

WATER-QUALITY DATA FOR SELECTED WETLAND STREAMS IN CENTRAL AND EASTERN MASSACHUSETTS

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CONVERSION FACTORS AND WATER-QUALITY INFORMATION

Multiply	By	To obtain
Length		
meter (m)	3.281	foot
kilometer (km)	0.6214	mile
Area		
square kilometer (km ²)	0.3861	square mile
Flow		
cubic meter per second (m ³ /s)	35.31	cubic foot per second
Mass		
gram (g)	0.03527	ounce, avoirdupois
	0.002205	pound, avoirdupois
Temperature		
degree Celsius (°C)	°F = 1.8 × °C + 32	degree Fahrenheit

WATER QUALITY INFORMATION

Chemical concentration in water is expressed in milligrams per liter (mg/L) or micrograms per liter (µg/L). Milligrams and micrograms per liter are units expressing the weight of the solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. Milligrams per liter is approximately equivalent to parts per million. Micrograms per liter is approximately equivalent to parts per billion.

Specific electrical conductance of water is expressed in microsiemens per centimeter at 25 °C (µS/cm).

Water-Quality Data for Selected Wetland Streams in Central and Eastern Massachusetts

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ABSTRACT

This report presents water-quality, physical, and biological data collected at 96 sites on 23 streams throughout central and eastern Massachusetts. The data include pH, alkalinity, biochemical oxygen demand, total drainage area, wetland area, concentrations of chlorophyll a and b, and other water-quality data.

INTRODUCTION

A wide variety of wetlands ranging from small bogs to large marshes are found throughout Massachusetts. These wetlands sustain biological, chemical, and physical processes that affect the quality of waters flowing through them. This report includes information on a variety of contiguous wetland streams and their contributing areas that represent about 1,400 km², and includes parts of 23 drainage basins in central and eastern Massachusetts.

Hydrologic data presented in this report were collected from the late 1960's through the early 1980's by the Massachusetts Department of Environmental Protection, Division of Water

Pollution Control (MDEP, DWPC), formerly known as the Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control (MDEQE, DWPC). The data were collected as part of their stream-water-quality monitoring network (see references cited), and during 1985-89 by the U.S. Geological Survey (USGS) in cooperation with MDEP. The data include selected constituents pertinent to physical, chemical, biological, and wetland characteristics and were obtained at 96 sampling sites on 72 stream reaches (stream segments between consecutive sampling sites).

The purpose of this report is to combine MDEP data from 19 water-quality data reports with supplemental USGS data. The report can be used in water-quality investigations that require a large and diverse water-quality data base.

Selection, Numbering, and Location of Wetland-Stream Sites

Preliminary data collected by the MDEP indicated that under certain hydrologic and seasonal conditions, dissolved-oxygen (DO) concentrations became undersaturated and nutrient concentrations increased in stream

reaches which are contiguous to wetland areas. The Charles, Sevenmile, Shawsheen, and Sudbury Rivers had these characteristics, and as such were included in this investigation. Other streams contiguous to wetlands and suspected of being similarly affected such as the Bungay, Ipswich, and Town Rivers were also included. Some streams with little or no wetland contact such as Robinson Brook and the West Branch Ware River were selected as control streams by the USGS. Site selections generally were restricted to the headwater areas of the streams because these are usually the areas with the largest wetland-to-stream contact as a percentage of total area. Sampling headwater areas also minimizes the cumulative effects of oxygen-consuming point and non-point source inputs. Various physical characteristics of water-surface slope, length, and contributing drainage area were measured and calculated for selected reaches between successive sampling sites.

Selected streams were grouped into four geographic areas (fig. 1). Streams in western Massachusetts were not selected because contiguous wetland areas were minimal due to higher slope values in the hills and mountains. Rainfall patterns in these upland areas also vary from those in central and eastern Massachusetts.

The MDEP had established a site-numbering scheme during their earlier data-collection activities. An attempt to relate MDEP site numbers to those from supplemental USGS data-collection efforts resulted in the creation of a common site-numbering system that incorporated the stream name with a site-sequence number. For example, within the Charles River basin, seven sampling sites were selected and numbered sequentially, 1-7. The basin name is followed by the sequence number that increases in the downstream direction. In tables 1-6 (at back of report), the major river basin name is identified in parentheses for all streams included in this investigation.

The study areas are shown in figure 1. Hydrologic data-collection sites within the study basins are shown in figures 2-5.

Acknowledgments

The author thanks Arthur J. Screpetis from the Massachusetts Department of Environmental Protection, Division of Water Pollution Control, who assisted in providing access to water-quality records. In addition, the author thanks the many persons and organizations who have kindly given their time, information, and guidance to this study.

DESCRIPTION OF WETLAND STREAM SITE-SPECIFIC AND REACH-SPECIFIC WATER-QUALITY DATA

Stream physical characteristic information and water-quality data were collected at 96 sampling sites in central and eastern Massachusetts

Data are arranged in tables 1-6 according to site locations and are assigned unique identifier numbers. A cross-reference list of all sampling sites is provided in table 1. This table includes stream name, river basin name, station identifier number, corresponding area and figure number, USGS downstream order number where applicable, original MDEP station identifier number, and a physical landmark or location with the town name. Subsequent discussions of study sites will use the first column, stream name and station identifier number, to locate and name the sites and reaches.

Water-quality investigations often require physical data to supplement site-specific water-quality data. For each stream, measured physical data, including mean width, reach length, channel slope, drainage area,

wetland area, and ratio of wetland area to drainage area as percent, are provided in table 2.

Miscellaneous water-quality data collected by the MDEP are provided in table 3. These data include alkalinity, pH, turbidity, suspended solids, color, and biochemical oxygen demand (BOD).

All data in tables 3 and 4 were collected, analyzed, and published in a series of stream water-quality data reports by the MDEP (see references cited). Tables 3 and 4 were manually created by transferring selected data from the individual data reports to the tabular form. Quality control of the transferring process was accomplished through spot-check comparisons of approximately 5 percent of the data in tables 3 and 4 with data in the individual data reports. Although no errors were found, the possibility exists for errors in tables 3 and 4.

Both DO and nutrients, especially nitrogen and phosphorus, have a profound effect on stream-water quality. Excess nutrients can accelerate the eutrophication processes in natural and manmade waterbodies and are therefore important factors to consider in any water-quality investigation. A major effort by the MDEP to sample for various compounds of nitrogen and phosphorus has resulted in the creation of a substantial nutrient data base. Nutrient data collected by the MDEP are presented in table 4. These data include nitrogen as ammonia, nitrogen as nitrate, total kjeldahl nitrogen, orthophosphorus, and total phosphorus.

Miscellaneous water-quality data collected by the USGS from 1985 to 1989 are provided in table 5. Included are measurements of temperature, instantaneous discharge, specific conductance, alkalinity, pH, DO, turbidity, calcium, magnesium, sodium, potassium, chloride, sulfate, and iron. Concentrations of dissolved and total nitrogen, phosphorous, organic carbon, chlorophyll-*a*, chlorophyll-*b*,

suspended sediment, BOD, and chemical oxygen demand (COD) also are provided in table 5.

