307	95-0023	95-0024	Fecal Coliforms	5	CFU/100mL
05/03/05	1307	95-0024	95-0023	Fecal Coliforms	5	CFU/100mL
06/09/05	1245	95-0149	95-0150	Fecal Coliforms	15 e	CFU/100mL
06/09/05	1245	95-0150	95-0149	Fecal Coliforms	20	CFU/100mL
06/28/05	1253	95-0205	95-0206	Fecal Coliforms	40 d,e	CFU/100mL
06/28/05	1253	95-0206	95-0205	Fecal Coliforms	100 d	CFU/100mL
08/02/05	1255	95-0312	95-0313	Fecal Coliforms	30	CFU/100mL
08/02/05	1255	95-0313	95-0312	Fecal Coliforms	35	CFU/100mL
08/30/05	1245	95-0451	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	1033	95-0483	--	Fecal Coliforms	130	CFU/100mL
05/03/05	1307	95-0023	95-0024	Apparent color	230	PCU
05/03/05	1307	95-0024	95-0023	Apparent color	200	PCU
06/09/05	1245	95-0149	95-0150	Apparent color	300	PCU
06/09/05	1245	95-0150	95-0149	Apparent color	300	PCU
06/28/05	1253	95-0205	95-0206	Apparent color	170	PCU
06/28/05	1253	95-0206	95-0205	Apparent color	180	PCU
08/02/05	1255	95-0312	95-0313	Apparent color	90	PCU
08/02/05	1255	95-0313	95-0312	Apparent color	80	PCU
08/30/05	1245	95-0451	--	Apparent color	170	PCU
05/03/05	1307	95-0023	95-0024	True Color	**	PCU
05/03/05	1307	95-0024	95-0023	True Color	**	PCU
06/09/05	1245	95-0149	95-0150	True Color	280	PCU
06/09/05	1245	95-0150	95-0149	True Color	230	PCU
06/28/05	1253	95-0205	95-0206	True Color	170	PCU
06/28/05	1253	95-0206	95-0205	True Color	170	PCU
08/02/05	1255	95-0312	95-0313	True Color	60	PCU
08/02/05	1255	95-0313	95-0312	True Color	60	PCU
08/30/05	1245	95-0451	--	True Color	140	PCU
05/03/05	1307	95-0023	95-0024	Turbidity	1.1	NTU
05/03/05	1307	95-0024	95-0023	Turbidity	0.9	NTU
06/09/05	1245	95-0149	95-0150	Turbidity	10.0 d	NTU
06/09/05	1245	95-0150	95-0149	Turbidity	16.0 d	NTU
06/28/05	1253	95-0205	95-0206	Turbidity	2.2	NTU
06/28/05	1253	95-0206	95-0205	Turbidity	2.0	NTU
08/02/05	1255	95-0312	95-0313	Turbidity	2.6d	NTU
08/02/05	1255	95-0313	95-0312	Turbidity	2.3d	NTU
08/30/05	1245	95-0451	--	Turbidity	4.7	NTU
05/03/05	1307	95-0023	95-0024	Total Nitrogen	0.42	mg/L
05/03/05	1307	95-0024	95-0023	Total Nitrogen	0.43	mg/L
06/09/05	1245	95-0149	95-0150	Total Nitrogen	0.59	mg/L
06/09/05	1245	95-0150	95-0149	Total Nitrogen	0.66 h	mg/L
06/28/05	1253	95-0205	95-0206	Total Nitrogen	0.92	mg/L
06/28/05	1253	95-0206	95-0205	Total Nitrogen	0.90	mg/L
08/02/05	1255	95-0312	95-0313	Total Nitrogen	0.87 b	mg/L
08/02/05	1255	95-0313	95-0312	Total Nitrogen	0.88 b	mg/L
08/30/05	1245	95-0451	--	Total Nitrogen	1.2	mg/L
05/03/05	1307	95-0023	95-0024	Total Phosphorus	0.020	mg/L

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
05/03/05	1307	95-0024	95-0023	Total Phosphorus	0.022	mg/L
06/09/05	1245	95-0149	95-0150	Total Phosphorus	0.029	mg/L
06/09/05	1245	95-0150	95-0149	Total Phosphorus	0.032	mg/L
06/28/05	1253	95-0205	95-0206	Total Phosphorus	0.060	mg/L
06/28/05	1253	95-0206	95-0205	Total Phosphorus	0.057	mg/L
08/02/05	1255	95-0312	95-0313	Total Phosphorus	0.054	mg/L
08/02/05	1255	95-0313	95-0312	Total Phosphorus	0.054	mg/L
08/30/05	1245	95-0451	--	Total Phosphorus	0.054	mg/L
05/03/05	1307	95-0023	95-0024	Ammonia-N	0.02	mg/L
05/03/05	1307	95-0024	95-0023	Ammonia-N	<0.02	mg/L
06/09/05	1245	95-0149	95-0150	Ammonia-N	0.03 d	mg/L
06/09/05	1245	95-0150	95-0149	Ammonia-N	0.03 d	mg/L
06/28/05	1253	95-0205	95-0206	Ammonia-N	0.21	mg/L
06/28/05	1253	95-0206	95-0205	Ammonia-N	0.22	mg/L
08/02/05	1255	95-0312	95-0313	Ammonia-N	0.24	mg/L
08/02/05	1255	95-0313	95-0312	Ammonia-N	0.24	mg/L
08/30/05	1245	95-0451	--	Ammonia-N	0.02	mg/L
Shingle Island River, Station Sh01, Unique ID W1367						
05/03/05	1205	95-0019	--	*E. coli*	20	CFU/100mL
06/09/05	1200	95-0145	--	*E. coli*	45 e	CFU/100mL
06/28/05	1205	95-0201	--	*E. coli*	440	CFU/100mL
08/02/05	1207	95-0308	--	*E. coli*	125	CFU/100mL
08/30/05	1202	95-0447	--	*E. coli*	## b	CFU/100mL
09/12/05	1009	95-0475	--	*E. coli*	200	CFU/100mL
05/03/05	1205	95-0019	--	*Enterococci*	20	CFU/100mL
06/09/05	1200	95-0145	--	*Enterococci*	25	CFU/100mL
06/28/05	1205	95-0201	--	*Enterococci*	105	CFU/100mL
08/02/05	1207	95-0308	--	*Enterococci*	180	CFU/100mL
08/30/05	1202	95-0447	--	*Enterococci*	## b	CFU/100mL
05/03/05	1205	95-0019	--	Fecal Coliforms	35	CFU/100mL
06/09/05	1200	95-0145	--	Fecal Coliforms	40 e	CFU/100mL
06/28/05	1205	95-0201	--	Fecal Coliforms	500	CFU/100mL
08/02/05	1207	95-0308	--	Fecal Coliforms	130	CFU/100mL
08/30/05	1202	95-0447	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	1009	95-0475	--	Fecal Coliforms	205	CFU/100mL
05/03/05	1205	95-0019	--	Apparent color	150	PCU
06/09/05	1200	95-0145	--	Apparent color	210	PCU
06/28/05	1205	95-0201	--	Apparent color	110	PCU
08/02/05	1207	95-0308	--	Apparent color	100	PCU
08/30/05	1202	95-0447	--	Apparent color	95	PCU
05/03/05	1205	95-0019	--	True Color	**	PCU
06/09/05	1200	95-0145	--	True Color	110	PCU
06/28/05	1205	95-0201	--	True Color	85	PCU
08/02/05	1207	95-0308	--	True Color	80	PCU
08/30/05	1202	95-0447	--	True Color	60	PCU
05/03/05	1205	95-0019	--	Turbidity	1.0	NTU
06/09/05	1200	95-0145	--	Turbidity	3.0	NTU
06/28/05	1205	95-0201	--	Turbidity	8.5	NTU
08/02/05	1207	95-0308	--	Turbidity	5.3 d	NTU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/30/05	1202	95-0447	--	Turbidity	5.7	NTU
05/03/05	1205	95-0019	--	Total Nitrogen	0.45	mg/L
06/09/05	1200	95-0145	--	Total Nitrogen	0.61	mg/L
06/28/05	1205	95-0201	--	Total Nitrogen	0.76	mg/L
08/02/05	1207	95-0308	--	Total Nitrogen	0.63 b	mg/L
08/30/05	1202	95-0447	--	Total Nitrogen	1.1	mg/L
05/03/05	1205	95-0019	--	Total Phosphorus	0.022	mg/L
06/09/05	1200	95-0145	--	Total Phosphorus	0.043	mg/L
06/28/05	1205	95-0201	--	Total Phosphorus	0.053	mg/L
08/02/05	1207	95-0308	--	Total Phosphorus	0.048	mg/L
08/30/05	1202	95-0447	--	Total Phosphorus	0.085	mg/L
05/03/05	1205	95-0019	--	Ammonia-N	0.04	mg/L
06/09/05	1200	95-0145	--	Ammonia-N	0.08 d	mg/L
06/28/05	1205	95-0201	--	Ammonia-N	0.09	mg/L
08/02/05	1207	95-0308	--	Ammonia-N	0.04	mg/L
08/30/05	1202	95-0447	--	Ammonia-N	0.06	mg/L
East Branch Westport River, Station EBW02, Unique ID W1368						
05/03/05	1104	95-0013	--	*E. coli*	95	CFU/100mL
06/09/05	1050	95-0139	--	*E. coli*	15 e	CFU/100mL
06/28/05	1055	95-0195	--	*E. coli*	620	CFU/100mL
08/02/05	1057	95-0302	--	*E. coli*	30	CFU/100mL
08/30/05	1052	95-0439	95-0440	*E. coli*	## b	CFU/100mL
08/30/05	1052	95-0440	95-0439	*E. coli*	## b	CFU/100mL
08/30/05	1102	95-0441	--	*E. coli*	## b	CFU/100mL
09/12/05	915	95-0478	95-0479	*E. coli*	75	CFU/100mL
09/12/05	915	95-0479	95-0478	*E. coli*	35	CFU/100mL
09/12/05	918	95-0480	--	*E. coli*	< 5	CFU/100mL
05/03/05	1104	95-0013	--	*Enterococci*	170	CFU/100mL
06/09/05	1050	95-0139	--	*Enterococci*	10	CFU/100mL
06/28/05	1055	95-0195	--	*Enterococci*	1100	CFU/100mL
08/02/05	1057	95-0302	--	*Enterococci*	175	CFU/100mL
08/30/05	1052	95-0439	95-0440	*Enterococci*	## b	CFU/100mL
08/30/05	1052	95-0440	95-0439	*Enterococci*	## b	CFU/100mL
08/30/05	1102	95-0441	--	*Enterococci*	## b	CFU/100mL
05/03/05	1104	95-0013	--	Fecal Coliforms	420	CFU/100mL
06/09/05	1050	95-0139	--	Fecal Coliforms	10 e	CFU/100mL
06/28/05	1055	95-0195	--	Fecal Coliforms	1100	CFU/100mL
08/02/05	1057	95-0302	--	Fecal Coliforms	65	CFU/100mL
08/30/05	1052	95-0439	95-0440	Fecal Coliforms	## b	CFU/100mL
08/30/05	1052	95-0440	95-0439	Fecal Coliforms	## b	CFU/100mL
08/30/05	1102	95-0441	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	915	95-0478	95-0479	Fecal Coliforms	75	CFU/100mL
09/12/05	915	95-0479	95-0478	Fecal Coliforms	130	CFU/100mL
09/12/05	918	95-0480	--	Fecal Coliforms	< 5	CFU/100mL
05/03/05	1104	95-0013	--	Apparent color	150	PCU
06/09/05	1050	95-0139	--	Apparent color	170	PCU
06/28/05	1055	95-0195	--	Apparent color	130	PCU
08/02/05	1057	95-0302	--	Apparent color	120	PCU
08/30/05	1052	95-0439	95-0440	Apparent color	140	PCU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/30/05	1052	95-0440	95-0439	Apparent color	120	PCU
08/30/05	1102	95-0441	--	Apparent color	<15	PCU
05/03/05	1104	95-0013	--	True Color	**	PCU
06/09/05	1050	95-0139	--	True Color	150	PCU
06/28/05	1055	95-0195	--	True Color	120	PCU
08/02/05	1057	95-0302	--	True Color	110	PCU
08/30/05	1052	95-0439	95-0440	True Color	90	PCU
08/30/05	1052	95-0440	95-0439	True Color	85	PCU
08/30/05	1102	95-0441	--	True Color	**	PCU
05/03/05	1104	95-0013	--	Turbidity	1.7	NTU
06/09/05	1050	95-0139	--	Turbidity	2.4	NTU
06/28/05	1055	95-0195	--	Turbidity	4.1	NTU
08/02/05	1057	95-0302	--	Turbidity	3.2 d	NTU
08/30/05	1052	95-0439	95-0440	Turbidity	8.0 d	NTU
08/30/05	1052	95-0440	95-0439	Turbidity	5.2 d	NTU
08/30/05	1102	95-0441	--	Turbidity	<0.5	NTU
05/03/05	1104	95-0013	--	Total Nitrogen	0.49	mg/L
06/09/05	1050	95-0139	--	Total Nitrogen	0.64	mg/L
06/28/05	1055	95-0195	--	Total Nitrogen	0.74	mg/L
08/02/05	1057	95-0302	--	Total Nitrogen	0.77 b	mg/L
08/30/05	1052	95-0439	95-0440	Total Nitrogen	0.68	mg/L
08/30/05	1052	95-0440	95-0439	Total Nitrogen	0.67	mg/L
08/30/05	1102	95-0441	--	Total Nitrogen	<0.040	mg/L
05/03/05	1104	95-0013	--	Total Phosphorus	0.021	mg/L
06/09/05	1050	95-0139	--	Total Phosphorus	0.031	mg/L
06/28/05	1055	95-0195	--	Total Phosphorus	0.043	mg/L
08/02/05	1057	95-0302	--	Total Phosphorus	0.034	mg/L
08/30/05	1052	95-0439	95-0440	Total Phosphorus	0.074	mg/L
08/30/05	1052	95-0440	95-0439	Total Phosphorus	0.073	mg/L
08/30/05	1102	95-0441	--	Total Phosphorus	<0.005	mg/L
05/03/05	1104	95-0013	--	Ammonia-N	<0.02	mg/L
06/09/05	1050	95-0139	--	Ammonia-N	0.03 d	mg/L
06/28/05	1055	95-0195	--	Ammonia-N	0.04	mg/L
08/02/05	1057	95-0302	--	Ammonia-N	0.03	mg/L
08/30/05	1052	95-0439	95-0440	Ammonia-N	0.02	mg/L
08/30/05	1052	95-0440	95-0439	Ammonia-N	0.03	mg/L
08/30/05	1102	95-0441	--	Ammonia-N	<0.02	mg/L
East Branch Westport River, Station EBW00, Unique ID W1369						
05/03/05	1045	95-0011	--	*E. coli*	55	CFU/100mL
06/09/05	1032	95-0137	--	*E. coli*	35	CFU/100mL
06/28/05	1030	95-0193	--	*E. coli*	920	CFU/100mL
08/02/05	1035	95-0300	--	*E. coli*	150 r	CFU/100mL
08/30/05	1034	95-0437	--	*E. coli*	## b	CFU/100mL
09/12/05	905	95-0477	--	*E. coli*	35	CFU/100mL
05/03/05	1045	95-0011	--	*Enterococci*	140	CFU/100mL
06/09/05	1032	95-0137	--	*Enterococci*	35	CFU/100mL
06/28/05	1030	95-0193	--	*Enterococci*	620	CFU/100mL
08/02/05	1035	95-0300	--	*Enterococci*	165 r	CFU/100mL
08/30/05	1034	95-0437	--	*Enterococci*	## b	CFU/100mL