Dissolved-oxygen data for 73 wetland-stream sites are in table 6. Data include dissolved-oxygen concentrations and percentage of saturation values. MDEP data were manually collected at various times throughout the day, and the USGS data were obtained by use of field instruments that recorded hourly dissolved-oxygen concentrations and water temperatures.

DATA-COLLECTION METHODS

The MDEP data were collected using standard techniques developed or adopted by the MDEP. Data collected by the USGS follow standard techniques that are published in a series of TWRI (Techniques of Water-Resources Investigations) manuals. Many types of USGS data-collection methods and calculations were used to assess site-specific and reach-specific water-quality constituents.

Instantaneous discharge and mean width were measured directly or interpolated between sites. Methods for making the measurements are described by Buchanan and Somers (1969).

Physical attributes of reach length, channel slope, drainage area, and wetland area were determined for each stream and reach by the Massachusetts Geographic Information System (MassGIS) developed by the Massachusetts Executive Office of Environmental Affairs and the USGS. MassGIS utilizes a digital mapping system based on the series of Massachusetts USGS topographic maps, at a scale of 1:25,000. Wetland areas (combined areas of ponds and wetlands), are based on data tabulated from aerial photographs taken in 1985.

Specific conductance, pH, and dissolved oxygen were measured at the field sites. Continuous hourly dissolved-oxygen and temperature data were recorded by multi-constituent monitors.

Water-quality analyses for alkalinity (fixed-endpoint to 4.0 standard pH units), and turbidity were done at the Marlborough, Massachusetts USGS water-quality laboratory. Samples requiring suspended-sediment determinations were analyzed at the Harrisburg, Pennsylvania USGS water-quality laboratory. Water samples were analyzed for major solutes at the National Water-Quality Laboratory, Arvada, Colorado; analysis methods for major solutes are described by Skougstad and others (1979).

Analyses of BOD (5-day), COD, and chlorophyll-*a* and *b* were done by the DEP Lawrence Experiment Station, Lawrence, Massachusetts. Measurements of chlorophyll-*a* and *b* are described by Greeson and others (1977). Attempts to filter the chlorophyll samples at the sampling sites, as recommended by Greeson and others (1977), were unsuccessful due to high concentrations of suspended matter in the chlorophyll water samples that clogged the hand-operated pump. Consequently, samples were filtered with an electrically operated pump at the Marlborough, Massachusetts USGS water-quality laboratory several hours after collection. Samples were then delivered to the Lawrence Experiment Station for analysis. The delay between sampling and filtration may have adversely affected the analyses of the samples (Greeson and others, 1977, 217 p.). For this reason, the chlorophyll-*a* and *b* values are qualified as estimated.

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- _____, 1979, Concord and Sudbury Rivers.
- _____, 1979, Millers River.
- _____, 1979, Upper Quaboag River Basin.
- _____, 1980, Millers River.

____ 1981, Upper Charles River Basin.

____ 1981, Millers River.

Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control, 1982, Water quality data and wastewater discharge data, Millers River Basin.

Skougstad, M.W., Fishman, M.J., Friedman, L.C., Erdmann, D.E., and Duncan, S.S., eds., 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A1, 626 p.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined as follows:

Alkalinity is a measure of the capacity of solutes in a solution to react with and neutralize acid.

Biochemical oxygen demand (BOD) is a measure of the biological consumption of dissolved oxygen, usually through digestive processes of bacteria and other organisms. Incubation of water samples for a period of time is required for the analysis.

Channel slope is a ratio of the change in elevation of the water surface for a given study-reach length. It can be expressed as a unit elevation change per unit distance or as a unitless value. Elevation is derived from USGS topographic maps.

Chemical oxygen demand (COD) is a faster method for determining oxygen consumption. An oxidizing agent and heat are added to the sample in order to speed the biological and chemical reactions;

however, the results must be interpreted in a slightly different manner than those for BOD due to the nature of the analysis.

Color is expressed in units of the platinum-cobalt scale proposed by Hazen (1892, p.427-428). A unit of color is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given time.

Dissolved oxygen is a measure of a unit mass of oxygen dissolved in a unit volume of water, and is expressed in milligrams O₂ per liter water.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane enclosed by a topographic divide, from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures and values of drainage area given herein are for those of the respective reach.

Instantaneous discharge is the discharge at a particular instant of time.

Mean width is the average width of the stream for a given reach.

pH is a measure of the relative concentration of hydrogen ions in a solution; values range from 0 to 14--the lower the value, the more acidic the solution; that is, the more hydrogen ions it contains.

Percentage of saturation is the relative amount of dissolved oxygen in water as allowed by the constraining factors of temperature, atmospheric pressure, and dissolved solids.

Reach length is the stream distance between successive stream sampling sites.

Specific conductance is a measure of the ability of water to conduct an electrical current and is expressed in microsiemens per centimeter at 25 degrees Celsius.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended solids are any materials that remain on a standard glass-fiber filter after raw water sample is filtered and

dried at 103-105 degrees Celsius.

Turbidity is a measure of the clarity of water. It is measured by determining the light-scattering ability of a sample of water in response to the amount of suspended and dissolved sediment in the sample.

Wetland area is the part of the drainage area that contains flora and fauna normally found in wetlands, and exhibit typical wetland characteristics. These areas can be either temporarily or permanently inundated during the year.

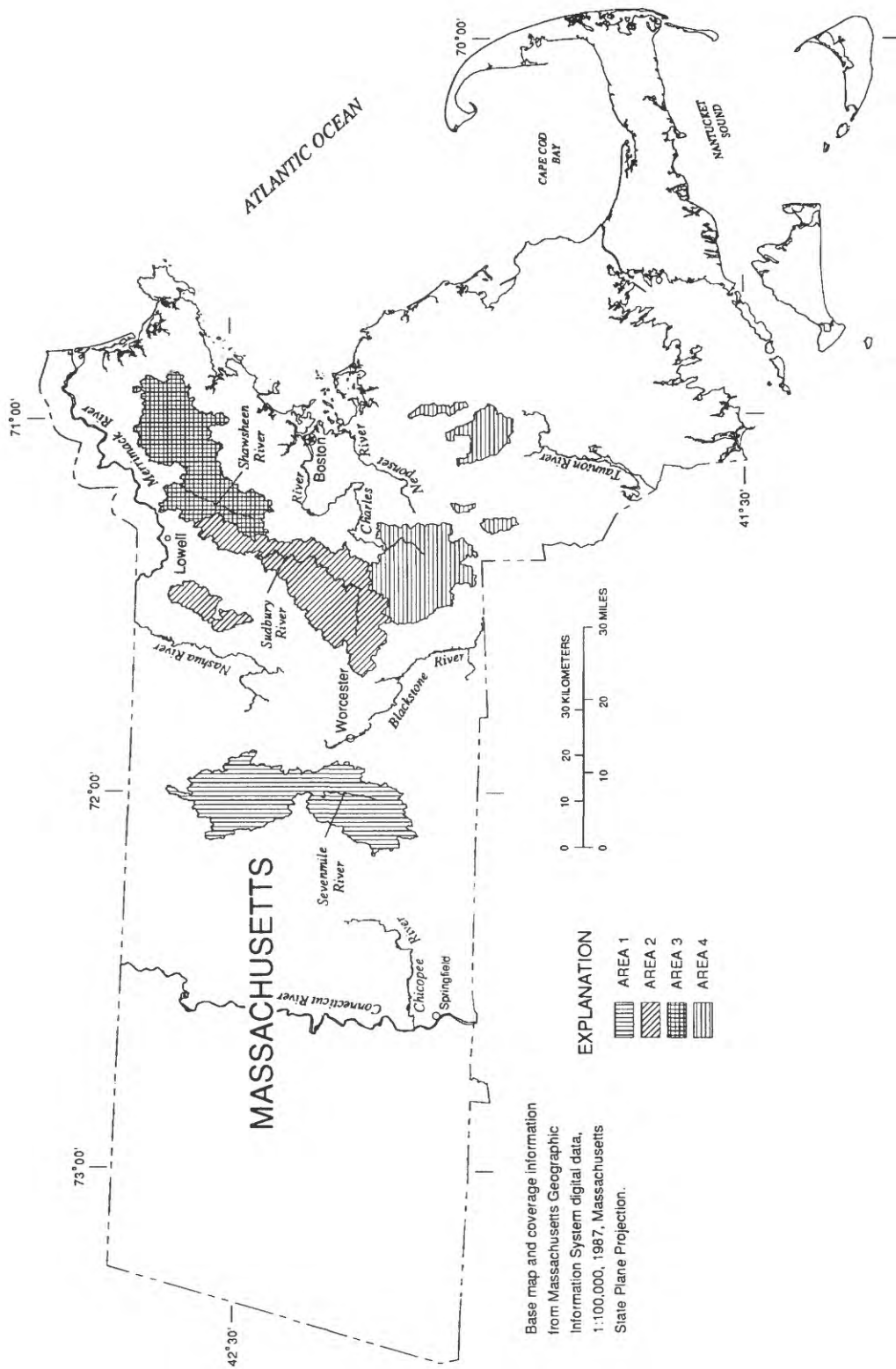


Figure 1.--Location of wetland-stream study areas.

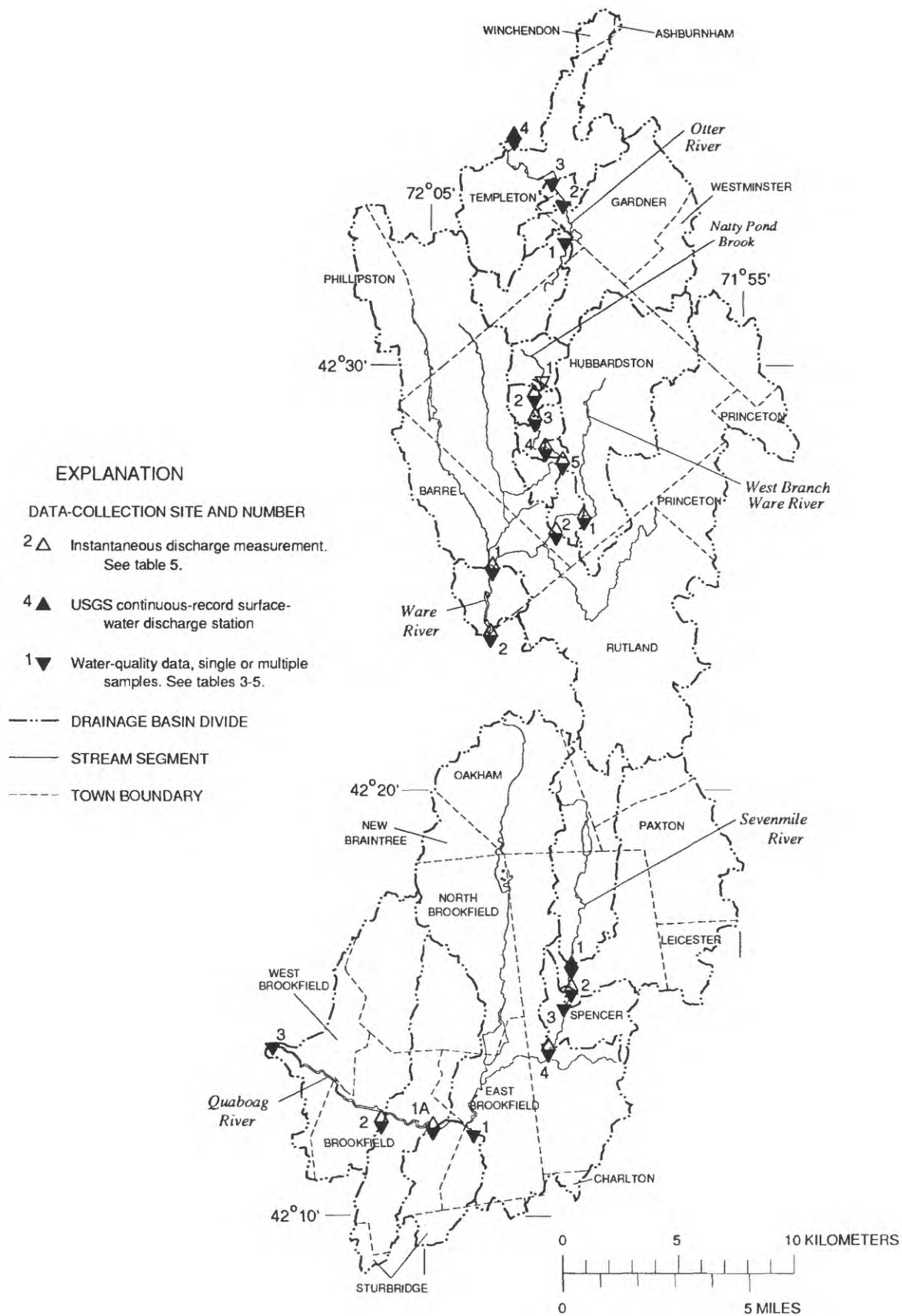


Figure 2.--Hydrologic data-collection sites and contributing drainage-basin divides in Area 1.