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
05/03/05	1045	95-0011	--	Fecal Coliforms	295	CFU/100mL
06/09/05	1032	95-0137	--	Fecal Coliforms	45	CFU/100mL
06/28/05	1030	95-0193	--	Fecal Coliforms	960	CFU/100mL
08/02/05	1035	95-0300	--	Fecal Coliforms	170 r	CFU/100mL
08/30/05	1034	95-0437	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	905	95-0477	--	Fecal Coliforms	145	CFU/100mL
05/03/05	1045	95-0011	--	Apparent color	150	PCU
06/09/05	1032	95-0137	--	Apparent color	240	PCU
06/28/05	1030	95-0193	--	Apparent color	140	PCU
08/02/05	1035	95-0300	--	Apparent color	140 r	PCU
08/30/05	1034	95-0437	--	Apparent color	120	PCU
05/03/05	1045	95-0011	--	True Color	**	PCU
06/09/05	1032	95-0137	--	True Color	200	PCU
06/28/05	1030	95-0193	--	True Color	120	PCU
08/02/05	1035	95-0300	--	True Color	25 r	PCU
08/30/05	1034	95-0437	--	True Color	90	PCU
05/03/05	1045	95-0011	--	Turbidity	1.6	NTU
06/09/05	1032	95-0137	--	Turbidity	2.3	NTU
06/28/05	1030	95-0193	--	Turbidity	3.5	NTU
08/02/05	1035	95-0300	--	Turbidity	17.0 d,r	NTU
08/30/05	1034	95-0437	--	Turbidity	14.0	NTU
05/03/05	1045	95-0011	--	Total Nitrogen	0.62	mg/L
06/09/05	1032	95-0137	--	Total Nitrogen	0.79	mg/L
06/28/05	1030	95-0193	--	Total Nitrogen	1.1	mg/L
08/02/05	1035	95-0300	--	Total Nitrogen	## a,b,r	mg/L
08/30/05	1034	95-0437	--	Total Nitrogen	1.5	mg/L
05/03/05	1045	95-0011	--	Total Phosphorus	0.025	mg/L
06/09/05	1032	95-0137	--	Total Phosphorus	0.036	mg/L
06/28/05	1030	95-0193	--	Total Phosphorus	0.044	mg/L
08/02/05	1035	95-0300	--	Total Phosphorus	0.075 a,r	mg/L
08/30/05	1034	95-0437	--	Total Phosphorus	0.21	mg/L
05/03/05	1045	95-0011	--	Ammonia-N	0.02	mg/L
06/09/05	1032	95-0137	--	Ammonia-N	0.05 d	mg/L
06/28/05	1030	95-0193	--	Ammonia-N	0.05	mg/L
08/02/05	1035	95-0300	--	Ammonia-N	0.03 r	mg/L
08/30/05	1034	95-0437	--	Ammonia-N	0.11	mg/L
Bread and Cheese Brook, Station BrCh04, Unique ID W1370						
05/03/05	1143	95-0017	--	*E. coli*	< 5	CFU/100mL
06/09/05	1135	95-0143	--	*E. coli*	60 e	CFU/100mL
06/28/05	1135	95-0199	--	*E. coli*	520 e	CFU/100mL
08/02/05	1140	95-0306	--	*E. coli*	20	CFU/100mL
08/30/05	1130	95-0445	--	*E. coli*	## b	CFU/100mL
09/12/05	934	95-0481	--	*E. coli*	110	CFU/100mL
05/03/05	1143	95-0017	--	*Enterococci*	15	CFU/100mL
06/09/05	1135	95-0143	--	*Enterococci*	90	CFU/100mL
06/28/05	1135	95-0199	--	*Enterococci*	270	CFU/100mL
08/02/05	1140	95-0306	--	*Enterococci*	130	CFU/100mL
08/30/05	1130	95-0445	--	*Enterococci*	## b	CFU/100mL
05/03/05	1143	95-0017	--	Fecal Coliforms	10	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/09/05	1135	95-0143	--	Fecal Coliforms	50 e	CFU/100mL
06/28/05	1135	95-0199	--	Fecal Coliforms	440 e	CFU/100mL
08/02/05	1140	95-0306	--	Fecal Coliforms	20	CFU/100mL
08/30/05	1130	95-0445	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	934	95-0481	--	Fecal Coliforms	270	CFU/100mL
05/03/05	1143	95-0017	--	Apparent color	200	PCU
06/09/05	1135	95-0143	--	Apparent color	380	PCU
06/28/05	1135	95-0199	--	Apparent color	250	PCU
08/02/05	1140	95-0306	--	Apparent color	46	PCU
08/30/05	1130	95-0445	--	Apparent color	120	PCU
05/03/05	1143	95-0017	--	True Color	**	PCU
06/09/05	1135	95-0143	--	True Color	190	PCU
06/28/05	1135	95-0199	--	True Color	220	PCU
08/02/05	1140	95-0306	--	True Color	40	PCU
08/30/05	1130	95-0445	--	True Color	85	PCU
05/03/05	1143	95-0017	--	Turbidity	0.9	NTU
06/09/05	1135	95-0143	--	Turbidity	3.8	NTU
06/28/05	1135	95-0199	--	Turbidity	10.5	NTU
08/02/05	1140	95-0306	--	Turbidity	1.1 d	NTU
08/30/05	1130	95-0445	--	Turbidity	8.1	NTU
05/03/05	1143	95-0017	--	Total Nitrogen	0.69	mg/L
06/09/05	1135	95-0143	--	Total Nitrogen	1.4	mg/L
06/28/05	1135	95-0199	--	Total Nitrogen	1.7	mg/L
08/02/05	1140	95-0306	--	Total Nitrogen	1.3 b	mg/L
08/30/05	1130	95-0445	--	Total Nitrogen	1.2	mg/L
05/03/05	1143	95-0017	--	Total Phosphorus	0.023	mg/L
06/09/05	1135	95-0143	--	Total Phosphorus	0.075	mg/L
06/28/05	1135	95-0199	--	Total Phosphorus	0.13	mg/L
08/02/05	1140	95-0306	--	Total Phosphorus	0.025	mg/L
08/30/05	1130	95-0445	--	Total Phosphorus	0.095	mg/L
05/03/05	1143	95-0017	--	Ammonia-N	0.02	mg/L
06/09/05	1135	95-0143	--	Ammonia-N	0.10 d	mg/L
06/28/05	1135	95-0199	--	Ammonia-N	0.08	mg/L
08/02/05	1140	95-0306	--	Ammonia-N	0.04	mg/L
08/30/05	1130	95-0445	--	Ammonia-N	0.04	mg/L
Bread and Cheese Brook, Station BrCh01, Unique ID W1371						
05/03/05	1124	95-0015	--	*E. coli*	55	CFU/100mL
06/09/05	1110	95-0141	--	*E. coli*	40 e	CFU/100mL
06/28/05	1115	95-0197	--	*E. coli*	1400 e	CFU/100mL
08/02/05	1119	95-0304	--	*E. coli*	5	CFU/100mL
08/30/05	1110	95-0443	--	*E. coli*	## b	CFU/100mL
09/12/05	923	95-0471	--	*E. coli*	35	CFU/100mL
05/03/05	1124	95-0015	--	*Enterococci*	25	CFU/100mL
06/09/05	1110	95-0141	--	*Enterococci*	40	CFU/100mL
06/28/05	1115	95-0197	--	*Enterococci*	860	CFU/100mL
08/02/05	1119	95-0304	--	*Enterococci*	30	CFU/100mL
08/30/05	1110	95-0443	--	*Enterococci*	## b	CFU/100mL
05/03/05	1124	95-0015	--	Fecal Coliforms	75	CFU/100mL
06/09/05	1110	95-0141	--	Fecal Coliforms	35 e	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	1115	95-0197	--	Fecal Coliforms	1100 e	CFU/100mL
08/02/05	1119	95-0304	--	Fecal Coliforms	15	CFU/100mL
08/30/05	1110	95-0443	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	923	95-0471	--	Fecal Coliforms	70	CFU/100mL
05/03/05	1124	95-0015	--	Apparent color	200	PCU
06/09/05	1110	95-0141	--	Apparent color	340	PCU
06/28/05	1115	95-0197	--	Apparent color	180	PCU
08/02/05	1119	95-0304	--	Apparent color	50	PCU
08/30/05	1110	95-0443	--	Apparent color	130	PCU
05/03/05	1124	95-0015	--	True Color	**	PCU
06/09/05	1110	95-0141	--	True Color	300	PCU
06/28/05	1115	95-0197	--	True Color	170	PCU
08/02/05	1119	95-0304	--	True Color	50	PCU
08/30/05	1110	95-0443	--	True Color	95	PCU
05/03/05	1124	95-0015	--	Turbidity	1.6	NTU
06/09/05	1110	95-0141	--	Turbidity	2.7	NTU
06/28/05	1115	95-0197	--	Turbidity	3.3	NTU
08/02/05	1119	95-0304	--	Turbidity	1.4 d	NTU
08/30/05	1110	95-0443	--	Turbidity	9.8	NTU
05/03/05	1124	95-0015	--	Total Nitrogen	0.83	mg/L
06/09/05	1110	95-0141	--	Total Nitrogen	1.6	mg/L
06/28/05	1115	95-0197	--	Total Nitrogen	1.8	mg/L
08/02/05	1119	95-0304	--	Total Nitrogen	1.4 b	mg/L
08/30/05	1110	95-0443	--	Total Nitrogen	1.6	mg/L
05/03/05	1124	95-0015	--	Total Phosphorus	0.031	mg/L
06/09/05	1110	95-0141	--	Total Phosphorus	0.065	mg/L
06/28/05	1115	95-0197	--	Total Phosphorus	0.063	mg/L
08/02/05	1119	95-0304	--	Total Phosphorus	0.046	mg/L
08/30/05	1110	95-0443	--	Total Phosphorus	0.24	mg/L
05/03/05	1124	95-0015	--	Ammonia-N	0.06	mg/L
06/09/05	1110	95-0141	--	Ammonia-N	0.07 d	mg/L
06/28/05	1115	95-0197	--	Ammonia-N	0.03	mg/L
08/02/05	1119	95-0304	--	Ammonia-N	0.04	mg/L
08/30/05	1110	95-0443	--	Ammonia-N	0.08	mg/L
Snell Creek, Station Snl02, Unique ID W1372						
05/03/05	1000	95-0007	--	*E. coli*	50 e	CFU/100mL
06/09/05	950	95-0133	--	*E. coli*	80	CFU/100mL
06/28/05	1000	95-0189	--	*E. coli*	>1600	CFU/100mL
08/02/05	953	95-0296	--	*E. coli*	1200	CFU/100mL
08/30/05	1002	95-0435	--	*E. coli*	## b	CFU/100mL
09/12/05	852	95-0472	--	*E. coli*	270	CFU/100mL
05/03/05	1000	95-0007	--	*Enterococci*	40	CFU/100mL
06/09/05	950	95-0133	--	*Enterococci*	35	CFU/100mL
06/28/05	1000	95-0189	--	*Enterococci*	>1600	CFU/100mL
08/02/05	953	95-0296	--	*Enterococci*	1500	CFU/100mL
08/30/05	1002	95-0435	--	*Enterococci*	## b	CFU/100mL
05/03/05	1000	95-0007	--	Fecal Coliforms	30 e	CFU/100mL
06/09/05	950	95-0133	--	Fecal Coliforms	110	CFU/100mL
06/28/05	1000	95-0189	--	Fecal Coliforms	>1600	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/02/05	953	95-0296	--	Fecal Coliforms	1300	CFU/100mL
08/30/05	1002	95-0435	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	852	95-0472	--	Fecal Coliforms	270	CFU/100mL
05/03/05	1000	95-0007	--	Apparent color	55	PCU
06/09/05	950	95-0133	--	Apparent color	50	PCU
06/28/05	1000	95-0189	--	Apparent color	90	PCU
08/02/05	953	95-0296	--	Apparent color	25	PCU
05/03/05	1000	95-0007	--	True Color	**	PCU
06/09/05	950	95-0133	--	True Color	48	PCU
06/28/05	1000	95-0189	--	True Color	80	PCU
08/02/05	953	95-0296	--	True Color	<15	PCU
05/03/05	1000	95-0007	--	Turbidity	1.3	NTU
06/09/05	950	95-0133	--	Turbidity	4.5	NTU
06/28/05	1000	95-0189	--	Turbidity	10.5	NTU
08/02/05	953	95-0296	--	Turbidity	18.0 d	NTU
05/03/05	1000	95-0007	--	Total Nitrogen	0.95	mg/L
06/09/05	950	95-0133	--	Total Nitrogen	1.4	mg/L
06/28/05	1000	95-0189	--	Total Nitrogen	1.5	mg/L
08/02/05	953	95-0296	--	Total Nitrogen	2.2b	mg/L
05/03/05	1000	95-0007	--	Total Phosphorus	0.022	mg/L
06/09/05	950	95-0133	--	Total Phosphorus	0.044	mg/L
06/28/05	1000	95-0189	--	Total Phosphorus	0.097	mg/L
08/02/05	953	95-0296	--	Total Phosphorus	0.072	mg/L
05/03/05	1000	95-0007	--	Ammonia-N	0.03	mg/L
06/09/05	950	95-0133	--	Ammonia-N	0.03 d	mg/L
06/28/05	1000	95-0189	--	Ammonia-N	<0.02	mg/L
08/02/05	953	95-0296	--	Ammonia-N	0.02	mg/L
Snell Creek, Station Snl01, Unique ID W1373						
05/03/05	935	95-0003	95-0004	*E. coli*	5d	CFU/100mL
05/03/05	935	95-0004	95-0003	*E. coli*	25 d,e	CFU/100mL
05/03/05	950	95-0005	--	*E. coli*	< 5	CFU/100mL
06/09/05	930	95-0129	95-0130	*E. coli*	35	CFU/100mL
06/09/05	930	95-0130	95-0129	*E. coli*	30e	CFU/100mL
06/09/05	940	95-0131	--	*E. coli*	< 5	CFU/100mL
06/28/05	940	95-0185	95-0186	*E. coli*	>1600	CFU/100mL
06/28/05	940	95-0186	95-0185	*E. coli*	>1600	CFU/100mL
06/28/05	950	95-0187	--	*E. coli*	< 5	CFU/100mL
08/02/05	940	95-0292	95-0293	*E. coli*	265	CFU/100mL
08/02/05	940	95-0293	95-0292	*E. coli*	245	CFU/100mL
08/02/05	950	95-0294	--	*E. coli*	< 5	CFU/100mL
08/30/05	952	95-0434	--	*E. coli*	## b	CFU/100mL
09/12/05	849	95-0468	--	*E. coli*	840	CFU/100mL
05/03/05	935	95-0003	95-0004	*Enterococci*	< 5	CFU/100mL
05/03/05	935	95-0004	95-0003	*Enterococci*	5	CFU/100mL
05/03/05	950	95-0005	--	*Enterococci*	< 5	CFU/100mL
06/09/05	930	95-0129	95-0130	*Enterococci*	10 d	CFU/100mL
06/09/05	930	95-0130	95-0129	*Enterococci*	40 d	CFU/100mL
06/09/05	940	95-0131	--	*Enterococci*	< 5	CFU/100mL
06/28/05	940	95-0185	95-0186	*Enterococci*	>1600	CFU/100mL