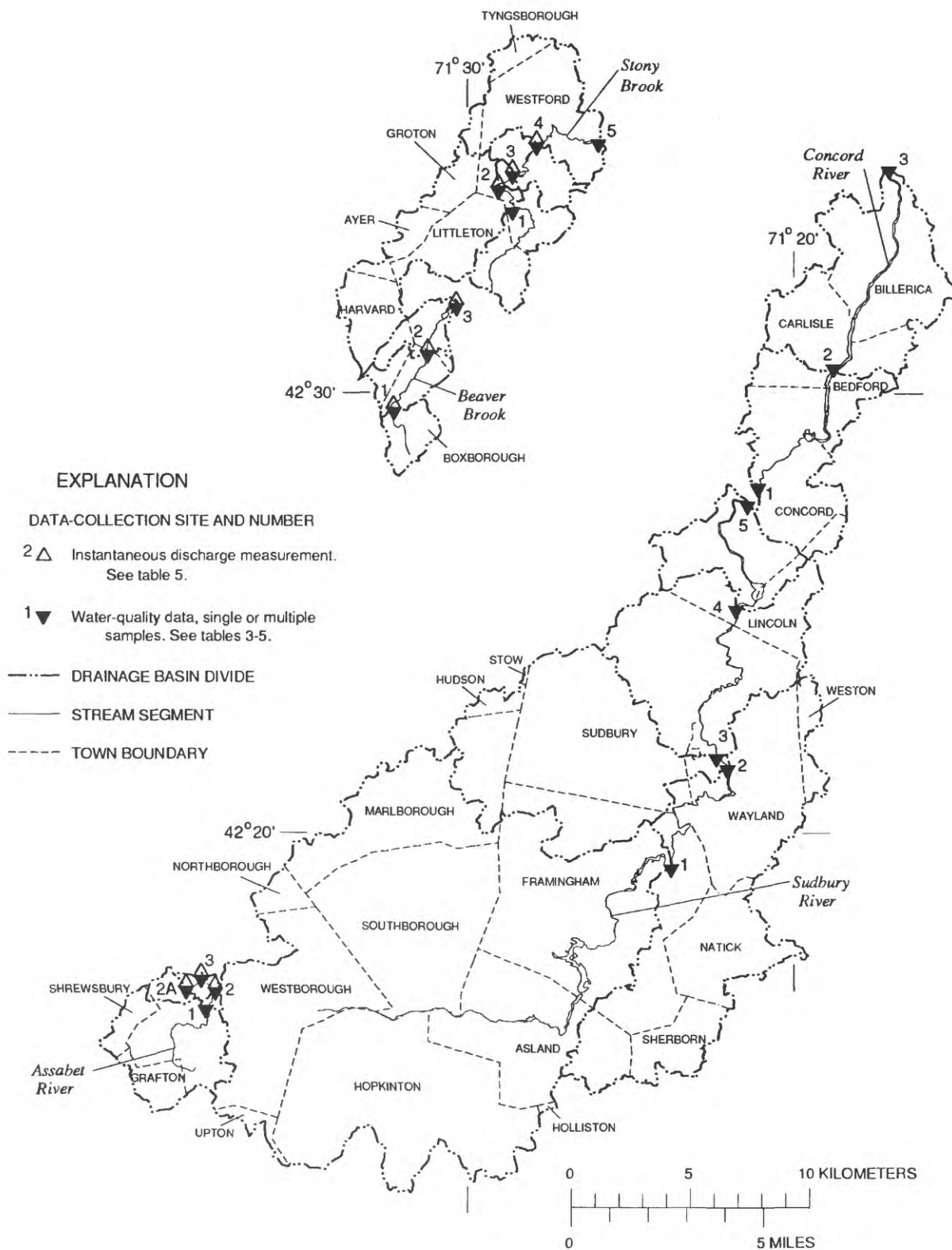


Figure 3.--Hydrologic data-collection sites and contributing drainage-basin divides in Area 2.

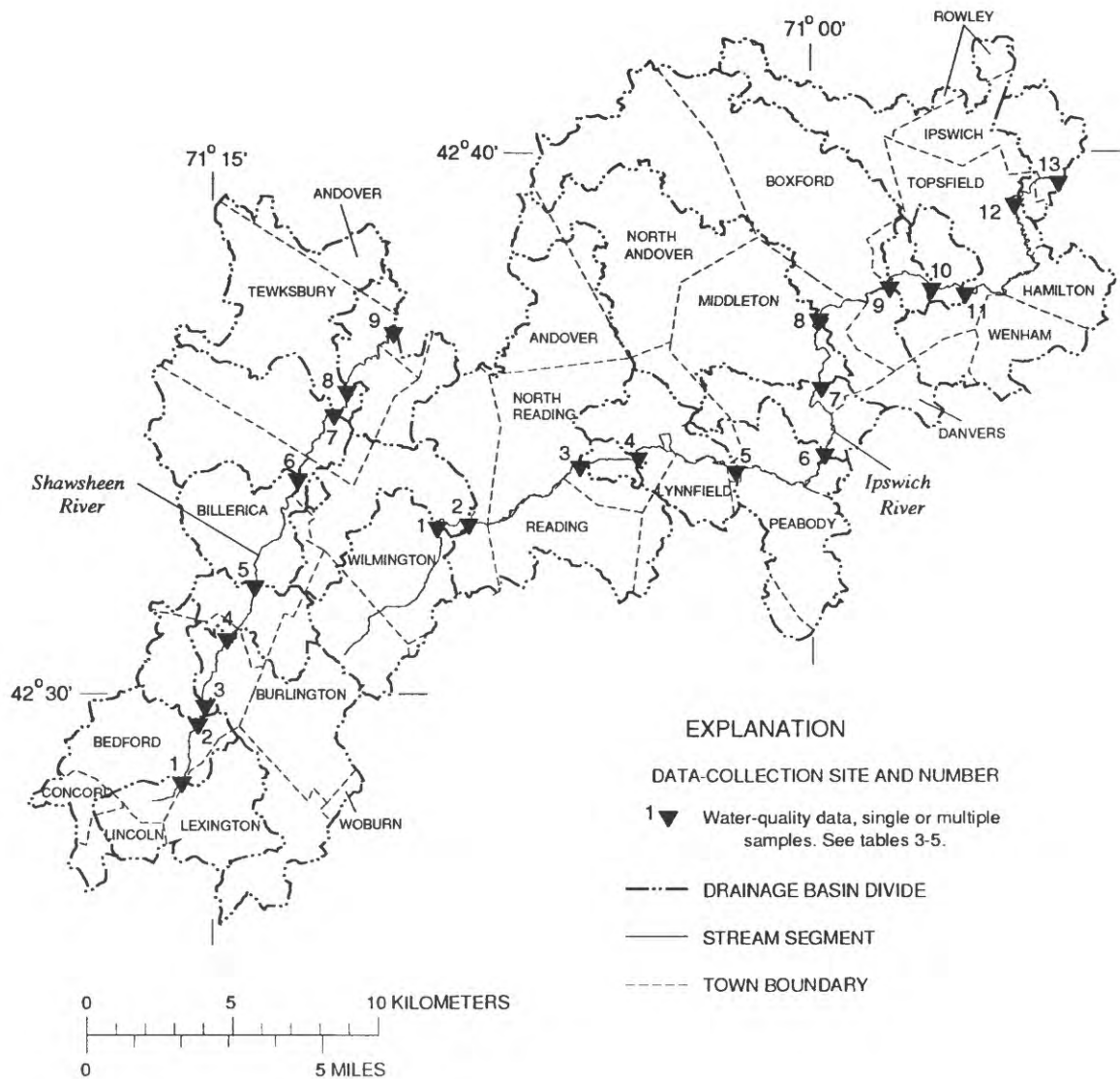


Figure 4.--Hydrologic data-collection sites and contributing drainage-basin divides in Area 3.