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	940	95-0186	95-0185	*Enterococci*	>1600	CFU/100mL
06/28/05	950	95-0187	--	*Enterococci*	< 5	CFU/100mL
08/02/05	940	95-0292	95-0293	*Enterococci*	1300	CFU/100mL
08/02/05	940	95-0293	95-0292	*Enterococci*	1300	CFU/100mL
08/02/05	950	95-0294	--	*Enterococci*	< 5	CFU/100mL
08/30/05	952	95-0434	--	*Enterococci*	## b	CFU/100mL
05/03/05	935	95-0003	95-0004	Fecal Coliforms	10	CFU/100mL
05/03/05	935	95-0004	95-0003	Fecal Coliforms	5 e	CFU/100mL
05/03/05	950	95-0005	--	Fecal Coliforms	< 5	CFU/100mL
06/09/05	930	95-0129	95-0130	Fecal Coliforms	35	CFU/100mL
06/09/05	930	95-0130	95-0129	Fecal Coliforms	25 e	CFU/100mL
06/09/05	940	95-0131	--	Fecal Coliforms	< 5	CFU/100mL
06/28/05	940	95-0185	95-0186	Fecal Coliforms	>1600	CFU/100mL
06/28/05	940	95-0186	95-0185	Fecal Coliforms	>1600	CFU/100mL
06/28/05	950	95-0187	--	Fecal Coliforms	< 5	CFU/100mL
08/02/05	940	95-0292	95-0293	Fecal Coliforms	280	CFU/100mL
08/02/05	940	95-0293	95-0292	Fecal Coliforms	315	CFU/100mL
08/02/05	950	95-0294	--	Fecal Coliforms	< 5	CFU/100mL
08/30/05	952	95-0434	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	849	95-0468	--	Fecal Coliforms	1220	CFU/100mL
05/03/05	935	95-0003	95-0004	Apparent color	65	PCU
05/03/05	935	95-0004	95-0003	Apparent color	70	PCU
05/03/05	950	95-0005	--	Apparent color	<15	PCU
06/09/05	930	95-0129	95-0130	Apparent color	70	PCU
06/09/05	930	95-0130	95-0129	Apparent color	65	PCU
06/09/05	940	95-0131	--	Apparent color	<15	PCU
06/28/05	940	95-0185	95-0186	Apparent color	110	PCU
06/28/05	940	95-0186	95-0185	Apparent color	110	PCU
06/28/05	950	95-0187	--	Apparent color	<15	PCU
08/02/05	940	95-0292	95-0293	Apparent color	25	PCU
08/02/05	940	95-0293	95-0292	Apparent color	25	PCU
08/02/05	950	95-0294	--	Apparent color	<15	PCU
05/03/05	935	95-0003	95-0004	True Color	**	PCU
05/03/05	935	95-0004	95-0003	True Color	**	PCU
05/03/05	950	95-0005	--	True Color	**	NTU
06/09/05	930	95-0129	95-0130	True Color	55	PCU
06/09/05	930	95-0130	95-0129	True Color	65	PCU
06/09/05	940	95-0131	--	True Color	**	PCU
06/28/05	940	95-0185	95-0186	True Color	100	PCU
06/28/05	940	95-0186	95-0185	True Color	100	PCU
06/28/05	950	95-0187	--	True Color	**	PCU
08/02/05	940	95-0292	95-0293	True Color	16	PCU
08/02/05	940	95-0293	95-0292	True Color	16	PCU
08/02/05	950	95-0294	--	True Color	**	PCU
05/03/05	935	95-0003	95-0004	Turbidity	1.4	NTU
05/03/05	935	95-0004	95-0003	Turbidity	1.7	NTU
05/03/05	950	95-0005	--	Turbidity	<0.5	NTU
06/09/05	930	95-0129	95-0130	Turbidity	1.6	NTU
06/09/05	930	95-0130	95-0129	Turbidity	1.7	NTU
06/09/05	940	95-0131	--	Turbidity	<0.5	NTU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	940	95-0185	95-0186	Turbidity	14.5	NTU
06/28/05	940	95-0186	95-0185	Turbidity	14.0	NTU
06/28/05	950	95-0187	--	Turbidity	<0.5	NTU
08/02/05	940	95-0292	95-0293	Turbidity	## d	NTU
08/02/05	940	95-0293	95-0292	Turbidity	## d	NTU
08/02/05	950	95-0294	--	Turbidity	<0.5 d	NTU
05/03/05	935	95-0003	95-0004	Total Nitrogen	0.87	mg/L
05/03/05	935	95-0004	95-0003	Total Nitrogen	0.86	mg/L
05/03/05	950	95-0005	--	Total Nitrogen	<0.040	mg/L
06/09/05	930	95-0129	95-0130	Total Nitrogen	1.7	mg/L
06/09/05	930	95-0130	95-0129	Total Nitrogen	1.7	mg/L
06/09/05	940	95-0131	--	Total Nitrogen	<0.040	mg/L
06/28/05	940	95-0185	95-0186	Total Nitrogen	1.8	mg/L
06/28/05	940	95-0186	95-0185	Total Nitrogen	1.9	mg/L
06/28/05	950	95-0187	--	Total Nitrogen	<0.040	mg/L
08/02/05	940	95-0292	95-0293	Total Nitrogen	4.0 b	mg/L
08/02/05	940	95-0293	95-0292	Total Nitrogen	3.3 b	mg/L
08/02/05	950	95-0294	--	Total Nitrogen	0.081 b	mg/L
05/03/05	935	95-0003	95-0004	Total Phosphorus	0.022	mg/L
05/03/05	935	95-0004	95-0003	Total Phosphorus	0.022	mg/L
05/03/05	950	95-0005	--	Total Phosphorus	<0.005	mg/L
06/09/05	930	95-0129	95-0130	Total Phosphorus	0.033	mg/L
06/09/05	930	95-0130	95-0129	Total Phosphorus	0.031	mg/L
06/09/05	940	95-0131	--	Total Phosphorus	<0.005	mg/L
06/28/05	940	95-0185	95-0186	Total Phosphorus	0.13	mg/L
06/28/05	940	95-0186	95-0185	Total Phosphorus	0.14	mg/L
06/28/05	950	95-0187	--	Total Phosphorus	<0.005	mg/L
08/02/05	940	95-0292	95-0293	Total Phosphorus	0.10	mg/L
08/02/05	940	95-0293	95-0292	Total Phosphorus	0.090	mg/L
08/02/05	950	95-0294	--	Total Phosphorus	<0.005	mg/L
05/03/05	935	95-0003	95-0004	Ammonia-N	0.03	mg/L
05/03/05	935	95-0004	95-0003	Ammonia-N	0.02	mg/L
05/03/05	950	95-0005	--	Ammonia-N	0.02	mg/L
06/09/05	930	95-0129	95-0130	Ammonia-N	0.07 d	mg/L
06/09/05	930	95-0130	95-0129	Ammonia-N	0.04 d	mg/L
06/09/05	940	95-0131	--	Ammonia-N	<0.02 d	mg/L
06/28/05	940	95-0185	95-0186	Ammonia-N	0.08	mg/L
06/28/05	940	95-0186	95-0185	Ammonia-N	0.08	mg/L
06/28/05	950	95-0187	--	Ammonia-N	<0.02	mg/L
08/02/05	940	95-0292	95-0293	Ammonia-N	0.05	mg/L
08/02/05	940	95-0293	95-0292	Ammonia-N	0.05	mg/L
08/02/05	950	95-0294	--	Ammonia-N	<0.02	mg/L
Kirby Brook, Station Kirb01, Unique ID W1374						
05/03/05	1015	95-0009	--	*E. coli*	5	CFU/100mL
06/09/05	1010	95-0135	--	*E. coli*	65 e	CFU/100mL
06/28/05	1010	95-0191	--	*E. coli*	1500	CFU/100mL
08/02/05	1012	95-0298	--	*E. coli*	100 e	CFU/100mL
08/30/05	1010	95-0436	--	*E. coli*	## b	CFU/100mL
09/12/05	857	95-0476	--	*E. coli*	50	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
See the Appendix at the end of this technical memorandum for definitions of result qualifiers.

Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
05/03/05	1015	95-0009	--	*Enterococci*	10	CFU/100mL
06/09/05	1010	95-0135	--	*Enterococci*	35	CFU/100mL
06/28/05	1010	95-0191	--	*Enterococci*	>1600	CFU/100mL
08/02/05	1012	95-0298	--	*Enterococci*	460	CFU/100mL
08/30/05	1010	95-0436	--	*Enterococci*	## b	CFU/100mL
05/03/05	1015	95-0009	--	Fecal Coliforms	50	CFU/100mL
06/09/05	1010	95-0135	--	Fecal Coliforms	25 e	CFU/100mL
06/28/05	1010	95-0191	--	Fecal Coliforms	1600	CFU/100mL
08/02/05	1012	95-0298	--	Fecal Coliforms	60 e	CFU/100mL
08/30/05	1010	95-0436	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	857	95-0476	--	Fecal Coliforms	85	CFU/100mL
05/03/05	1015	95-0009	--	Apparent color	190	PCU
06/09/05	1010	95-0135	--	Apparent color	240	PCU
06/28/05	1010	95-0191	--	Apparent color	110	PCU
08/02/05	1012	95-0298	--	Apparent color	26	PCU
05/03/05	1015	95-0009	--	True Color	**	PCU
06/09/05	1010	95-0135	--	True Color	200	PCU
06/28/05	1010	95-0191	--	True Color	100	PCU
08/02/05	1012	95-0298	--	True Color	25	PCU
05/03/05	1015	95-0009	--	Turbidity	0.9	NTU
06/09/05	1010	95-0135	--	Turbidity	1.5	NTU
06/28/05	1010	95-0191	--	Turbidity	3.0	NTU
08/02/05	1012	95-0298	--	Turbidity	3.1 d	NTU
05/03/05	1015	95-0009	--	Total Nitrogen	0.69	mg/L
06/09/05	1010	95-0135	--	Total Nitrogen	1.4	mg/L
06/28/05	1010	95-0191	--	Total Nitrogen	1.6	mg/L
08/02/05	1012	95-0298	--	Total Nitrogen	1.8b	mg/L
05/03/05	1015	95-0009	--	Total Phosphorus	0.031	mg/L
06/09/05	1010	95-0135	--	Total Phosphorus	0.056	mg/L
06/28/05	1010	95-0191	--	Total Phosphorus	0.064	mg/L
08/02/05	1012	95-0298	--	Total Phosphorus	0.090	mg/L
05/03/05	1015	95-0009	--	Ammonia-N	0.02	mg/L
06/09/05	1010	95-0135	--	Ammonia-N	0.06 d	mg/L
06/28/05	1010	95-0191	--	Ammonia-N	0.06	mg/L
08/02/05	1012	95-0298	--	Ammonia-N	0.04	mg/L
Angeline Brook, Station Ang01, Unique ID W1375						
05/03/05	908	95-0001	--	*E. coli*	115	CFU/100mL
06/09/05	900	95-0127	--	*E. coli*	25 e	CFU/100mL
06/28/05	915	95-0183	--	*E. coli*	>1600	CFU/100mL
08/02/05	910	95-0290	--	*E. coli*	< 5	CFU/100mL
08/30/05	937	95-0433	--	*E. coli*	## b	CFU/100mL
09/12/05	838	95-0467	--	*E. coli*	45	CFU/100mL
05/03/05	908	95-0001	--	*Enterococci*	45	CFU/100mL
06/09/05	900	95-0127	--	*Enterococci*	< 5	CFU/100mL
06/28/05	915	95-0183	--	*Enterococci*	>1600	CFU/100mL
08/02/05	910	95-0290	--	*Enterococci*	40	CFU/100mL
08/30/05	937	95-0433	--	*Enterococci*	## b	CFU/100mL
05/03/05	908	95-0001	--	Fecal Coliforms	145	CFU/100mL
06/09/05	900	95-0127	--	Fecal Coliforms	< 5 e	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	915	95-0183	--	Fecal Coliforms	>1600	CFU/100mL
08/02/05	910	95-0290	--	Fecal Coliforms	5	CFU/100mL
08/30/05	937	95-0433	--	Fecal Coliforms	## b	CFU/100mL
09/12/05	838	95-0467	--	Fecal Coliforms	100	CFU/100mL
05/03/05	908	95-0001	--	Apparent color	150	PCU
06/09/05	900	95-0127	--	Apparent color	150	PCU
06/28/05	915	95-0183	--	Apparent color	100	PCU
08/02/05	910	95-0290	--	Apparent color	50	PCU
05/03/05	908	95-0001	--	True Color	**	PCU
06/09/05	900	95-0127	--	True Color	130	PCU
06/28/05	915	95-0183	--	True Color	100	PCU
08/02/05	910	95-0290	--	True Color	40	PCU
05/03/05	908	95-0001	--	Turbidity	1.1	NTU
06/09/05	900	95-0127	--	Turbidity	1.5	NTU
06/28/05	915	95-0183	--	Turbidity	2.0	NTU
08/02/05	910	95-0290	--	Turbidity	1.5 d	NTU
05/03/05	908	95-0001	--	Total Nitrogen	1.3	mg/L
06/09/05	900	95-0127	--	Total Nitrogen	3.8	mg/L
06/28/05	915	95-0183	--	Total Nitrogen	4.8	mg/L
08/02/05	910	95-0290	--	Total Nitrogen	5.7 b	mg/L
05/03/05	908	95-0001	--	Total Phosphorus	0.030	mg/L
06/09/05	900	95-0127	--	Total Phosphorus	0.061	mg/L
06/28/05	915	95-0183	--	Total Phosphorus	0.12	mg/L
08/02/05	910	95-0290	--	Total Phosphorus	0.082	mg/L
05/03/05	908	95-0001	--	Ammonia-N	0.04	mg/L
06/09/05	900	95-0127	--	Ammonia-N	0.04 d	mg/L
06/28/05	915	95-0183	--	Ammonia-N	<0.02	mg/L
08/02/05	910	95-0290	--	Ammonia-N	0.02	mg/L
Paskamanset River, Station Pask05, Unique ID W1376						
05/03/05	1325	95-0026	--	*E. coli*	< 5	CFU/100mL
06/09/05	1237	95-0177	--	*E. coli*	110 e	CFU/100mL
06/28/05	1237	95-0233	--	*E. coli*	1300	CFU/100mL
08/02/05	1245	95-0340	--	*E. coli*	90 b,e	CFU/100mL
09/12/05	1054	95-0484	--	*E. coli*	30	CFU/100mL
05/03/05	1325	95-0026	--	*Enterococci*	< 5	CFU/100mL
06/09/05	1237	95-0177	--	*Enterococci*	60	CFU/100mL
06/28/05	1237	95-0233	--	*Enterococci*	400 d	CFU/100mL
08/02/05	1245	95-0340	--	*Enterococci*	20d	CFU/100mL
05/03/05	1325	95-0026	--	Fecal Coliforms	30	CFU/100mL
06/09/05	1237	95-0177	--	Fecal Coliforms	80 e	CFU/100mL
06/28/05	1237	95-0233	--	Fecal Coliforms	1500	CFU/100mL
08/02/05	1245	95-0340	--	Fecal Coliforms	85 e	CFU/100mL
09/12/05	1054	95-0484	--	Fecal Coliforms	35	CFU/100mL
05/03/05	1325	95-0026	--	Apparent color	250	PCU
06/09/05	1237	95-0177	--	Apparent color	190	PCU
06/28/05	1237	95-0233	--	Apparent color	250	PCU
08/02/05	1245	95-0340	--	Apparent color	280	PCU
05/03/05	1325	95-0026	--	True Color	**	PCU
06/09/05	1237	95-0177	--	True Color	140	PCU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	1237	95-0233	--	True Color	210	PCU
08/02/05	1245	95-0340	--	True Color	180	PCU
05/03/05	1325	95-0026	--	Turbidity	0.8	NTU
06/09/05	1237	95-0177	--	Turbidity	4.4	NTU
06/28/05	1237	95-0233	--	Turbidity	6.3	NTU
08/02/05	1245	95-0340	--	Turbidity	27.0	NTU
05/03/05	1325	95-0026	--	Total Nitrogen	0.66	mg/L
06/09/05	1237	95-0177	--	Total Nitrogen	0.86	mg/L
06/28/05	1237	95-0233	--	Total Nitrogen	1.1	mg/L
08/02/05	1245	95-0340	--	Total Nitrogen	1.0	mg/L
05/03/05	1325	95-0026	--	Total Phosphorus	0.030	mg/L
06/09/05	1237	95-0177	--	Total Phosphorus	0.073 d	mg/L
06/28/05	1237	95-0233	--	Total Phosphorus	0.070	mg/L
08/02/05	1245	95-0340	--	Total Phosphorus	0.13	mg/L
05/03/05	1325	95-0026	--	Ammonia-N	<0.02	mg/L
06/09/05	1237	95-0177	--	Ammonia-N	0.04	mg/L
06/28/05	1237	95-0233	--	Ammonia-N	0.08	mg/L
08/02/05	1245	95-0340	--	Ammonia-N	0.25 b	mg/L
Paskamanset River, Station Pask02, Unique ID W1377						
05/03/05	1300	95-0081	--	*E. coli*	30	CFU/100mL
06/09/05	1206	95-0174	95-0175	*E. coli*	55	CFU/100mL
06/09/05	1206	95-0175	95-0174	*E. coli*	80	CFU/100mL
06/28/05	1219	95-0230	95-0231	*E. coli*	300	CFU/100mL
06/28/05	1219	95-0231	95-0230	*E. coli*	360	CFU/100mL
08/02/05	1225	95-0337	95-0338	*E. coli*	150 b,e	CFU/100mL
08/02/05	1228	95-0338	95-0337	*E. coli*	95b	CFU/100mL
08/30/05	1208	95-0473	--	*E. coli*	>1600	CFU/100mL
09/12/05	1105	95-0485	--	*E. coli*	190 e	CFU/100mL
05/03/05	1300	95-0081	--	*Enterococci*	55	CFU/100mL
06/09/05	1206	95-0174	95-0175	*Enterococci*	30	CFU/100mL
06/09/05	1206	95-0175	95-0174	*Enterococci*	40	CFU/100mL
06/28/05	1219	95-0230	95-0231	*Enterococci*	500 d	CFU/100mL
06/28/05	1219	95-0231	95-0230	*Enterococci*	120 d	CFU/100mL
08/02/05	1225	95-0337	95-0338	*Enterococci*	70d	CFU/100mL
08/02/05	1228	95-0338	95-0337	*Enterococci*	75d	CFU/100mL
08/30/05	1208	95-0473	--	*Enterococci*	>1600	CFU/100mL
05/03/05	1300	95-0081	--	Fecal Coliforms	100	CFU/100mL
06/09/05	1206	95-0174	95-0175	Fecal Coliforms	105	CFU/100mL
06/09/05	1206	95-0175	95-0174	Fecal Coliforms	80	CFU/100mL
06/28/05	1219	95-0230	95-0231	Fecal Coliforms	460	CFU/100mL
06/28/05	1219	95-0231	95-0230	Fecal Coliforms	400	CFU/100mL
08/02/05	1225	95-0337	95-0338	Fecal Coliforms	110 e	CFU/100mL
08/02/05	1228	95-0338	95-0337	Fecal Coliforms	125	CFU/100mL
08/30/05	1208	95-0473	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1105	95-0485	--	Fecal Coliforms	160 e	CFU/100mL
05/03/05	1300	95-0081	--	Apparent color	200	PCU
06/09/05	1206	95-0174	95-0175	Apparent color	180	PCU
06/09/05	1206	95-0175	95-0174	Apparent color	150	PCU
06/28/05	1219	95-0230	95-0231	Apparent color	190	PCU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	1219	95-0231	95-0230	Apparent color	180	PCU
08/02/05	1225	95-0337	95-0338	Apparent color	130	PCU
08/02/05	1228	95-0338	95-0337	Apparent color	130	PCU
08/30/05	1208	95-0473	--	Apparent color	95	PCU
05/03/05	1300	95-0081	--	True Color	**	PCU
06/09/05	1206	95-0174	95-0175	True Color	130	PCU
06/09/05	1206	95-0175	95-0174	True Color	130	PCU
06/28/05	1219	95-0230	95-0231	True Color	180	PCU
06/28/05	1219	95-0231	95-0230	True Color	160	PCU
08/02/05	1225	95-0337	95-0338	True Color	100	PCU
08/02/05	1228	95-0338	95-0337	True Color	100	PCU
08/30/05	1208	95-0473	--	True Color	65	PCU
05/03/05	1300	95-0081	--	Turbidity	1.6	NTU
06/09/05	1206	95-0174	95-0175	Turbidity	6.4	NTU
06/09/05	1206	95-0175	95-0174	Turbidity	6.8	NTU
06/28/05	1219	95-0230	95-0231	Turbidity	5.8	NTU
06/28/05	1219	95-0231	95-0230	Turbidity	5.6	NTU
08/02/05	1225	95-0337	95-0338	Turbidity	7.3	NTU
08/02/05	1228	95-0338	95-0337	Turbidity	7.2	NTU
08/30/05	1208	95-0473	--	Turbidity	11.0	NTU
05/03/05	1300	95-0081	--	Total Nitrogen	0.74 b	mg/L
06/09/05	1206	95-0174	95-0175	Total Nitrogen	1.4	mg/L
06/09/05	1206	95-0175	95-0174	Total Nitrogen	1.3	mg/L
06/28/05	1219	95-0230	95-0231	Total Nitrogen	1.2	mg/L
06/28/05	1219	95-0231	95-0230	Total Nitrogen	1.2	mg/L
08/02/05	1225	95-0337	95-0338	Total Nitrogen	1.4	mg/L
08/02/05	1228	95-0338	95-0337	Total Nitrogen	1.4	mg/L
08/30/05	1208	95-0473	--	Total Nitrogen	0.92	mg/L
05/03/05	1300	95-0081	--	Total Phosphorus	0.027	mg/L
06/09/05	1206	95-0174	95-0175	Total Phosphorus	## d	mg/L
06/09/05	1206	95-0175	95-0174	Total Phosphorus	## d	mg/L
06/28/05	1219	95-0230	95-0231	Total Phosphorus	0.068	mg/L
06/28/05	1219	95-0231	95-0230	Total Phosphorus	0.068	mg/L
08/02/05	1225	95-0337	95-0338	Total Phosphorus	0.059	mg/L
08/02/05	1228	95-0338	95-0337	Total Phosphorus	0.059	mg/L
08/30/05	1208	95-0473	--	Total Phosphorus	0.091	mg/L
05/03/05	1300	95-0081	--	Ammonia-N	0.04 d	mg/L
06/09/05	1206	95-0174	95-0175	Ammonia-N	0.11	mg/L
06/09/05	1206	95-0175	95-0174	Ammonia-N	0.11	mg/L
06/28/05	1219	95-0230	95-0231	Ammonia-N	0.13	mg/L
06/28/05	1219	95-0231	95-0230	Ammonia-N	0.13	mg/L
08/02/05	1225	95-0337	95-0338	Ammonia-N	0.12 b	mg/L
08/02/05	1228	95-0338	95-0337	Ammonia-N	0.12 b	mg/L
08/30/05	1208	95-0473	--	Ammonia-N	0.05	mg/L
Acushnet River, Station Acush04, Unique ID W1382						
05/03/05	1056	95-0038	95-0039	*E. coli*	5	CFU/100mL
05/03/05	1056	95-0039	95-0038	*E. coli*	< 5	CFU/100mL
05/03/05	1059	95-0040	--	*E. coli*	< 5	CFU/100mL
06/09/05	1014	95-0162	95-0163	*E. coli*	85	CFU/100mL