EXPLANATION

DATA-COLLECTION SITE AND NUMBER

2 Δ Instantaneous discharge measurement.
See table 5.

1 \blacktriangledown Water-quality data, single or multiple
samples. See tables 3-5.

--- DRAINAGE BASIN DIVIDE

— STREAM SEGMENT

--- TOWN BOUNDARY

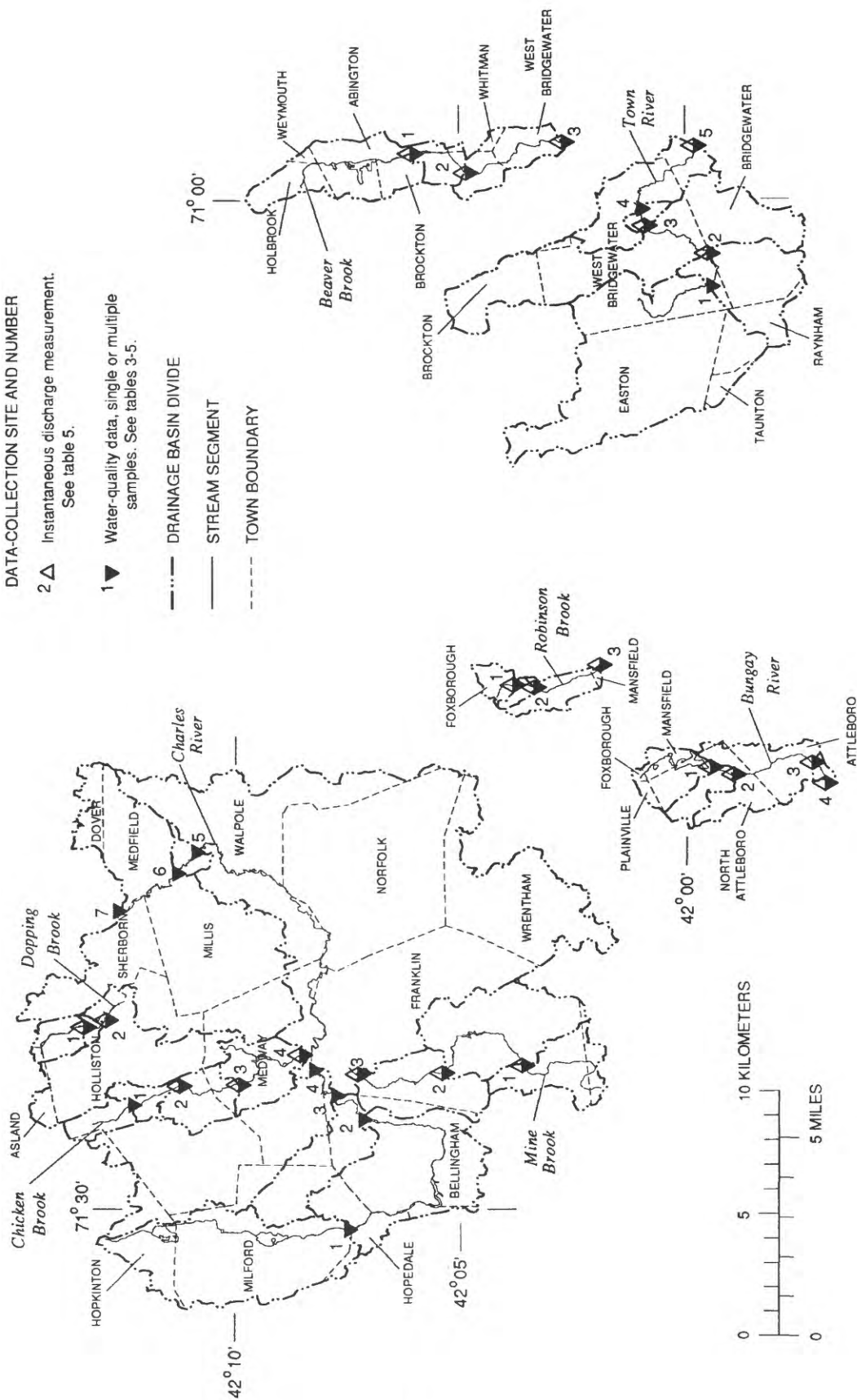


Figure 5.--Hydrologic data-collection sites and contributing drainage-basin divides in Area 4.

Table 1.--Site information for wetland-stream sampling sites

[Stream names and site Nos. are shown in figures 2-5. USGS site No.: Sites with (gage) indicates that site is a U. S. Geological Survey continuous-record stream-gaging station; MDEP, Massachusetts Department of Environmental Protection; --, no number assigned]

Stream name, (river basin name) and site No.	USGS site No.	MDEP site No.	Location
AREA 1			
Natty Pond Brook (Ware)			
1	01172685	--	At Natty Pond outlet, Hubbardston
2	01172690	--	0.4 mi downstream from bridge on New Templeton Rd, Hubbardston
3	01172695	--	At Tanyard Pond inlet, Hubbardston
4	01172730	--	800 ft downstream from Parson Rd, Hubbardston
5	01172750	--	Dirt road crossing, 770 ft west of Barre Rd, Hubbardston
Otter River (Millers)			
1	01162700	OT08	Whitney St, Templeton
2	01162900	OT07	Rt 2A, Gardner
3	01163000	OT06	Rt 101, Templeton
4	01163200 (gage)	OT05	Turner St, Gardner
Quaboag River (Ware)			
1	01175672	QA03	Shore Rd, East Brookfield
1A	01175745	--	Quaboag Pond outlet, Brookfield
2	01175765	QA04	Fiskdale Rd, Brookfield
3	--	QA05	Rt 67, West Brookfield
Sevenmile River (Quaboag)			
1	01175670 (gage)	--	Cooney Rd, Spencer
2	01175672	QA01	Rt 31, Spencer
3	01175673	--	Smithville Rd, Spencer
4	01175677	QA01A	Rt 9, Spencer
Ware River (Chicopee)			
1	01172880	--	Covered Bridge Rd, Barre
2	01172940	WA01	Rt 122, Barre
West Branch Ware River (Ware)			
1	01172396	--	Twin Hill Rd, Hubbardston
2	01172398	--	Brigham Rd, Hubbardston
AREA 2			
Assabet River (Concord)			
1	--	AS01	Augmentation Pond dam intake, Westborough
2	01096602	AS02	Maynard St, Westborough
2A	010966025	AS03T	Hocomonco Pond outlet, Westborough
3	01096603	--	Westborough treatment plant, Westborough
Beaver Brook (Merrimack)			
1	01096534	--	Swanson Rd, Boxborough
2	01096535	--	Harvard Sportsman's Club, Boxborough
3	01096537	--	Harwood Ave, Littleton

Table 1.--Site information for wetland-stream sampling sites--*Continued*

Stream name, (river basin name) and site No.	USGS site No.	MDEP site No.	Location
AREA 2--Continued			
Concord River (Merrimack)			
1	--	CO01	Lowell Rd, Concord
2	--	CO02	Rt 225, Bedford
3	--	CO03	Pollard Ave, Billerica
Stony Brook (Merrimack)			
1	--	ST03	Beaver Brook Rd, Westford
2	01096539	ST04	Rt 225, Westford
3	01096540	ST05	Town Farm Rd, Westford
4	01096541	ST06	Broadway St, Westford
5	--	ST07	Plain Rd, Westford
Sudbury River (Concord)			
1	--	SU06	Elm St, Framingham
2	--	SU07	Pelham Island Rd, Wayland
3	--	SU08	Rt 20, Wayland
4	--	SU09	Rt 117, Lincoln
5	--	SU10	Nashawtuc Rd, Concord
AREA 3			
Ipswich River (Ipswich)			
1	--	I01	Wildwood St, Wilmington
2	--	I02	Woburn St, Wilmington
3	--	I03	Chestnut St, North Reading
4	--	I04	East St, North Reading
5	--	I05	Above dam, Middleton
6	--	I06	Rt 114, Middleton
7	--	I07	Rt 62, Middleton
8	--	I08	Peabody St, Middleton
9	--	I09	Rowley Bridge Rd, Topsfield
10	--	I10	Salem Rd, Topsfield
11	--	I11	Rt 97, Topsfield
12	--	I12	Hamilton Rd, Topsfield
13	--	I13	Willowdale Dam, Ipswich
Shawsheen River (Merrimack)			
1	--	SH01	Maguire Rd, Bedford
2	--	SH02	Page Rd, Bedford
3	--	SH03	Rt 62, Bedford
4	--	SH05	Middlesex Tpk, Bedford
5	--	SH06	Rt 3A, Billerica
6	--	SH07	Rt 129, Billerica
7	--	SH08	Rt 38, Tewksbury
8	--	SH09	Mill St, Tewksbury
9	--	SH10	Rt 93, Tewksbury

Table 1.--Site information for wetland-stream sampling sites--*Continued*

Stream name, (river basin name) and site No.	USGS site No.	MDEP site No.	Location
AREA 4			
Beaver Brook (Taunton)			
1	01106445	BE01	Groveland St, Brockton
2	01106450	BE02	Crescent St, Brockton
3	01106460	BE03	Belmont St, East Bridgewater
Bogastow Brook (Charles)			
1	01103388	DB03	Fiske St, Holliston
Bungay River (Ten Mile)			
1	01109360	BG01	Above fish hatchery, North Attleborough
2	01109365	BG03	Below fish hatchery, North Attleborough
3	01109369	BG04	Holden St, Attleboro
4	01109375	BG05	North Main St, Attleboro
Charles River (Charles)			
1	--	CH01	Howard St, Milford
2	--	CH05	Maple St, Bellingham
3	--	CH06	Beech St, Bellingham
4	--	CH07	Pond St, Franklin
5	--	CH11	Rt 109, Medfield
6	--	CH12	Dover St, Medfield
7	--	CH13	Rt 27, Medfield
Chicken Brook (Charles)			
1	--	CB01	Prentice St, Holliston
2	01103250	CB02	Rts 16, and 126, Holliston
3	01103251	CB03	Lovering St, Medway
4	01103253	CB04	Village St, Medway
Dopping Brook (Charles)			
1	01103384	DB01	Brook St, Holliston
2	01103386	DB02	Whitney St, Holliston
Hockomock River (Taunton)			
1	01107053	TW01	Maple St, West Bridgewater
Mine Brook (Charles)			
1	01103229	--	Grove St, Franklin
2	01103235	MN00	Rt 140, Franklin
3	01103239	MN01	Beech St, Franklin
Robinson Brook (Taunton)			
1	01109026	RB01	Cocassett St, Foxborough
2	01109027	RB02	Rt 140, Foxborough
3	01109030	RB03	Central St, Mansfield
Town River (Taunton)			
1	01107053	TW01	Maple St, West Bridgewater
2	01107065	TW02	Scotland St, West Bridgewater
3	01107085	TW03	South St, West Bridgewater
4	--	TW04	Rt 28, West Bridgewater
5	01107100	TW05	Rt 18, Bridgewater

Table 2.--Physical data for wetland-stream reaches

[Stream names and station identifier numbers are located in figures 2-5; m, meter; m/m, meter per meter; km², square kilometer]

Stream name, (river basin name) and site No.	Mean width (m)	Reach length (m)	Channel slope (m/m)	Drainage area (km ²)	Wetland area (km ²)	Ratio of wetland area to drainage area (percent)
AREA 1						
Natty Pond Brook (Ware)						
1 - 2	8.2	355	0.0001	0.23	0.01	2
2 - 3	4.0	1,390	.0050	2.56	.33	13
4 - 5	7.2	870	.0001	.64	.15	23
Otter River (Millers)						
1 - 2	19.8	2,920	.0003	38.05	2.58	7
2 - 3	13.8	1,370	.0003	2.09	.20	10
3 - 4	12.2	4,790	.0010	29.54	2.08	7
Quaboag River (Ware)						
1 - 1A	25.5	2,520	.0002	13.88	0.76	5
1A - 2	48.6	2,660	.0002	30.41	2.42	8
2 - 3	44.1	6,620	.0002	43.51	3.21	7
Sevenmile River (Quaboag)						
1 - 2	7.6	1,150	.0023	47.29	3.30	7
2 - 3	11.6	658	.0013	.50	.00	0
3 - 4	17.4	2,426	.0009	10.19	.76	7
Ware River (Chicopee)						
1 - 2	27.7	3,420	.0006	7.28	.36	5
West Branch Ware River (Ware)						
1 - 2	8.1	1,950	.0039	3.38	.01	0
AREA 2						
Assabet River (Concord)						
1 - 2	4.4	909	.0010	.52	.00	0
2A - 3	3.4	970	.0004	1.21	.04	4
2 - 3	3.4	1,030	.0010	1.21	.04	4
Beaver Brook (Merrimack)						
1 - 2	10.1	3,160	.0014	6.21	.62	10
2 - 3	10.7	2,730	.0009	4.95	.44	9
Concord River (Merrimack)						
1 - 2	61.9	7,700	.0002	31.12	4.97	16
2 - 3	66.4	9,930	.0003	39.86	4.02	10
Stony Brook (Merrimack)						
1 - 2	19.7	1,530	.0003	26.31	2.53	10
2 - 3	19.6	840	.0046	.75	.02	3
3 - 4	67.4	2,520	.0009	6.47	.59	9
4 - 5	51.2	3,860	.0016	21.36	1.54	7