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/09/05	1014	95-0163	95-0162	*E. coli*	65	CFU/100mL
06/09/05	1017	95-0164	--	*E. coli*	< 5	CFU/100mL
06/28/05	1030	95-0218	95-0219	*E. coli*	1200	CFU/100mL
06/28/05	1030	95-0219	95-0218	*E. coli*	1300 e	CFU/100mL
06/28/05	1035	95-0220	--	*E. coli*	< 5	CFU/100mL
08/02/05	1048	95-0325	95-0326	*E. coli*	45 b	CFU/100mL
08/02/05	1050	95-0326	95-0325	*E. coli*	60 b	CFU/100mL
08/02/05	1055	95-0327	--	*E. coli*	5 b,e	CFU/100mL
08/30/05	1039	95-0463	95-0464	*E. coli*	>1600	CFU/100mL
08/30/05	1040	95-0464	95-0463	*E. coli*	>1600	CFU/100mL
08/30/05	1045	95-0465	--	*E. coli*	< 5	CFU/100mL
09/12/05	1151	95-0490	95-0491	*E. coli*	15	CFU/100mL
09/12/05	1151	95-0491	95-0490	*E. coli*	10	CFU/100mL
05/03/05	1056	95-0038	95-0039	*Enterococci*	< 5	CFU/100mL
05/03/05	1056	95-0039	95-0038	*Enterococci*	5	CFU/100mL
05/03/05	1059	95-0040	--	*Enterococci*	< 5	CFU/100mL
06/09/05	1014	95-0162	95-0163	*Enterococci*	5	CFU/100mL
06/09/05	1014	95-0163	95-0162	*Enterococci*	10	CFU/100mL
06/09/05	1017	95-0164	--	*Enterococci*	< 5	CFU/100mL
06/28/05	1030	95-0218	95-0219	*Enterococci*	1200 d	CFU/100mL
06/28/05	1030	95-0219	95-0218	*Enterococci*	1100 d	CFU/100mL
06/28/05	1035	95-0220	--	*Enterococci*	< 5 d	CFU/100mL
08/02/05	1048	95-0325	95-0326	*Enterococci*	375 d	CFU/100mL
08/02/05	1050	95-0326	95-0325	*Enterococci*	900 d	CFU/100mL
08/02/05	1055	95-0327	--	*Enterococci*	< 5d	CFU/100mL
08/30/05	1039	95-0463	95-0464	*Enterococci*	>1600	CFU/100mL
08/30/05	1040	95-0464	95-0463	*Enterococci*	>1600	CFU/100mL
08/30/05	1045	95-0465	--	*Enterococci*	< 5	CFU/100mL
05/03/05	1056	95-0038	95-0039	Fecal Coliforms	10	CFU/100mL
05/03/05	1056	95-0039	95-0038	Fecal Coliforms	< 5	CFU/100mL
05/03/05	1059	95-0040	--	Fecal Coliforms	< 5	CFU/100mL
06/09/05	1014	95-0162	95-0163	Fecal Coliforms	110	CFU/100mL
06/09/05	1014	95-0163	95-0162	Fecal Coliforms	100	CFU/100mL
06/09/05	1017	95-0164	--	Fecal Coliforms	< 5	CFU/100mL
06/28/05	1030	95-0218	95-0219	Fecal Coliforms	1300	CFU/100mL
06/28/05	1030	95-0219	95-0218	Fecal Coliforms	1000 e	CFU/100mL
06/28/05	1035	95-0220	--	Fecal Coliforms	< 5	CFU/100mL
08/02/05	1048	95-0325	95-0326	Fecal Coliforms	45	CFU/100mL
08/02/05	1050	95-0326	95-0325	Fecal Coliforms	60	CFU/100mL
08/02/05	1055	95-0327	--	Fecal Coliforms	< 5 e	CFU/100mL
08/30/05	1039	95-0463	95-0464	Fecal Coliforms	>1600	CFU/100mL
08/30/05	1040	95-0464	95-0463	Fecal Coliforms	>1600	CFU/100mL
08/30/05	1045	95-0465	--	Fecal Coliforms	< 5	CFU/100mL
09/12/05	1151	95-0490	95-0491	Fecal Coliforms	15	CFU/100mL
09/12/05	1151	95-0491	95-0490	Fecal Coliforms	15	CFU/100mL
05/03/05	1056	95-0038	95-0039	Apparent color	75	PCU
05/03/05	1056	95-0039	95-0038	Apparent color	90	PCU
05/03/05	1059	95-0040	--	Apparent color	<15	PCU
06/09/05	1014	95-0162	95-0163	Apparent color	45	PCU
06/09/05	1014	95-0163	95-0162	Apparent color	45	PCU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/09/05	1017	95-0164	--	Apparent color	<15	PCU
06/28/05	1030	95-0218	95-0219	Apparent color	110	PCU
06/28/05	1030	95-0219	95-0218	Apparent color	100	PCU
06/28/05	1035	95-0220	--	Apparent color	<15	PCU
08/02/05	1048	95-0325	95-0326	Apparent color	55	PCU
08/02/05	1050	95-0326	95-0325	Apparent color	55	PCU
08/02/05	1055	95-0327	--	Apparent color	<15	PCU
08/30/05	1039	95-0463	95-0464	Apparent color	75	PCU
08/30/05	1040	95-0464	95-0463	Apparent color	70	PCU
08/30/05	1045	95-0465	--	Apparent color	<15	PCU
05/03/05	1056	95-0038	95-0039	True Color	**	PCU
05/03/05	1056	95-0039	95-0038	True Color	**	PCU
05/03/05	1059	95-0040	--	True Color	**	PCU
06/09/05	1014	95-0162	95-0163	True Color	35	PCU
06/09/05	1014	95-0163	95-0162	True Color	35	PCU
06/09/05	1017	95-0164	--	True Color	**	PCU
06/28/05	1030	95-0218	95-0219	True Color	85	PCU
06/28/05	1030	95-0219	95-0218	True Color	75	PCU
06/28/05	1035	95-0220	--	True Color	**	PCU
08/02/05	1048	95-0325	95-0326	True Color	40	PCU
08/02/05	1050	95-0326	95-0325	True Color	43	PCU
08/02/05	1055	95-0327	--	True Color	**	PCU
08/30/05	1039	95-0463	95-0464	True Color	65	PCU
08/30/05	1040	95-0464	95-0463	True Color	60	PCU
08/30/05	1045	95-0465	--	True Color	**	PCU
05/03/05	1056	95-0038	95-0039	Turbidity	1.6	NTU
05/03/05	1056	95-0039	95-0038	Turbidity	1.4	NTU
05/03/05	1059	95-0040	--	Turbidity	<0.5	NTU
06/09/05	1014	95-0162	95-0163	Turbidity	1.4	NTU
06/09/05	1014	95-0163	95-0162	Turbidity	1.2	NTU
06/09/05	1017	95-0164	--	Turbidity	<0.5	NTU
06/28/05	1030	95-0218	95-0219	Turbidity	4.0	NTU
06/28/05	1030	95-0219	95-0218	Turbidity	3.4	NTU
06/28/05	1035	95-0220	--	Turbidity	<0.5	NTU
08/02/05	1048	95-0325	95-0326	Turbidity	3.5	NTU
08/02/05	1050	95-0326	95-0325	Turbidity	3.6	NTU
08/02/05	1055	95-0327	--	Turbidity	<0.5	NTU
08/30/05	1039	95-0463	95-0464	Turbidity	12.0 d	NTU
08/30/05	1040	95-0464	95-0463	Turbidity	15.0 d	NTU
08/30/05	1045	95-0465	--	Turbidity	<0.5	NTU
05/03/05	1056	95-0038	95-0039	Total Nitrogen	0.55 b	mg/L
05/03/05	1056	95-0039	95-0038	Total Nitrogen	0.62 b	mg/L
05/03/05	1059	95-0040	--	Total Nitrogen	0.052 b	mg/L
06/09/05	1014	95-0162	95-0163	Total Nitrogen	0.70	mg/L
06/09/05	1014	95-0163	95-0162	Total Nitrogen	0.63	mg/L
06/09/05	1017	95-0164	--	Total Nitrogen	<0.040	mg/L
06/28/05	1030	95-0218	95-0219	Total Nitrogen	0.84	mg/L
06/28/05	1030	95-0219	95-0218	Total Nitrogen	0.84	mg/L
06/28/05	1035	95-0220	--	Total Nitrogen	<0.040	mg/L
08/02/05	1048	95-0325	95-0326	Total Nitrogen	1.2	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/02/05	1050	95-0326	95-0325	Total Nitrogen	1.1	mg/L
08/02/05	1055	95-0327	--	Total Nitrogen	<0.040	mg/L
08/30/05	1039	95-0463	95-0464	Total Nitrogen	1.1	mg/L
08/30/05	1040	95-0464	95-0463	Total Nitrogen	1.1	mg/L
08/30/05	1045	95-0465	--	Total Nitrogen	<0.040	mg/L
05/03/05	1056	95-0038	95-0039	Total Phosphorus	0.022	mg/L
05/03/05	1056	95-0039	95-0038	Total Phosphorus	0.021	mg/L
05/03/05	1059	95-0040	--	Total Phosphorus	<0.005	mg/L
06/09/05	1014	95-0162	95-0163	Total Phosphorus	0.022 d	mg/L
06/09/05	1014	95-0163	95-0162	Total Phosphorus	0.021 d	mg/L
06/09/05	1017	95-0164	--	Total Phosphorus	<0.005 d	mg/L
06/28/05	1030	95-0218	95-0219	Total Phosphorus	0.035	mg/L
06/28/05	1030	95-0219	95-0218	Total Phosphorus	0.034	mg/L
06/28/05	1035	95-0220	--	Total Phosphorus	<0.005	mg/L
08/02/05	1048	95-0325	95-0326	Total Phosphorus	0.028	mg/L
08/02/05	1050	95-0326	95-0325	Total Phosphorus	0.029	mg/L
08/02/05	1055	95-0327	--	Total Phosphorus	<0.005	mg/L
08/30/05	1039	95-0463	95-0464	Total Phosphorus	0.16	mg/L
08/30/05	1040	95-0464	95-0463	Total Phosphorus	0.15	mg/L
08/30/05	1045	95-0465	--	Total Phosphorus	<0.005	mg/L
05/03/05	1056	95-0038	95-0039	Ammonia-N	0.02 d	mg/L
05/03/05	1056	95-0039	95-0038	Ammonia-N	0.05 d	mg/L
05/03/05	1059	95-0040	--	Ammonia-N	<0.02 d	mg/L
06/09/05	1014	95-0162	95-0163	Ammonia-N	0.03	mg/L
06/09/05	1014	95-0163	95-0162	Ammonia-N	0.04	mg/L
06/09/05	1017	95-0164	--	Ammonia-N	<0.02	mg/L
06/28/05	1030	95-0218	95-0219	Ammonia-N	0.04	mg/L
06/28/05	1030	95-0219	95-0218	Ammonia-N	0.03	mg/L
06/28/05	1035	95-0220	--	Ammonia-N	<0.02	mg/L
08/02/05	1048	95-0325	95-0326	Ammonia-N	0.03 b	mg/L
08/02/05	1050	95-0326	95-0325	Ammonia-N	0.03 b	mg/L
08/02/05	1055	95-0327	--	Ammonia-N	0.03 b	mg/L
08/30/05	1039	95-0463	95-0464	Ammonia-N	0.10	mg/L
08/30/05	1040	95-0464	95-0463	Ammonia-N	0.09	mg/L
08/30/05	1045	95-0465	--	Ammonia-N	<0.02	mg/L
05/03/05	1056	95-0038	--	Hardness	17	mg/L
05/03/05	1059	95-0040	--	Hardness	<0.66	mg/L
Acushnet River, Station Acush02, Unique ID W1381						
05/03/05	1118	95-0042	--	*E. coli*	40	CFU/100mL
06/09/05	1038	95-0166	--	*E. coli*	120 e	CFU/100mL
06/28/05	1051	95-0222	--	*E. coli*	1300 e	CFU/100mL
08/02/05	1108	95-0329	--	*E. coli*	75b	CFU/100mL
09/12/05	1143	95-0489	--	*E. coli*	160	CFU/100mL
05/03/05	1118	95-0042	--	*Enterococci*	35	CFU/100mL
06/09/05	1038	95-0166	--	*Enterococci*	50	CFU/100mL
06/28/05	1051	95-0222	--	*Enterococci*	1500 d	CFU/100mL
08/02/05	1108	95-0329	--	*Enterococci*	140d	CFU/100mL
05/03/05	1118	95-0042	--	Fecal Coliforms	110	CFU/100mL
06/09/05	1038	95-0166	--	Fecal Coliforms	110 e	CFU/100mL

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	1051	95-0222	--	Fecal Coliforms	1000 e	CFU/100mL
08/02/05	1108	95-0329	--	Fecal Coliforms	115	CFU/100mL
09/12/05	1143	95-0489	--	Fecal Coliforms	180	CFU/100mL
05/03/05	1118	95-0042	--	Apparent color	120	PCU
06/09/05	1038	95-0166	--	Apparent color	100	PCU
06/28/05	1051	95-0222	--	Apparent color	80	PCU
08/02/05	1108	95-0329	--	Apparent color	60	PCU
05/03/05	1118	95-0042	--	True Color	**	PCU
06/09/05	1038	95-0166	--	True Color	60	PCU
06/28/05	1051	95-0222	--	True Color	60	PCU
08/02/05	1108	95-0329	--	True Color	47	PCU
05/03/05	1118	95-0042	--	Turbidity	3.2	NTU
06/09/05	1038	95-0166	--	Turbidity	2.4	NTU
06/28/05	1051	95-0222	--	Turbidity	5.9	NTU
08/02/05	1108	95-0329	--	Turbidity	3.2	NTU
05/03/05	1118	95-0042	--	Total Nitrogen	0.69 b	mg/L
06/09/05	1038	95-0166	--	Total Nitrogen	0.98	mg/L
06/28/05	1051	95-0222	--	Total Nitrogen	1.1	mg/L
08/02/05	1108	95-0329	--	Total Nitrogen	0.86	mg/L
05/03/05	1118	95-0042	--	Total Phosphorus	0.023	mg/L
06/09/05	1038	95-0166	--	Total Phosphorus	0.039 d	mg/L
06/28/05	1051	95-0222	--	Total Phosphorus	0.065	mg/L
08/02/05	1108	95-0329	--	Total Phosphorus	0.036	mg/L
05/03/05	1118	95-0042	--	Ammonia-N	0.02 d	mg/L
06/09/05	1038	95-0166	--	Ammonia-N	0.09	mg/L
06/28/05	1051	95-0222	--	Ammonia-N	0.05	mg/L
08/02/05	1108	95-0329	--	Ammonia-N	0.05 b	mg/L
Acushnet River, Station Acush01, Unique ID W1380						
05/03/05	1134	95-0044	--	*E. coli*	15	CFU/100mL
06/09/05	1051	95-0168	--	*E. coli*	140 r	CFU/100mL
06/28/05	1110	95-0224	--	*E. coli*	>1600	CFU/100mL
08/02/05	1129	95-0331	--	*E. coli*	>1600 b	CFU/100mL
08/30/05	1114	95-0469	--	*E. coli*	>1600	CFU/100mL
09/12/05	1136	95-0488	--	*E. coli*	> 1600	CFU/100mL
05/03/05	1134	95-0044	--	*Enterococci*	15	CFU/100mL
06/09/05	1051	95-0168	--	*Enterococci*	75 r	CFU/100mL
06/28/05	1110	95-0224	--	*Enterococci*	>1600 d	CFU/100mL
08/02/05	1129	95-0331	--	*Enterococci*	1000 d	CFU/100mL
08/30/05	1114	95-0469	--	*Enterococci*	>1600	CFU/100mL
05/03/05	1134	95-0044	--	Fecal Coliforms	55	CFU/100mL
06/09/05	1051	95-0168	--	Fecal Coliforms	150 r	CFU/100mL
06/28/05	1110	95-0224	--	Fecal Coliforms	>1600	CFU/100mL
08/02/05	1129	95-0331	--	Fecal Coliforms	>1600	CFU/100mL
08/30/05	1114	95-0469	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1136	95-0488	--	Fecal Coliforms	> 1600	CFU/100mL
05/03/05	1134	95-0044	--	Apparent color	140	PCU
06/09/05	1051	95-0168	--	Apparent color	70 r	PCU
06/28/05	1110	95-0224	--	Apparent color	80	PCU
08/02/05	1129	95-0331	--	Apparent color	65	PCU

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
08/30/05	1114	95-0469	--	Apparent color	90	PCU
05/03/05	1134	95-0044	--	True Color	**	PCU
06/09/05	1051	95-0168	--	True Color	70 r	PCU
06/28/05	1110	95-0224	--	True Color	75	PCU
08/02/05	1129	95-0331	--	True Color	30	PCU
08/30/05	1114	95-0469	--	True Color	70	PCU
05/03/05	1134	95-0044	--	Turbidity	1.3	NTU
06/09/05	1051	95-0168	--	Turbidity	2.4 r	NTU
06/28/05	1110	95-0224	--	Turbidity	4.4	NTU
08/02/05	1129	95-0331	--	Turbidity	6.8	NTU
08/30/05	1114	95-0469	--	Turbidity	16.0	NTU
05/03/05	1134	95-0044	--	Total Nitrogen	0.74 b	mg/L
06/09/05	1051	95-0168	--	Total Nitrogen	## a,h,r	mg/L
06/28/05	1110	95-0224	--	Total Nitrogen	1.2	mg/L
08/02/05	1129	95-0331	--	Total Nitrogen	1.5	mg/L
08/30/05	1114	95-0469	--	Total Nitrogen	1.3	mg/L
05/03/05	1134	95-0044	--	Total Phosphorus	0.027	mg/L
06/09/05	1051	95-0168	--	Total Phosphorus	## a,d,r	mg/L
06/28/05	1110	95-0224	--	Total Phosphorus	0.078	mg/L
08/02/05	1129	95-0331	--	Total Phosphorus	0.080	mg/L
08/30/05	1114	95-0469	--	Total Phosphorus	0.23	mg/L
05/03/05	1134	95-0044	--	Ammonia-N	0.02 d	mg/L
06/09/05	1051	95-0168	--	Ammonia-N	**	mg/L
06/28/05	1110	95-0224	--	Ammonia-N	0.07	mg/L
08/02/05	1129	95-0331	--	Ammonia-N	0.11 b	mg/L
08/30/05	1114	95-0469	--	Ammonia-N	0.05	mg/L
Buttonwood Brook, Station But15, Unique ID W1379						
05/03/05	1202	95-0048	--	*E. coli*	85	CFU/100mL
06/09/05	1122	95-0170	--	*E. coli*	160	CFU/100mL
06/28/05	1136	95-0226	--	*E. coli*	1100	CFU/100mL
08/02/05	1155	95-0333	--	*E. coli*	240 b	CFU/100mL
09/12/05	1123	95-0487	--	*E. coli*	145	CFU/100mL
05/03/05	1202	95-0048	--	*Enterococci*	40	CFU/100mL
06/09/05	1122	95-0170	--	*Enterococci*	110	CFU/100mL
06/28/05	1136	95-0226	--	*Enterococci*	1600 d	CFU/100mL
08/02/05	1155	95-0333	--	*Enterococci*	120 d	CFU/100mL
05/03/05	1202	95-0048	--	Fecal Coliforms	190	CFU/100mL
06/09/05	1122	95-0170	--	Fecal Coliforms	240	CFU/100mL
06/28/05	1136	95-0226	--	Fecal Coliforms	1400	CFU/100mL
08/02/05	1155	95-0333	--	Fecal Coliforms	320	CFU/100mL
09/12/05	1123	95-0487	--	Fecal Coliforms	190	CFU/100mL
05/03/05	1202	95-0048	--	Apparent color	90	PCU
06/09/05	1122	95-0170	--	Apparent color	45	PCU
06/28/05	1136	95-0226	--	Apparent color	55	PCU
05/03/05	1202	95-0048	--	True Color	**	PCU
06/09/05	1122	95-0170	--	True Color	37	PCU
06/28/05	1136	95-0226	--	True Color	40	PCU
05/03/05	1202	95-0048	--	Turbidity	5.7	NTU
06/09/05	1122	95-0170	--	Turbidity	5.6	NTU

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/28/05	1136	95-0226	--	Turbidity	11.0	NTU
05/03/05	1202	95-0048	--	Total Nitrogen	0.95 b	mg/L
06/09/05	1122	95-0170	--	Total Nitrogen	0.92	mg/L
06/28/05	1136	95-0226	--	Total Nitrogen	1.1	mg/L
05/03/05	1202	95-0048	--	Total Phosphorus	0.061	mg/L
06/09/05	1122	95-0170	--	Total Phosphorus	0.081 d	mg/L
06/28/05	1136	95-0226	--	Total Phosphorus	0.10	mg/L
05/03/05	1202	95-0048	--	Ammonia-N	0.04 d	mg/L
06/09/05	1122	95-0170	--	Ammonia-N	0.04	mg/L
06/28/05	1136	95-0226	--	Ammonia-N	0.07	mg/L
05/03/05	1202	95-0048	--	Hardness	21	mg/L
Buttonwood Brook, Station But01, Unique ID W1378						
05/03/05	1228	95-0050	--	*E. coli*	125 e	CFU/100mL
06/09/05	1148	95-0172	--	*E. coli*	35	CFU/100mL
06/28/05	1200	95-0228	--	*E. coli*	>1600 e	CFU/100mL
08/02/05	1209	95-0335	--	*E. coli*	235 b	CFU/100mL
09/12/05	1115	95-0486	--	*E. coli*	95	CFU/100mL
05/03/05	1228	95-0050	--	*Enterococci*	320	CFU/100mL
06/09/05	1148	95-0172	--	*Enterococci*	75	CFU/100mL
06/28/05	1200	95-0228	--	*Enterococci*	1400 d	CFU/100mL
08/02/05	1209	95-0335	--	*Enterococci*	370 d	CFU/100mL
05/03/05	1228	95-0050	--	Fecal Coliforms	65 e	CFU/100mL
06/09/05	1148	95-0172	--	Fecal Coliforms	50	CFU/100mL
06/28/05	1200	95-0228	--	Fecal Coliforms	1500 e	CFU/100mL
08/02/05	1209	95-0335	--	Fecal Coliforms	270	CFU/100mL
09/12/05	1115	95-0486	--	Fecal Coliforms	150	CFU/100mL
05/03/05	1228	95-0050	--	Apparent color	65	PCU
06/09/05	1148	95-0172	--	Apparent color	<15	PCU
06/28/05	1200	95-0228	--	Apparent color	29	PCU
08/02/05	1209	95-0335	--	Apparent color	<15	PCU
05/03/05	1228	95-0050	--	True Color	**	PCU
06/09/05	1148	95-0172	--	True Color	**	PCU
06/28/05	1200	95-0228	--	True Color	20	PCU
08/02/05	1209	95-0335	--	True Color	**	PCU
05/03/05	1228	95-0050	--	Turbidity	1.9	NTU
06/09/05	1148	95-0172	--	Turbidity	2.6	NTU
06/28/05	1200	95-0228	--	Turbidity	4.1	NTU
08/02/05	1209	95-0335	--	Turbidity	0.8	NTU
05/03/05	1228	95-0050	--	Total Nitrogen	1.8 b	mg/L
06/09/05	1148	95-0172	--	Total Nitrogen	2.4	mg/L
06/28/05	1200	95-0228	--	Total Nitrogen	2.4	mg/L
08/02/05	1209	95-0335	--	Total Nitrogen	2.0	mg/L
05/03/05	1228	95-0050	--	Total Phosphorus	0.038	mg/L
06/09/05	1148	95-0172	--	Total Phosphorus	0.042 d	mg/L
06/28/05	1200	95-0228	--	Total Phosphorus	0.073	mg/L
08/02/05	1209	95-0335	--	Total Phosphorus	0.047	mg/L
05/03/05	1228	95-0050	--	Ammonia-N	<0.02 d	mg/L
06/09/05	1148	95-0172	--	Ammonia-N	0.03	mg/L
06/28/05	1200	95-0228	--	Ammonia-N	<0.02	mg/L
08/02/05	1209	95-0335	--	Ammonia-N	0.02 b	mg/L