Table 2.--Physical data for wetland-stream reaches

Stream name, (river basin name) and site No.	Mean width (m)	Reach length (m)	Channel slope (m/m)	Drainage area (km ²)	Wetland area (km ²)	Ratio of wetland area to drainage area (percent)
AREA 2--Continued						
Sudbury River (Concord)						
1 - 2	35.9	8,790	0.0001	79.75	8.58	11
2 - 3	42.4	806	.0001	58.18	5.54	10
3 - 4	47.2	10,200	.0001	44.41	10.30	23
4 - 5	39.4	6,950	.0001	16.22	2.34	14
AREA 3						
Ipswich River (Ipswich)						
1 - 2	5.1	1,360	.0004	15.73	1.15	7
2 - 3	6.0	5,360	.0005	59.37	5.14	9
3 - 4	17.4	2,220	.0006	2.27	.03	1
4 - 5	14.8	4,410	.0007	14.64	.45	3
5 - 6	14.0	4,750	.0004	20.94	2.25	11
6 - 7	10.8	3,660	.0004	10.61	1.10	10
7 - 8	13.0	3,250	.0026	46.88	3.42	7
8 - 9	12.4	3,460	.0003	59.83	2.30	4
9 -10	13.4	2,260	.0003	3.13	.12	4
10 -11	21.8	1,560	.0003	4.99	.12	2
11 -12	26.3	8,740	.0003	56.10	6.88	12
12 -13	26.3	2,020	.0003	7.61	.24	3
Shawsheen River (Merrimack)						
1 - 2	8.5	2,430	.0012	18.61	.30	2
2 - 3	5.5	579	.0012	6.21	.49	8
3 - 4	9.6	2,680	.0010	29.95	1.39	5
4 - 5	23.4	2,470	.0005	8.91	.44	5
5 - 6	17.1	4,860	.0004	14.04	.58	4
6 - 7	14.5	3,010	.0006	24.18	1.53	6
7 - 8	12.0	1,410	.0006	24.90	1.29	5
8 - 9	16.4	3,990	.0005	13.76	.38	3
AREA 4						
Beaver Brook (Taunton)						
1 - 2	20.3	2,610	.0024	3.04	.25	8
2 - 3	5.1	5,070	.0031	6.84	.16	2
Bungay River (Ten Mile)						
1 - 2	7.2	853	.0005	2.82	.02	1
2 - 3	8.3	3,910	.0005	10.12	.36	4
3 - 4	11.2	1,080	.0005	.60	.12	20
Charles River (Charles)						
1 - 2	13.0	12,000	.0010	24.64	1.83	7
2 - 3	29.4	2,130	.0026	11.03	.39	4
3 - 4	10.3	1,920	.0012	30.76	1.60	5

Table 2.--Physical data for wetland-stream reaches

Stream name, (river basin name) and site No.	Mean width (m)	Reach length (m)	Channel slope (m/m)	Drainage area (km ²)	Wetland area (km ²)	Ratio of wetland area to drainage area (percent)
AREA 4--Continued						
Charles River--Continued						
(Charles)						
4 - 5	22.5	20,000	.0009	129.28	13.16	10
5 - 6	47.7	1,580	.0001	1.80	.50	28
6 - 7	31.6	4,410	.0001	58.75	6.16	10
Chicken Brook						
(Charles)						
1 - 2	5.7	2,030	0.0012	2.57	0.05	2
2 - 3	27.3	3,120	.0027	5.82	.12	2
3 - 4	14.6	4,170	.0032	7.27	.37	5
Dopping Brook						
(Charles)						
1 - 2	13.3	891	.0029	.70	.03	4
Mine Brook						
(Charles)						
1 - 2	13.9	5,620	.0027	17.62	1.12	6
2 - 3	11.3	4,340	.0011	10.56	.94	9
Robinson Brook						
(Taunton)						
1 - 2	3.2	885	.0064	.88	.01	1
2 - 3	4.3	3,060	.0071	3.92	.10	2
Town River						
(Taunton)						
1 - 2	4.5	2,100	.0004	12.54	3.01	24
2 - 3	17.9	3,560	.0002	30.78	1.27	4
3 - 4	16.1	883	.0012	1.23	.00	0
4 - 5	2.9	4,830	.0013	10.92	.41	4

Table 3.--Miscellaneous water-quality data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection

[Stream names and station identifiers are shown in figures 2-5; all values represent average concentrations of multiple samples except as indicated by the letters c, (composite sample concentration) and s, (single sample concentration); mg/L, milligram per liter; NTU, nephelometric-turbidity units; Pt-Co units, platinum-cobalt units]

Stream name, (river basin name) and site No.	Date	Alkalinity, total (mg/L as CaCO ₃)	pH (field measurement, standard units)	Turbidity (NTU)	Suspended solids (mg/L)	Color (Pt-Co units)	Biochemical oxygen demand (mg/L)
AREA 1							
Otter River (Millers)							
1	June 18-19, 1979	3	5.9s	1.7	7.0	1.5	2.7
	Aug 20-21, 1979	2	5.6s	1.2	1.5	3.0	1.7
	June 23-24, 1980	3c	5.8c	1.8c	5.0c	180c	2.7c
	July 21-22, 1980	5c	5.8c	1.5c	6.0c	100c	4.5c
	July 27-28, 1981	4c	5.4c	1.3c	6.5c	100c	3.0c
	July 28-29, 1982	7c	6.3c	.6c	4.0c	--	8.4
	Aug 30-31, 1982	2c	5.7c	1.2c	9.0c	100c	3.3c
2	June 18-19, 1979	9	6.7s	5.2	12	22	2.7
	Aug 20-21, 1979	6	6.6s	3.0	3.5	17	2.3
	June 23-24, 1980	6c	7.0c	6.1c	12c	160c	2.7c
	July 21-22, 1980	13c	6.7c	4.4c	7.5c	100c	2.7c
	July 27-28, 1981	4c	5.5c	3.0c	8.0c	90c	1.8c
	July 28-29, 1982	12c	6.3c	2.3c	7.0c	100c	6.3c
	Aug 30-31, 1982	7c	6.4c	4.3c	9.5c	70c	2.4c
3	June 18-19, 1979	20	7.0s	8.2	13	29	6.3
	Aug 20-21, 1979	14	6.8s	4.4	5.5	23	4.2
	June 23-24, 1980	22c	7.1c	8.8c	10c	100c	7.8c
	July 21-22, 1980	46c	7.3c	5.3c	9.5c	100c	7.8c
	July 27-28, 1981	14c	7.0c	4.2c	14.5c	100c	5.1c
	July 28-29, 1982	12c	6.3c	2.7c	11c	100c	9.3c
	Aug 30-31, 1982	20c	7.0c	6.3c	9.0c	90c	6.9c
4	June 18-19, 1979	18	7.0s	6.2	14	27	5.0
	Aug 20-21, 1979	9	6.8s	4.3	6.0	21	4.1
	June 23-24, 1980	20c	7.5c	6.6c	10c	100c	5.4c
	July 21-22, 1980	28c	7.1c	4.1c	11c	90c	9.0c
	July 27-28, 1981	8c	5.9c	4.0c	6.5c	100c	3.1c
	July 28-29, 1982	9c	6.4c	3.6c	22c	--	8.7c
	Aug 30-31, 1982	24c	7.3c	5.2c	6.5c	80c	8.4c
Quaboag River (Ware)							
1	July 16-18, 1974	16	7.0s	--	2.5	--	1.3
	July 23-25, 1979	13	7.0s	2.4	4.2	--	2.5
2	July 16-18, 1974	14	7.0s	--	1.5	--	1.5
	July 23-25, 1979	12	7.2s	2.2	3.3	--	2.8
3	July 16-18, 1974	14	7.2s	--	1.3	--	1.6
Sevenmile River (Quaboag)							
2	July 16-18, 1974	14	7.2s	--	1.0	--	1.0
4	July 16-18, 1974	16	7.5s	--	1.0	--	1.4