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Mattapoisett River, Station Matt07, Unique ID W1383						
05/03/05	1032	95-0036	--	*E. coli*	20	CFU/100mL
06/09/05	953	95-0160	--	*E. coli*	80 e	CFU/100mL
06/28/05	1007	95-0216	--	*E. coli*	360 e	CFU/100mL
08/02/05	1025	95-0323	--	*E. coli*	140 b,e	CFU/100mL
08/30/05	1015	95-0461	--	*E. coli*	>1600	CFU/100mL
09/12/05	1205	95-0492	--	*E. coli*	110	CFU/100mL
05/03/05	1032	95-0036	--	*Enterococci*	30	CFU/100mL
06/09/05	953	95-0160	--	*Enterococci*	20	CFU/100mL
06/28/05	1007	95-0216	--	*Enterococci*	135 d	CFU/100mL
08/02/05	1025	95-0323	--	*Enterococci*	280 d	CFU/100mL
08/30/05	1015	95-0461	--	*Enterococci*	>1600	CFU/100mL
05/03/05	1032	95-0036	--	Fecal Coliforms	20	CFU/100mL
06/09/05	953	95-0160	--	Fecal Coliforms	45 e	CFU/100mL
06/28/05	1007	95-0216	--	Fecal Coliforms	310 e	CFU/100mL
08/02/05	1025	95-0323	--	Fecal Coliforms	130 e	CFU/100mL
08/30/05	1015	95-0461	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1205	95-0492	--	Fecal Coliforms	145	CFU/100mL
05/03/05	1032	95-0036	--	Apparent color	200	PCU
06/09/05	953	95-0160	--	Apparent color	130	PCU
06/28/05	1007	95-0216	--	Apparent color	150	PCU
08/02/05	1025	95-0323	--	Apparent color	70	PCU
08/30/05	1015	95-0461	--	Apparent color	70	PCU
05/03/05	1032	95-0036	--	True Color	**	PCU
06/09/05	953	95-0160	--	True Color	100	PCU
06/28/05	1007	95-0216	--	True Color	150	PCU
08/02/05	1025	95-0323	--	True Color	60	PCU
08/30/05	1015	95-0461	--	True Color	60	PCU
05/03/05	1032	95-0036	--	Turbidity	1.7	NTU
06/09/05	953	95-0160	--	Turbidity	2.6	NTU
06/28/05	1007	95-0216	--	Turbidity	3.1	NTU
08/02/05	1025	95-0323	--	Turbidity	2.1	NTU
08/30/05	1015	95-0461	--	Turbidity	7.9	NTU
05/03/05	1032	95-0036	--	Total Nitrogen	0.67 b	mg/L
06/09/05	953	95-0160	--	Total Nitrogen	0.89	mg/L
06/28/05	1007	95-0216	--	Total Nitrogen	1.0	mg/L
08/02/05	1025	95-0323	--	Total Nitrogen	0.96	mg/L
08/30/05	1015	95-0461	--	Total Nitrogen	1.6	mg/L
05/03/05	1032	95-0036	--	Total Phosphorus	0.042	mg/L
06/09/05	953	95-0160	--	Total Phosphorus	0.064 d	mg/L
06/28/05	1007	95-0216	--	Total Phosphorus	0.058	mg/L
08/02/05	1025	95-0323	--	Total Phosphorus	0.040	mg/L
08/30/05	1015	95-0461	--	Total Phosphorus	0.097	mg/L
05/03/05	1032	95-0036	--	Ammonia-N	0.03 d	mg/L
06/09/05	953	95-0160	--	Ammonia-N	0.07	mg/L
06/28/05	1007	95-0216	--	Ammonia-N	0.06	mg/L
08/02/05	1025	95-0323	--	Ammonia-N	0.03 b	mg/L
08/30/05	1015	95-0461	--	Ammonia-N	0.06	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Mattapoisett River, Station Matt02, Unique ID W1384						
05/03/05	1012	95-0046	--	*E. coli*	15	CFU/100mL
06/09/05	932	95-0158	--	*E. coli*	30	CFU/100mL
06/28/05	945	95-0214	--	*E. coli*	65	CFU/100mL
08/02/05	952	95-0321	--	*E. coli*	60 b	CFU/100mL
08/30/05	956	95-0459	--	*E. coli*	>1600	CFU/100mL
09/12/05	1220	95-0493	--	*E. coli*	30	CFU/100mL
05/03/05	1012	95-0046	--	*Enterococci*	25	CFU/100mL
06/09/05	932	95-0158	--	*Enterococci*	10	CFU/100mL
06/28/05	945	95-0214	--	*Enterococci*	30 d	CFU/100mL
08/02/05	952	95-0321	--	*Enterococci*	225 d	CFU/100mL
08/30/05	956	95-0459	--	*Enterococci*	>1600	CFU/100mL
05/03/05	1012	95-0046	--	Fecal Coliforms	40	CFU/100mL
06/09/05	932	95-0158	--	Fecal Coliforms	45	CFU/100mL
06/28/05	945	95-0214	--	Fecal Coliforms	105	CFU/100mL
08/02/05	952	95-0321	--	Fecal Coliforms	100	CFU/100mL
08/30/05	956	95-0459	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1220	95-0493	--	Fecal Coliforms	40	CFU/100mL
05/03/05	1012	95-0046	--	Apparent color	210	PCU
06/09/05	932	95-0158	--	Apparent color	230	PCU
06/28/05	945	95-0214	--	Apparent color	190	PCU
08/02/05	952	95-0321	--	Apparent color	90	PCU
08/30/05	956	95-0459	--	Apparent color	60	PCU
05/03/05	1012	95-0046	--	True Color	**	PCU
06/09/05	932	95-0158	--	True Color	230	PCU
06/28/05	945	95-0214	--	True Color	180	PCU
08/02/05	952	95-0321	--	True Color	85	PCU
08/30/05	956	95-0459	--	True Color	55	PCU
05/03/05	1012	95-0046	--	Turbidity	1.3	NTU
06/09/05	932	95-0158	--	Turbidity	2.4	NTU
06/28/05	945	95-0214	--	Turbidity	2.2	NTU
08/02/05	952	95-0321	--	Turbidity	2.7	NTU
08/30/05	956	95-0459	--	Turbidity	4.1	NTU
05/03/05	1012	95-0046	--	Total Nitrogen	0.58 b	mg/L
06/09/05	932	95-0158	--	Total Nitrogen	0.87	mg/L
06/28/05	945	95-0214	--	Total Nitrogen	0.98	mg/L
08/02/05	952	95-0321	--	Total Nitrogen	0.89	mg/L
08/30/05	956	95-0459	--	Total Nitrogen	0.77	mg/L
05/03/05	1012	95-0046	--	Total Phosphorus	0.033	mg/L
06/09/05	932	95-0158	--	Total Phosphorus	0.063 d	mg/L
06/28/05	945	95-0214	--	Total Phosphorus	0.059	mg/L
08/02/05	952	95-0321	--	Total Phosphorus	0.058	mg/L
08/30/05	956	95-0459	--	Total Phosphorus	0.072	mg/L
05/03/05	1012	95-0046	--	Ammonia-N	<0.02 d	mg/L
06/09/05	932	95-0158	--	Ammonia-N	0.07	mg/L
06/28/05	945	95-0214	--	Ammonia-N	0.09	mg/L
08/02/05	952	95-0321	--	Ammonia-N	0.03 b	mg/L
08/30/05	956	95-0459	--	Ammonia-N	0.05	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Weweantic River, Station Wewe10, Unique ID W1385						
05/03/05	846	95-0030	--	*E. coli*	10	CFU/100mL
06/09/05	820	95-0152	--	*E. coli*	25	CFU/100mL
06/28/05	837	95-0208	--	*E. coli*	75 e	CFU/100mL
08/02/05	833	95-0315	--	*E. coli*	180 b,e	CFU/100mL
08/30/05	840	95-0453	--	*E. coli*	>1600	CFU/100mL
09/12/05	1305	95-0496	--	*E. coli*	70 e	CFU/100mL
05/03/05	846	95-0030	--	*Enterococci*	10	CFU/100mL
06/09/05	820	95-0152	--	*Enterococci*	< 5	CFU/100mL
06/28/05	837	95-0208	--	*Enterococci*	55 d	CFU/100mL
08/02/05	833	95-0315	--	*Enterococci*	395 d	CFU/100mL
08/30/05	840	95-0453	--	*Enterococci*	>1600	CFU/100mL
05/03/05	846	95-0030	--	Fecal Coliforms	40	CFU/100mL
06/09/05	820	95-0152	--	Fecal Coliforms	25	CFU/100mL
06/28/05	837	95-0208	--	Fecal Coliforms	40 e	CFU/100mL
08/02/05	833	95-0315	--	Fecal Coliforms	80 e	CFU/100mL
08/30/05	840	95-0453	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1305	95-0496	--	Fecal Coliforms	55 e	CFU/100mL
05/03/05	846	95-0030	--	Apparent color	180	PCU
06/09/05	820	95-0152	--	Apparent color	320	PCU
06/28/05	837	95-0208	--	Apparent color	220	PCU
08/02/05	833	95-0315	--	Apparent color	150	PCU
08/30/05	840	95-0453	--	Apparent color	110	PCU
05/03/05	846	95-0030	--	True Color	100	PCU
06/09/05	820	95-0152	--	True Color	280	PCU
06/28/05	837	95-0208	--	True Color	200	PCU
08/02/05	833	95-0315	--	True Color	110	PCU
08/30/05	840	95-0453	--	True Color	60	PCU
05/03/05	846	95-0030	--	Turbidity	1.9	NTU
06/09/05	820	95-0152	--	Turbidity	6.9	NTU
06/28/05	837	95-0208	--	Turbidity	7.4	NTU
08/02/05	833	95-0315	--	Turbidity	7.3	NTU
08/30/05	840	95-0453	--	Turbidity	15.0	NTU
05/03/05	846	95-0030	--	Total Nitrogen	0.47 b	mg/L
06/09/05	820	95-0152	--	Total Nitrogen	1.0	mg/L
06/28/05	837	95-0208	--	Total Nitrogen	0.79	mg/L
08/02/05	833	95-0315	--	Total Nitrogen	1.1	mg/L
08/30/05	840	95-0453	--	Total Nitrogen	0.90	mg/L
05/03/05	846	95-0030	--	Total Phosphorus	0.046	mg/L
06/09/05	820	95-0152	--	Total Phosphorus	0.17 d	mg/L
06/28/05	837	95-0208	--	Total Phosphorus	0.12	mg/L
08/02/05	833	95-0315	--	Total Phosphorus	0.095	mg/L
08/30/05	840	95-0453	--	Total Phosphorus	0.15	mg/L
05/03/05	846	95-0030	--	Ammonia-N	<0.02 d	mg/L
06/09/05	820	95-0152	--	Ammonia-N	0.04	mg/L
06/28/05	837	95-0208	--	Ammonia-N	0.04	mg/L
08/02/05	833	95-0315	--	Ammonia-N	0.04 b	mg/L
08/30/05	840	95-0453	--	Ammonia-N	0.05	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Weweantic River, Station Wewe01, Unique ID W1386						
05/03/05	918	95-0032	--	*E. coli*	20	CFU/100mL
06/09/05	845	95-0154	--	*E. coli*	< 5	CFU/100mL
06/28/05	858	95-0210	--	*E. coli*	65	CFU/100mL
08/02/05	857	95-0317	--	*E. coli*	235 b	CFU/100mL
08/30/05	905	95-0455	--	*E. coli*	>1600	CFU/100mL
09/12/05	1250	95-0495	--	*E. coli*	< 5	CFU/100mL
05/03/05	918	95-0032	--	*Enterococci*	10	CFU/100mL
06/09/05	845	95-0154	--	*Enterococci*	20	CFU/100mL
06/28/05	858	95-0210	--	*Enterococci*	70 d	CFU/100mL
08/02/05	857	95-0317	--	*Enterococci*	370 d	CFU/100mL
08/30/05	905	95-0455	--	*Enterococci*	>1600	CFU/100mL
05/03/05	918	95-0032	--	Fecal Coliforms	20	CFU/100mL
06/09/05	845	95-0154	--	Fecal Coliforms	< 5	CFU/100mL
06/28/05	858	95-0210	--	Fecal Coliforms	85	CFU/100mL
08/02/05	857	95-0317	--	Fecal Coliforms	390	CFU/100mL
08/30/05	905	95-0455	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1250	95-0495	--	Fecal Coliforms	< 5	CFU/100mL
05/03/05	918	95-0032	--	Apparent color	150	PCU
06/09/05	845	95-0154	--	Apparent color	280 e	PCU
06/28/05	858	95-0210	--	Apparent color	180	PCU
08/02/05	857	95-0317	--	Apparent color	210	PCU
08/30/05	905	95-0455	--	Apparent color	90	PCU
05/03/05	918	95-0032	--	True Color	130	PCU
06/09/05	845	95-0154	--	True Color	300 e	PCU
06/28/05	858	95-0210	--	True Color	140	PCU
08/02/05	857	95-0317	--	True Color	100	PCU
08/30/05	905	95-0455	--	True Color	50	PCU
05/03/05	918	95-0032	--	Turbidity	3.3	NTU
06/09/05	845	95-0154	--	Turbidity	4.4	NTU
06/28/05	858	95-0210	--	Turbidity	4.9	NTU
08/02/05	857	95-0317	--	Turbidity	4.2	NTU
08/30/05	905	95-0455	--	Turbidity	8.2	NTU
05/03/05	918	95-0032	--	Total Nitrogen	0.50 b	mg/L
06/09/05	845	95-0154	--	Total Nitrogen	0.88	mg/L
06/28/05	858	95-0210	--	Total Nitrogen	0.68	mg/L
08/02/05	857	95-0317	--	Total Nitrogen	0.71	mg/L
08/30/05	905	95-0455	--	Total Nitrogen	0.76	mg/L
05/03/05	918	95-0032	--	Total Phosphorus	0.052	mg/L
06/09/05	845	95-0154	--	Total Phosphorus	0.12 d	mg/L
06/28/05	858	95-0210	--	Total Phosphorus	0.086	mg/L
08/02/05	857	95-0317	--	Total Phosphorus	0.081	mg/L
08/30/05	905	95-0455	--	Total Phosphorus	0.12	mg/L
05/03/05	918	95-0032	--	Ammonia-N	<0.02 d	mg/L
06/09/05	845	95-0154	--	Ammonia-N	0.05	mg/L
06/28/05	858	95-0210	--	Ammonia-N	<0.02	mg/L
08/02/05	857	95-0317	--	Ammonia-N	0.03 b	mg/L
08/30/05	905	95-0455	--	Ammonia-N	0.02	mg/L
05/03/05	918	95-0032	--	Hardness	11	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Sippican River, Station Sip02, Unique ID W1387						
05/03/05	943	95-0034	--	*E. coli*	5	CFU/100mL
06/09/05	905	95-0156	--	*E. coli*	15	CFU/100mL
06/28/05	920	95-0212	--	*E. coli*	85	CFU/100mL
08/02/05	920	95-0319	--	*E. coli*	220 b,e	CFU/100mL
08/30/05	927	95-0457	--	*E. coli*	>1600	CFU/100mL
09/12/05	1241	95-0494	--	*E. coli*	20	CFU/100mL
05/03/05	943	95-0034	--	*Enterococci*	20	CFU/100mL
06/09/05	905	95-0156	--	*Enterococci*	15	CFU/100mL
06/28/05	920	95-0212	--	*Enterococci*	20 d	CFU/100mL
08/02/05	920	95-0319	--	*Enterococci*	210 d	CFU/100mL
08/30/05	927	95-0457	--	*Enterococci*	>1600	CFU/100mL
05/03/05	943	95-0034	--	Fecal Coliforms	40	CFU/100mL
06/09/05	905	95-0156	--	Fecal Coliforms	20	CFU/100mL
06/28/05	920	95-0212	--	Fecal Coliforms	90	CFU/100mL
08/02/05	920	95-0319	--	Fecal Coliforms	160 e	CFU/100mL
08/30/05	927	95-0457	--	Fecal Coliforms	>1600	CFU/100mL
09/12/05	1241	95-0494	--	Fecal Coliforms	50	CFU/100mL
05/03/05	943	95-0034	--	Apparent color	150	PCU
06/09/05	905	95-0156	--	Apparent color	280	PCU
06/28/05	920	95-0212	--	Apparent color	200	PCU
08/02/05	920	95-0319	--	Apparent color	95	PCU
08/30/05	927	95-0457	--	Apparent color	120	PCU
05/03/05	943	95-0034	--	True Color	150	PCU
06/09/05	905	95-0156	--	True Color	240	PCU
06/28/05	920	95-0212	--	True Color	180	PCU
08/02/05	920	95-0319	--	True Color	85	PCU
08/30/05	927	95-0457	--	True Color	65	PCU
05/03/05	943	95-0034	--	Turbidity	1.4	NTU
06/09/05	905	95-0156	--	Turbidity	2.6	NTU
06/28/05	920	95-0212	--	Turbidity	2.9	NTU
08/02/05	920	95-0319	--	Turbidity	3.0	NTU
08/30/05	927	95-0457	--	Turbidity	12.0	NTU
05/03/05	943	95-0034	--	Total Nitrogen	0.46 b	mg/L
06/09/05	905	95-0156	--	Total Nitrogen	0.79	mg/L
06/28/05	920	95-0212	--	Total Nitrogen	0.67	mg/L
08/02/05	920	95-0319	--	Total Nitrogen	0.55	mg/L
08/30/05	927	95-0457	--	Total Nitrogen	0.93	mg/L
05/03/05	943	95-0034	--	Total Phosphorus	0.035	mg/L
06/09/05	905	95-0156	--	Total Phosphorus	0.073 d	mg/L
06/28/05	920	95-0212	--	Total Phosphorus	0.084	mg/L
08/02/05	920	95-0319	--	Total Phosphorus	0.065	mg/L
08/30/05	927	95-0457	--	Total Phosphorus	0.20	mg/L
05/03/05	943	95-0034	--	Ammonia-N	<0.02 d	mg/L
06/09/05	905	95-0156	--	Ammonia-N	0.07	mg/L
06/28/05	920	95-0212	--	Ammonia-N	0.05	mg/L
08/02/05	920	95-0319	--	Ammonia-N	0.03 b	mg/L
08/30/05	927	95-0457	--	Ammonia-N	0.04	mg/L

Table 3. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area water quality data.
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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
Unnamed Tributary to Aucoot Creek, Station MarionUp, Unique ID W1388						
06/27/05	1215	--	--	*E. coli*	126 e	CFU/100mL
06/27/05	1228	--	--	*E. coli*	< 5	CFU/100mL
06/27/05	1215	--	--	*Enterococci*	30	CFU/100mL
06/27/05	1228	--	--	*Enterococci*	< 5	CFU/100mL
06/27/05	1215	--	--	Fecal Coliforms	106 e	CFU/100mL
06/27/05	1228	--	--	Fecal Coliforms	< 5	CFU/100mL
05/03/05	1502	--	--	Apparent color	200	PCU
06/09/05	1502	--	--	Apparent color	180	PCU
06/27/05	1215	--	--	Apparent color	120	PCU
05/03/05	1502	--	--	True Color	**	PCU
06/09/05	1502	--	--	True Color	180	PCU
06/27/05	1215	--	--	True Color	**	PCU
05/03/05	1502	--	--	Turbidity	0.7	NTU
06/09/05	1502	--	--	Turbidity	3.1	NTU
06/27/05	1215	--	--	Turbidity	2.0	NTU
05/03/05	1502	--	--	Total Nitrogen	0.86 b	mg/L
06/09/05	1502	--	--	Total Nitrogen	1.2	mg/L
06/27/05	1215	--	--	Total Nitrogen	1.3	mg/L
05/03/05	1502	--	--	Total Phosphorus	0.013	mg/L
06/09/05	1502	--	--	Total Phosphorus	0.026 d	mg/L
06/27/05	1215	--	--	Total Phosphorus	0.033	mg/L
05/03/05	1502	--	--	Ammonia-N	0.05d	mg/L
06/09/05	1502	--	--	Ammonia-N	0.07	mg/L
06/27/05	1215	--	--	Ammonia-N	0.11	mg/L
05/03/05	1502	--	--	Hardness	24	mg/L
Unnamed Tributary to Aucoot Creek, Station MarionDn, Unique ID W1389						
06/27/05	1149	--	--	*E. coli*	6 e	CFU/100mL
06/27/05	1149	--	--	*Enterococci*	6	CFU/100mL
06/27/05	1149	--	--	Fecal Coliforms	5e	CFU/100mL
05/03/05	1442	--	95-0055	Apparent color	210 d	PCU
05/03/05	1442	--	95-0054	Apparent color	170 d	PCU
06/09/05	1448	--	--	Apparent color	45	PCU
06/27/05	1149	--	--	Apparent color	65	PCU
05/03/05	1442	--	95-0055	True Color	90	PCU
05/03/05	1442	--	95-0054	True Color	**	PCU
06/09/05	1448	--	--	True Color	25	PCU
06/27/05	1149	--	--	True Color	39	PCU
05/03/05	1442	--	95-0055	Turbidity	15.5	NTU
05/03/05	1442	--	95-0054	Turbidity	15.0	NTU
06/09/05	1448	--	--	Turbidity	6.8	NTU
06/27/05	1149	--	--	Turbidity	11.0	NTU
05/03/05	1442	--	95-0055	Total Nitrogen	4.7 b	mg/L
05/03/05	1442	--	95-0054	Total Nitrogen	4.6 b	mg/L
06/09/05	1448	--	--	Total Nitrogen	1.9	mg/L
06/27/05	1149	--	--	Total Nitrogen	2.8	mg/L
05/03/05	1442	--	95-0055	Total Phosphorus	0.56	mg/L
05/03/05	1442	--	95-0054	Total Phosphorus	0.57	mg/L
06/09/05	1448	--	--	Total Phosphorus	0.69 d	mg/L

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Date	Time	OWMID	QA/QC OWMID	Analyte	Result	Units
06/27/05	1149	--	--	Total Phosphorus	1.1	mg/L
05/03/05	1442	--	95-0055	Ammonia-N	0.52 d	mg/L
05/03/05	1442	--	95-0054	Ammonia-N	0.53 d	mg/L
06/09/05	1448	--	--	Ammonia-N	0.17	mg/L
06/27/05	1149	--	--	Ammonia-N	0.14	mg/L
05/03/05	1442	--	95-0055	Hardness	43	mg/L
05/03/05	1442	--	95-0054	Hardness	42	mg/L

Table 4. Geometric mean of *E. coli* and *Enterococci* results for each sampling station.

Station ID	Unique ID	E. coli Sample Count	E. coli Geometric Mean (CFU/100 ml)	Enterococci Sample Count	Enterococci Geometric Mean (CFU/100 ml)
Cop02 / Cop02A	W1365/ W1399	4	12	3	19
Sh03	W1366	5	19	4	55
Sh01	W1367	5	100	4	137
EBW02	W1368	5	72	4	439
EBW00	W1369	5	99	4	320
BrCh04	W1370	5	51	4	187
BrCh01	W1371	5	56	4	161
Snl02	W1372	5	451	4	1549
Snl01	W1373	5	334	4	1442
Kirb01	W1374	5	149	4	858
Ang01	W1375	5	55	4	253
Pask05	W1376	5	140	4	89
Pask02	W1377	6	251	5	335
Acush04	W1382	6	293	5	775
Acush02	W1381	5	208	4	458
Acush01	W1380	6	983	5	1265
But15	W1379	5	220	4	438
But01	W1378	5	173	4	719
Matt07	W1383	6	156	5	669
Matt02	W1384	6	66	5	600
Wewe10	W1385	6	85	5	795
Wewe01	W1386	6	48	5	769
Sip02	W1387	6	60	5	580

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Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
Copicut River, Station Cop02, Unique ID W1365									
05/03/05	12:29 PM	95-0022	0.229	14.3	5.8	39	25	10.7	105
05/27/05	11:32 AM	95-0091	0.2	13.1	6.0 c	38	24	9.9	97
05/31/05	11:59 AM	95-0099	0.2	16.6	5.9 c	36	23	9.4	97
06/09/05	12:23 PM	95-0148	0.393	23.5	6.1	42	27	8.6	101
06/27/05	11:20 AM	95-0259	**	22.8	--	--	--	6.5 u	76 u

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Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
06/28/05	12:29 PM	95-0204	0.195	21.7	6.4	50	33	8.2	94
07/29/05	11:53 AM	95-0361	**	20.5	--	--	--	8.1 i	90 i
08/01/05	10:32 AM	95-0362	**	17.3	--	--	--	8.1	85
08/26/05	10:13 AM	95-0395	**	15.8	--	--	--	8.1	83
08/29/05	10:05 AM	95-0396	**	18.6	--	--	--	6.8	74
08/30/05	12:20 PM	95-0450	0.277	20.0	5.6	76	49	7.4	81
Shingle Island River, Station Sh03, Unique ID W1366									
06/09/05	12:47 PM	95-0151	0.623	21.8	5.3	61	40	7.9	90
06/28/05	12:58 PM	95-0207	0.398	20.1	5.7	71	46	4.5	50
08/02/05	12:59 PM	95-0314	0.328	19.62 u	6.3	93	60	4.1	44
08/30/05	12:47 PM	95-0452	1.175	20.8	4.4	98	64	6.6	73
Shingle Island River, Station Sh01, Unique ID W1367									
05/03/05	12:10 PM	95-0020	0.621	12.2	5.3	57	37	10.9	102
05/27/05	12:21 PM	95-0092	0.4	11.6	5.2 c	51	33	9.1	86
05/31/05	12:30 PM	95-0100	0.3	15.2	5.4 c	50	32	8.7	88
06/09/05	12:04 PM	95-0146	0.27	20.6	5.9	62	41	7.2	81
06/27/05	11:43 AM	95-0262	**	21.8	--	--	--	6.2	71
06/28/05	12:08 PM	95-0202	0.176	22.1	6.2	78	51	6.4	74
07/29/05	12:16 PM	95-0364	**	18.6	--	--	--	6.4 i	70i
08/01/05	10:49 AM	95-0365	**	19.9	--	--	--	6.3	70
08/02/05	12:13 PM	95-0309	0.067	20.7	6.5	107	69	6.7	75
08/26/05	10:32 AM	95-0398	**	18.0	--	--	--	6.6	70
08/29/05	10:21 AM	95-0399	**	21.3	--	--	--	6.0	69
08/30/05	12:02 PM	95-0448	0.619	21.0	5.4	102	66	7.2	81
East Branch Westport River, Station EBW02, Unique ID W1368									
05/03/05	11:12 AM	95-0014	0.265	13.3	5.7	113	74	10.7	102
05/27/05	10:23 AM	95-0094	0.1	10.6	6.1 c	111	71	10.6	97
05/31/05	11:04 AM	95-0102	0.1	17.4	5.8 c	104	66	8.9	94
06/09/05	10:57 AM	95-0140	0.028	22.2	6.1	103	67	8.4	96
06/27/05	10:25 AM	95-0253	**	22.9	--	--	--	7.6	88
06/28/05	11:00 AM	95-0196	0.466	23.7	6.3	124	81	7.6	90
07/29/05	10:52 AM	95-0355	**	20.8	--	--	--	6.2 i	70 i
08/01/05	9:51 AM	95-0356	**	21.7	--	--	--	6.5	74
08/02/05	11:02 AM	95-0303	0.337	22.5	6.6	155	101	7.3	85
08/26/05	9:28 AM	95-0389	**	17.8	--	--	--	7.6	81
08/29/05	9:01 AM	95-0390	**	20.8	--	--	--	6.9	78
08/30/05	10:47 AM	95-0442	0.37	23.4	6.3	113	73	8.1	95
East Branch Westport River, Station EBW00, Unique ID W1369									
05/03/05	10:49 AM	95-0012	0.509	12.6	5.8	134	87	11.2	106
06/09/05	10:37 AM	95-0138	0.968	21.2	6.3	130	85	8.7	98
06/28/05	10:40 AM	95-0194	0.277	22.3	6.3	150	97	8.0	92
08/02/05	10:42 AM	95-0301	0.615	26.1	6.8	17549 c	11410 c	5.1	67
08/30/05	10:20 AM	95-0438	0.84	21.9	6.2	141	91	8.4	96
Bread and Cheese Brook, Station BrCh04, Unique ID W1370									
05/03/05	11:47 AM	95-0018	0.547	11.8	5.0	198	129	11.0	102
06/09/05	11:40 AM	95-0144	0.356	18.9	5.6	230	149	8.0	86
06/28/05	11:44 AM	95-0200	0.291	19.5	5.6	270	175	6.5	71
08/02/05	11:46 AM	95-0307	0.208	20.2	6.0	388	252	6.4	70
08/30/05	11:37 AM	95-0446	0.714	20.7	4.8	231	150	7.9	88

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Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
Bread and Cheese Brook, Station BrCh01, Unique ID W1371									
05/03/05	11:29 AM	95-0016	0.302	11.6	5.5	200	130	11.7	108
05/27/05	10:56 AM	95-0095	0.1	10.7	5.8 c	178 u	114 u	10.4	96
05/31/05	11:23 AM	95-0103	0.1	14.1	5.8 c	190	121	10.0 u	99 u
06/09/05	11:16 AM	95-0142	0.28	18.9	5.8	221	144	9.0	97
06/27/05	10:47 AM	95-0256	**	19.8	--	--	--	7.7	84
06/28/05	11:21 AM	95-0198	0.218	19.9	6.0	262	171	7.9	87
07/29/05	11:12 AM	95-0358	**	18.3	--	--	--	7.1 i	76 i
08/01/05	10:08 AM	95-0359	**	19.4	--	--	--	6.6	73
08/02/05	11:25 AM	95-0305	0.086	20.7	6.4	319	207	7.3	82
08/26/05	9:48 AM	95-0392	**	17.0	--	--	--	7.3	76
08/29/05	9:24 AM	95-0393	**	20.6	--	--	--	7.4	81
08/30/05	11:10 AM	95-0444	0.219	21.0	5.4	151	98	8.6	97
Snell Creek, Station Snl02, Unique ID W1372									
05/03/05	10:06 AM	95-0008	0.184	10.2	6.6	222	144	11.8	105
05/31/05	9:39 AM	95-0097	0.2	13.0	6.5c	191	122	9.8	94
06/01/05	9:59 AM	95-0105	0.1	12.6	6.6c	236	151	10.1	96
06/09/05	9:54 AM	95-0134	0.107	15.9	6.9	327	213	9.7	98
06/27/05	9:44 AM	95-0247	**	17.5	--	--	--	8.3	87
06/28/05	10:02 AM	95-0190	0.114	17.5	6.7	410	267	9.1	95
07/29/05	10:16 AM	95-0349	**	17.3	--	--	--	4.9 u,i	52 u,i
08/01/05	9:19 AM	95-0350	**	18.6	--	--	--	5.4	59
08/02/05	9:57 AM	95-0297	0.154	19.1	7.0	261	170	7.7	83
Snell Creek, Station Snl01, Unique ID W1373									
04/29/05	10:41 AM	95-0061	0.338	10.5	6.5	205	133	11.8	106
05/02/05	10:26 AM	95-0064	0.218	10.5	6.2	148	96	11.6	104
05/03/05	9:46 AM	95-0006	0.115	10.2	6.5	196	127	11.9	106
05/31/05	9:18 AM	95-0096	0.2	13.3	6.5 c	161	103	10.1	97
06/01/05	9:41 AM	95-0104	0.2	12.9	6.6 c	199	128	10.3	98
06/09/05	9:33 AM	95-0132	0.068	16.1	6.7	299	194	9.6	98
06/27/05	9:26 AM	95-0244	**	17.4	--	--	--	7.9	83
06/28/05	9:46 AM	95-0188	0.184	17.2	6.6	254	165	9.2	96
07/29/05	10:03 AM	95-0346	**	16.7	--	--	--	6.5 u,i	68 u,i
08/01/05	9:06 AM	95-0347	**	18.5	--	--	--	5.8 u	63 u
08/02/05	9:42 AM	95-0295	0.035	19.3	6.9	301	195	7.4	80
Kirby Brook, Station Kirb01, Unique ID W1374									
05/03/05	10:23 AM	95-0010	0.33	11.3	6.2	161	104	11.7	107
05/27/05	9:54 AM	95-0093	0.1	10.7	6.1 c	157	100	10.6	98
05/31/05	10:40 AM	95-0101	0.1	14.3	6.2 c	130	84	9.8	97
06/09/05	10:13 AM	95-0136	0.14	17.9	6.5	185	120	9.0	94
06/27/05	10:02 AM	95-0250	**	18.4	--	--	--	7.9	84
06/28/05	10:17 AM	95-0192	0.165	18.5	6.3	368	239	7.9	84
07/29/05	10:32 AM	95-0352	**	17.36 u	--	--	--	5.5i	58 i
08/01/05	9:32 AM	95-0353	**	18.7	--	--	--	4.5u	49 u
08/02/05	10:17 AM	95-0299	0.27	18.7	6.3	248	161	5.6	60

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Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
Angeline Brook, Station Ang01, Unique ID W1375									
04/29/05	10:10 AM	95-0060	0.489	10.0	6.3	93	60	12.0	106
05/02/05	9:38 AM	95-0063	0.245	9.8	5.5	69	45	11.6	102
05/03/05	9:16 AM	95-0002	0.113	10.1	5.8	62	40	11.9	106
05/27/05	9:13 AM	95-0090	0.2	10.3	6.0c	70	45	10.5	96
05/31/05	10:13 AM	95-0098	0.1	13.7	6.0c	77.5	50	10.0	98
06/09/05	9:06 AM	95-0128	0.064	16.6	6.6	90	59	9.4	96
06/24/05	9:19 AM	95-0240	**	14.8	--	--	--	9.0 m	90 m
06/27/05	8:56 AM	95-0241	**	17.9	--	--	--	8.0	84
06/28/05	9:21 AM	95-0184	0.045	17.9	6.4 u	167	108	8.8	93
07/29/05	9:36 AM	95-0343	**	17.1	--	--	--	7.3 u,i	76 u,i
08/01/05	8:47 AM	95-0344	**	18.7	--	--	--	6.6	71
08/02/05	9:15 AM	95-0291	0.086	19.4	6.9	184	120	8.3	91
Paskamanset River, Station Pask05, Unique ID W1376									
05/03/05	1:31 PM	95-0027	0.308	13.7	6.0	252	164	8.8	85
06/09/05	12:38 PM	95-0178	0.159	21.8	6.0	237	154	5.5	63
06/28/05	12:40 PM	95-0234	0.113	22.6	6.1	266	173	5.2	60
08/02/05	12:51 PM	95-0341	0.073	22.8	6.5	368	239	3.0	35
Paskamanset River, Station Pask02, Unique ID W1377									
05/03/05	1:04 PM	95-0000	0.245	13.3	5.8	214	139	7.8	75
05/31/05	1:06 PM	95-0113	0.1	16.4	6.0 c	173	111	6.4	66
06/01/05	10:44 AM	95-0120	0.1	15.2	5.9 c	184	118	6.3	63
06/09/05	12:11 PM	95-0176	0.331	20.5	6.1	225	147	7.1	79
06/27/05	12:18 PM	95-0264	**	21.4	--	--	--	6.4	73
06/28/05	12:20 PM	95-0232	0.222	21.0	6.3	265	172	6.6	75
06/29/05	9:34 AM	95-0265	**	20.4	--	--	--	6.3	71
08/01/05	11:21 AM	95-0367	**	21.1	--	--	--	4.5 u	51 u
08/02/05	12:31 PM	95-0339	0.127	22.8	6.7	319	208	5.7	66
08/03/05	9:09 AM	95-0368	**	21.7	--	--	--	4.0 u	46 u
08/26/05	10:59 AM	95-0401	**	19.4	--	--	--	5.7	63
08/29/05	10:49 AM	95-0402	**	21.8	--	--	--	6.3	73
08/30/05	12:14 PM	95-0474	0.774	21.3	5.6	130	84	7.2	81
Acushnet River, Station Acush04, Unique ID W1382									
05/02/05	11:42 AM	95-0070	0.376	15.5	6.4	99	65	9.6	96
05/03/05	11:02 AM	95-0041	0.494	14.4	6.4	100	65	9.7	95
05/04/05	10:16 AM	95-0073	0.349	14.6	6.0	99	64	9.9	97
05/31/05	3:27 PM	95-0116	0.3	18.0	6.6 c	93	59	8.5 u	91 u
06/01/05	12:14 PM	95-0123	0.3	17.4	6.6 c	93	60	8.6	90
06/09/05	10:20 AM	95-0165	0.266	22.8	6.2	102	66	7.4	86
06/27/05	2:12 PM	95-0273	**	25.5	--	--	--	5.6	69
06/28/05	10:33 AM	95-0221	0.135	23.0	6.3	41	27	6.6	77
06/29/05	10:46 AM	95-0274	**	23.7	--	--	--	6.3	76
08/01/05	12:44 PM	95-0376	**	21.2	--	--	--	6.3	72
08/02/05	10:57 AM	95-0328	0.059	21.1	6.7	133	87	7.3	82
08/03/05	10:25 AM	95-0377	**	21.3	--	--	--	6.2	71
08/26/05	12:24 PM	95-0410	**	19.3	--	--	--	7.5	82
08/29/05	12:05 PM	95-0411	**	20.6	--	--	--	5.0	56
08/30/05	10:43 AM	95-0466	0.471	22.6	6.3	70	46	7.1	83

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Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
Acushnet River, Station Acush02, Unique ID W1381									
05/03/05	11:24 AM	95-0043	0.907	12.5	6.2	96	62	9.3	87
06/09/05	10:39 AM	95-0167	0.819	21.1	6.4	115	74	7.0	79
06/28/05	10:56 AM	95-0223	0.681	22.5	6.4	121	79	6.0	70
08/02/05	11:19 AM	95-0330	0.631	23.0	6.8	135	88	4.2 u	48 u
08/26/05	12:04 PM	95-0407	**	20.2	--	--	--	4.7	52
08/29/05	11:45 AM	95-0408	**	23.0	--	--	--	6.1	72
Acushnet River, Station Acush01, Unique ID W1380									
05/03/05	11:42 AM	95-0045	0.303	12.3	6.3	105	68	10.4	97
05/31/05	2:59 PM	95-0115	0.3	17.3	6.7 c	100	64	9.4	99
06/01/05	11:47 AM	95-0122	0.1	15.8	6.7 c	104	66	9.5	96
06/09/05	10:58 AM	95-0169	0.67	22.7	7.4 u	28084 c, u	18250 c, u	7.4	95
06/27/05	1:42 PM	95-0270	**	24.2	--	--	--	4.7 u	56 u
06/28/05	11:14 AM	95-0225	0.265	22.9	6.4	155	101	5.8	67
08/01/05	12:18 PM	95-0373	**	22.4	--	--	--	7.4	86
08/02/05	11:37 AM	95-0332	0.152	23.3	6.9	900	585	7.3	86
08/03/05	10:01 AM	95-0374	**	26.3	--	--	--	1.7 u	21 u
08/30/05	11:19 AM	95-0470	0.482	21.5	6.0	97	63	7.8	89
Buttonwood Brook, Station But15, Unique ID W1379									
05/03/05	12:10 PM	95-0049	0.141	14.7	6.9	189	123	10.1	100
06/09/05	11:28 AM	95-0171	0.059	25.1	7.6 u	200 u	130 u	6.5	79
06/28/05	11:41 AM	95-0227	0.079	25.8	7.0	270	175	4.5	55
Buttonwood Brook, Station But01, Unique ID W1378									
05/03/05	12:32 PM	95-0051	0.138	13.0	7.2	244	159	11.2	106
05/31/05	1:32 PM	95-0114	0.2	16.4	7.2 c	241	154	9.7	101
06/01/05	11:09 AM	95-0121	0.2	14.2	7.1 c	260	167	10.2	100
06/09/05	11:52 AM	95-0173	0.23	18.5	7.3	306	199	9.8	104
06/27/05	12:53 PM	95-0267	**	20.8	--	--	--	7.5	84
06/28/05	12:02 PM	95-0229	0.117	19.6	7.1	306	199	8.6	94
06/29/05	9:54 AM	95-0268	**	19.3	--	--	--	7.9	87
08/01/05	11:45 AM	95-0370	**	20.2	--	--	--	7.0 u	78 u
08/02/05	12:14 PM	95-0336	0.11	21.0	6.9	154	100	8.2	92
08/03/05	9:29 AM	95-0371	**	20.7	--	--	--	6.5	74
08/26/05	11:22 AM	95-0404	**	18.7	--	--	--	6.1	67
08/29/05	11:10 AM	95-0405	**	22.0	--	--	--	7.9	89
Mattapoisett River, Station Matt07, Unique ID W1383									
05/02/05	12:16 PM	95-0071	0.299	12.8	5.4	66	43	9.5	89
05/03/05	10:37 AM	95-0037	0.744	11.9	5.5	64	42	9.0	83
05/04/05	10:49 AM	95-0074	0.006	11.9	5.6	65	42	9.7	90
05/31/05	4:04 PM	95-0117	0.2	17.8	5.6 c	56	36	8.5	90
06/01/05	12:41 PM	95-0124	0.1	16.3	5.7 c	54	34	8.1	83
06/09/05	9:56 AM	95-0161	0.811	21.3	5.7	63	41	6.6	75
06/27/05	2:46 PM	95-0276	**	22.9	--	--	--	6.0	70
06/28/05	10:11 AM	95-0217	0.57	21.5	6.1	106	69	6.7	75
06/29/05	11:12 AM	95-0277	**	20.1	--	--	--	6.7	75
08/01/05	1:08 PM	95-0379	**	20.5	--	--	--	6.0	67
08/02/05	10:29 AM	95-0324	0.613	20.7	6.7	116	76	6.8	76

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08/03/05	10:50 AM	95-0380	**	21.4	--	--	--	4.8	56
08/29/05	12:30 PM	95-0416	**	21.4	--	--	--	5.0 u	58 u
08/30/05	10:20 AM	95-0462	0.762	20.4	5.4	158	103	7.3	81
08/31/05	10:29 AM	95-0417	**	21.3	--	--	--	4.3	49
Mattapoisett River, Station Matt02, Unique ID W1384									
05/03/05	10:17 AM	95-0047	0.352	11.9	5.1	63	41	8.7	81
06/09/05	9:35 AM	95-0159	0.882	20.8	5.7	67	43	6.7	75
06/28/05	9:49 AM	95-0215	0.566	21.9	5.8	102	66	5.4	62
08/02/05	10:01 AM	95-0322	0.712	20.5	6.3	125	82	5.4	60
08/29/05	1:02 PM	95-0419	**	20.7	--	--	--	2.7	30
08/30/05	9:58 AM	95-0460	0.921	21.2	6.2	254	165	7.2	81
08/31/05	10:54 AM	95-0420	**	21.4	--	--	--	5.4	62
Weweantic River, Station Wewe10, Unique ID W1385									
05/03/05	8:54 AM	95-0031	0.541	13.1	5.2	77	50	7.3	69
06/09/05	8:21 AM	95-0153	1.077	22.6	5.5	90	58	2.4	28
06/28/05	8:36 AM	95-0209	0.996	24.1	5.6	102	66	3.8	45
08/02/05	8:38 AM	95-0316	0.743	19.9	6.0	123	80	4.7	51
08/29/05	2:22 PM	95-0428	**	19.6	--	--	--	8.9 u	43 u
08/30/05	8:41 AM	95-0454	1.049	21.2	5.7	120	78	6.8	77
08/31/05	9:14 AM	95-0429	**	21.7	--	--	--	3.8	45
Weweantic River, Station Wewe01, Unique ID W1386									
05/02/05	1:04 PM	95-0069	0.196	13.5	6.0	94	61	10.6	101
05/03/05	9:24 AM	95-0033	0.555	13.4	5.8	92	60	10.2	98
05/04/05	11:32 AM	95-0072	0.168	13.7	5.9	94	61	10.5	102
05/31/05	5:03 PM	95-0119	0.3	17.8	5.9 c	80	51	8.7	93
06/01/05	1:35 PM	95-0126	0.4	17.1	5.9 c	82	53	9.1 u	94 u
06/09/05	8:48 AM	95-0155	0.846	21.7u	6.0	118 u	77 u	8.3	94
06/27/05	3:41 PM	95-0282	**	23.94u	--	--	--	7.6	90
06/28/05	9:01 AM	95-0211	0.256	22.49u	6.1	135u	88u	7.9	91
06/29/05	12:00 PM	95-0283	**	23.0	--	--	--	7.6	90
08/01/05	1:52 PM	95-0385	**	21.8	--	--	--	7.9	90
08/02/05	9:06 AM	95-0318	0.365	20.8	6.6	151	98	7.9	89
08/03/05	11:37 AM	95-0386	**	22.3	--	--	--	7.5	87
08/29/05	1:55 PM	95-0425	**	22.0	--	--	--	7.1	82
08/30/05	9:11 AM	95-0456	0.738	21.27u	6.1	126	82	7.6	85
08/31/05	9:41 AM	95-0426	**	22.1	--	--	--	7.7	90
Sippican River, Station Sip02, Unique ID W1387									
05/03/05	9:47 AM	95-0035	0.263	12.1	5.3	90	59	8.4	79
05/31/05	4:36 PM	95-0118	0.1	18.5	5.7 c	86	55	8.6 u	93 u
06/09/05	9:09 AM	95-0157	0.488	21.3	5.6	98	63	5.5	62
06/27/05	3:16 PM	95-0279	**	24.3	--	--	--	4.8	57
06/28/05	9:21 AM	95-0213	0.486	23.7	5.9	106	69	4.6	54
06/29/05	11:37 AM	95-0280	**	22.8	--	--	--	4.5	53
08/01/05	1:32 PM	95-0382	**	22.1	--	--	--	4.2 u	49 u
08/02/05	9:28 AM	95-0320	0.367	21.8	6.4	104	68	5.2	59
08/03/05	11:16 AM	95-0383	**	23.1	--	--	--	4.4 u	52 u
08/29/05	1:28 PM	95-0422	**	22.7	--	--	--	4.8	58
08/30/05	9:31 AM	95-0458	0.323	21.6	6.0	212	138	6.5	74
08/31/05	10:03 AM	95-0423	**	22.5	--	--	--	4.6	54

Table 5. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area attended multiprobe data.
See the Appendix at the end of this technical memorandum for definitions of result qualifiers.

Date	Time	OWMID	Sample Depth (meters)	Temperature (°C)	pH (SU)	SpCond (uS/cm)	TDS (mg/l)	DO (mg/l)	DO saturation (%)
Unnamed Tributary to Aucoot Creek, Station MarionUp, Unique ID W1388									
05/03/05	3:08 PM	95-0053	0.069	12.6	5.4	442	287	7.4	70
06/09/05	3:11 PM	95-0182	0.086	16.9	5.7	638	415	6.6	68
06/27/05	12:18 PM	95-0238	0.038	18.1	6.0	664	431	5.2	55
Unnamed Tributary to Aucoot Creek, Station MarionDn, Unique ID W1389									
05/03/05	2:49 PM	95-0056	0.161	14.2	6.7	378	246	8.1	79
06/09/05	2:48 PM	95-0180	0.133	24.0	8.9	430	280	5.5	65
06/27/05	11:52 AM	95-0236	0.147	24.8	9.2	439	285	6.5	79

Table 6. 2005 MassDEP DWM Buzzards Bay Coastal Drainage Area unattended temperature and dissolved oxygen (DO) data.

Station ID	Unique ID	OWM ID	Start Date	End Date	Deploy Hours	Min (°C)	Max (°C)	% Time <20°C	# Hours >28.3°C	Min DO (mg/L)	Max DO (mg/L)	# Hours <5.0 mg/L	Min (%)	Max (%)
Cop02	W1365	95-0083	05/27/05	05/31/05	95.5	12.0	19.6	100%	0	8.7	10.1	0	92	100
		95-0257	06/24/05	06/27/05	71.5	17.4	26.4	42%	0	6.9	8.5	0	80	95
Cop02A	W1399	95-0360	07/29/05	08/01/05	70.5	15.5	23.1	73%	0	6.6	8.9	0	68	104
		95-0394	08/26/05	08/29/05	71.5	13.7	23.6	70%	0	6.2	8.6	0	66	100
Sh01	W1367	95-0084	05/27/05	05/31/05	96.0	11.7	17.7	100%	0	6.1	9.3	0	62	97
		95-0260	06/24/05	06/27/05	71.5	18.0	23.0	35%	0	6.0	7.6	0	69	83
		95-0363	07/29/05	08/01/05	70.0	18.6	21.6	11%	0	5.9	6.9	0	66	77
		95-0397	08/26/05	08/29/05	71.0	18.1	21.4	75%	0	4.7	6.9	5.6	53	76
EBW02	W1368	95-0086	05/27/05	05/31/05	96.5	10.5	18.3	100%	0	8.8	10.8	0	93	100
		95-0251	06/24/05	06/27/05	71.0	20.0	23.8	0	0	7.4	8.2	0	86	92
		95-0354	07/29/05	08/01/05	70.5	20.8	23.0	0	0	6.9	7.4	0	79	85
		95-0388	08/26/05	08/29/05	71.5	17.7	21.1	62%	0	6.7	7.7	0	76	84
BrCh01	W1371	95-0087	05/27/05	05/31/05	96.0	10.7	16.5	100%	0	9.2	11.0	0	94	103
		95-0254	06/24/05	06/27/05	71.5	16.1	22.6	71%	0	7.4	8.9	0	82	95
		95-0357	07/29/05	08/01/05	70.5	18.5	22.4	39%	0	6.6	7.6	0	74	84
		95-0391	08/26/05	08/29/05	71.0	16.9	22.6	92%	0	4.7	10.0	1.4	52	109
Snl02	W1372	95-0089	05/31/05	06/01/05	23.5	12.0	15.2	100%	0	9.4	10.2	0	94	98
		95-0245	06/24/05	06/27/05	71.0	15.2	19.2	100%	0	8.0	9.3	0	87	93
		95-0348	07/29/05	08/01/05	70.5	17.3	19.7	100%	0	6.8	8.4	0	74	89
Snl01	W1373	95-0058	04/29/05	05/02/05	71.0	8.8	14.7	100%	0	8.8	10.6	0	84	99
		95-0088	05/31/05	06/01/05	24.0	12.2	15.7	100%	0	9.5	10.3	0	94	101
		95-0242	06/24/05	06/27/05	70.5	15.1	20.0	100%	0	7.5	9.3	0	82	94
		95-0345	07/29/05	08/01/05	70.5	16.9	21.1	72%	0	--	--	--	--	--
Kirb01	W1374	95-0085	05/27/05	05/31/05	96.5	10.6	16.9	100%	0	8.7	10.5	0	90	98
		95-0248	06/24/05	06/27/05	71.5	15.6	20.1	100%	0	7.3	9.2	0	79	94
		95-0351	07/29/05	08/01/05	70.5	17.3	21.0	71%	0	5.2	7.8	0	57	88
Ang01	W1375	95-0057	04/29/05	05/02/05	71.0	9.0	14.1	100%	0	8.4	11.1	0	77	102
		95-0082	05/27/05	05/31/05	96.5	10.3	15.8	100%	0	9.0	10.7	0	90	101
		95-0239	06/24/05	06/27/05	71.0	14.7	19.1	100%	0	8.0	9.5	0	86	97
		95-0342	07/29/05	08/01/05	70.5	17.2	20.3	88%	0	7.4	8.6	0	81	94
Pask02	W1377	95-0106	05/31/05	06/01/05	21.0	14.9	17.3	100%	0	5.7	7.2	0	58	77
		95-0263	06/27/05	06/29/05	45.0	20.1	23.4	0	0	5.3	6.6	0	59	77
		95-0366	08/01/05	08/03/05	45.5	20.9	23.7	0	0	4.8	5.7	6.7	55	67
		95-0400	08/26/05	08/29/05	71.5	18.7	23.1	20%	0	4.9	7.1	0.9	54	81

Table 6. 2005 MassDEP DWM Buzzards Bay coastal drainage area unattended temperature and dissolved oxygen (DO) data.

Station ID	Unique ID	OWM ID	Start Date	End Date	Deploy Hours	Min (°C)	Max (°C)	% Time <20°C	# Hours >28.3°C	Min (mg/L)	Max (mg/L)	# Hours <5.0 mg/L	Min (%)	Max (%)
Acush04	W1382	95-0067	05/02/05	05/04/05	46.0	13.1	15.8	100%	0	--	--	--	--	--
		95-0109	05/31/05	06/01/05	20.5	16.4	17.9	100%	0	7.9	8.3	0	84	90
		95-0272	06/27/05	06/29/05	44.0	22.7	25.6	0	0	6.0	6.5	0	70	78
		95-0375	08/01/05	08/03/05	45.0	20.0	23.9	0	0	6.1	7.0	0	71	80
		95-0409	08/26/05	08/29/05	71.5	17.6	22.1	40%	0	6.0	7.5	0	67	82
Acush02	W1381	95-0406	08/26/05	08/29/05	71.0	20.1	23.5	0	0	2.8	8.0	31.7	33	93
Acush01	W1380	95-0108	05/31/05	06/01/05	20.5	14.9	17.8	100%	0	8.3	9.4	0	86	101
		95-0372	08/01/05	08/03/05	45.5	20.5	27.0	100%	0	5.0	8.0	0	57	96
But01	W1378	95-0107	05/31/05	06/01/05	21.0	13.1	16.9	100%	0	9.0	10.1	0	92	101
		95-0266	06/27/05	06/29/05	44.5	18.7	22.6	63%	0	7.6	8.5	0	84	97
		95-0384	08/01/05	08/03/05	45.0	20.0	22.6	3%	0	6.4	7.7	0	72	87
		95-0403	08/26/05	08/29/05	71.5	18.1	22.4	69%	0	4.4	15.4	17.2	47	179
Matt07	W1383	95-0068	05/02/05	05/04/05	41.5	10.8	15.4	100%	0	6.9	8.5	0	64	85
		95-0110	05/31/05	06/01/05	20.0	15.0	17.9	100%	0	6.3	8.4	0	64	91
		95-0275	06/27/05	06/29/05	44.0	19.5	23.5	23%	0	6.2	6.9	0	72	79
		95-0378	08/01/05	08/03/05	45.0	20.6	22.5	0	0	6.1	7.1	0	70	81
		95-0415	08/29/05	08/31/05	45.0	20.4	21.8	0	0	4.0	6.6	15.9	45	75
Matt02	W1384	95-0418	08/29/05	08/31/05	45.0	20.4	21.6	0	0	3.0	6.8	7.4	34	77
Wewe10	W1385	95-0427	08/29/05	08/31/05	42.5	19.5	21.7	11%	0	3.8	6.5	14.0	44	74
Wewe01	W1386	95-0066	05/02/05	05/04/05	46.0	13.2	14.1	100%	0	8.5	9.5	0	83	93
		95-0112	05/31/05	06/01/05	20.0	16.6	17.8	100%	0	8.7	9.0	0	91	95
		95-0284	06/27/05	06/29/05	44.0	22.3	23.9	0	0	7.4	7.8	0	86	93
		95-0369	08/01/05	08/03/05	45.5	20.8	23.3	0	0	6.7	8.6	0	77	100
		95-0424	08/29/05	08/31/05	43.5	21.3	22.4	0	0	6.9	7.4	0	79	86
Sip02	W1387	95-0111	05/31/05	06/01/05	20.0	17.6	18.5	100%	0	7.2	8.8	0	78	97
		95-0278	06/27/05	06/29/05	44.0	22.4	24.9	0	0	4.2	5.2	37.3	50	63
		95-0381	08/01/05	08/03/05	45.0	21.8	23.5	0	0	4.6	5.3	34.6	53	62
		95-0421	08/29/05	08/31/05	44.5	21.3	22.8	0	0	4.0	5.6	34.6	47	64

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Appendix: 2005 Data Symbols and Qualifiers

Excerpted from: Data Validation Report for Year 2005 Project Data (CN 295.0)

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, ie. operator error (eg. 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 reagant 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 (eg. sediment in sample, floc formation), lab error (eg. 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