Table 3.--Miscellaneous water-quality data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name) and site No.	Date	Alkalinity, total (mg/L as CaCO ₃)	pH (field measurement, standard units)	Turbidity (NTU)	Suspended solids (mg/L)	Color (Pt-Co units)	Biochemical oxygen demand (mg/L)
AREA 2							
Assabet River (Concord)							
1	June 4-6, 1974	20	6.9s	--	25.0	--	4.2
	Sept 17-19, 1974	10	6.2s	--	11.5	--	6.6
2	June 4-6, 1974	20	6.9s	--	9.0	--	4.1
	Sept 17-19, 1974	10	6.7s	--	11.5	--	4.2
2A	June 4-6, 1974	28	7.3s	--	4.5	--	2.0
	Sept 17-19, 1974	28	6.9s	--	6.0	--	1.5
Concord River (Merrimack)							
1	June 11-13, 1979	--	7.2s	2.7	4.5	--	2.0
	Aug 13-15, 1979	--	7.2s	1.8	4.8	--	1.4
2	July 10-12, 1973	24	7.4s	--	5.0	--	2.2
	Aug 28-30, 1973	26	6.8s	--	8.0	--	5.4
	June 11-13, 1979	--	7.2s	2.9	5.3	--	1.4
	Aug 13-15, 1979	--	7.1s	1.8	2.0	--	1.5
3	July 10-12, 1973	23	7.1s	--	4.5	--	2.3
	Aug 28-30, 1973	25	6.8s	--	10.0	--	3.9
Stony Brook (Merrimack)							
1	June 25-27, 1974	33	7.3s	--	4	--	1.4
	Aug 27-29, 1974	46	7.6s	--	8	--	3.8
2	June 25-27, 1974	22	7.3s	--	12	--	1.6
	Aug 27-29, 1974	30	7.3s	--	8	--	3.6
3	June 25-27, 1974	26	7.4s	--	4	--	2.0
	Aug 27-29, 1974	32	7.3s	--	9	--	3.2
4	June 25-27, 1974	26	7.5s	--	2	--	2.4
	Aug 27-29, 1974	34	7.5s	--	6	--	3.0
5	June 25-27, 1974	24	7.3s	--	4	--	2.1
	Aug 27-29, 1974	34	7.4s	--	10	--	2.8
Sudbury River (Concord)							
1	July 10-12, 1973	17	7.0s	--	1.0	--	2.5
	Aug 28-30, 1973	26	7.1s	--	6.5	--	4.4
	June 11-13, 1979	--	7.2s	2.4	3.3	--	2.0
	Aug 13-15, 1979	--	7.0s	2.8	2.5	--	1.2
2	July 10-12, 1973	21	7.0s	--	4.0	--	3.6
	Aug 28-30, 1973	30	6.6s	--	11.0	--	3.6
	June 11-13, 1979	--	7.0s	2.1	3.5	--	1.8
	Aug 13-15, 1979	--	7.0s	2.4	3.5	--	1.4
3	July 10-12, 1973	22	7.0s	--	2.5	--	3.2
	Aug 28-30, 1973	30	6.8s	--	8.5	--	4.0
	June 11-13, 1979	--	7.1s	2.3	3.3	--	1.1
	Aug 13-15, 1979	--	7.0s	2.1	3.3	--	2.0
4	July 10-12, 1973	25	7.2s	--	3.0	--	3.9
	Aug 28-30, 1973	28	7.0s	--	15.0	--	7.5
	June 11-13, 1979	--	7.1s	2.4	4.0	--	2.0
	Aug 13-15, 1979	--	6.9s	1.9	2.5	--	2.0

Table 3.--Miscellaneous water-quality data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name) and site No.	Date	Alkalinity, total (mg/L as CaCO ₃)	pH (field measurement, standard units)	Turbidity (NTU)	Suspended solids (mg/L)	Color (Pt-Co units)	Biochemical oxygen demand (mg/L)
AREA 2--Continued							
Sudbury River--Continued (Concord)							
5	July 10-12, 1973	26	6.9s	--	13.0	--	3.9
	Aug 28-30, 1973	26	6.9s	--	19.5	--	6.2
	June 11-13, 1979	--	7.0s	2.5	4.5	--	1.7
	Aug 13-15, 1979	--	7.1s	2.0	3.0	--	1.4
AREA 3							
Ipswich River (Ipswich)							
1	June 5-7, 1973	34	7.2s	--	4.5	--	2.0
	Aug 14-16, 1973	43	6.8s	--	14.5	--	2.6
2	June 5-7, 1973	20	7.1s	--	5	--	1.8
	Aug 14-16, 1973	21	6.6s	--	27.5	--	4.1
3	June 5-7, 1973	20.5	7.2s	--	4.5	--	1.7
	Aug 14-16, 1973	44	6.6s	--	18.5	--	2.1
4	June 5-7, 1973	22	7.1s	--	5.0	--	1.8
	Aug 14-16, 1973	27.5	6.6s	--	6	--	2.0
	Sept 12-14, 1978	28	6.8s	3.5	1.5	--	.7
5	June 5-7, 1973	23.5	7.2s	--	5	--	2.7
	Aug 14-16, 1973	28.5	6.8s	--	5.5	--	2.1
	Sept 12-14, 1978	32	7.0s	1.4	2.0	--	.8
6	June 5-7, 1973	23.5	7.2s	--	4	--	2.3
	Aug 14-16, 1973	36.5	6.9s	--	6.5	--	1.2
	Sept 12-14, 1978	50	7.1s	1.2	0.8	--	0.9
7	June 5-7, 1973	26.5	7.0s	--	4.5	--	1.6
	Aug 14-16, 1973	36.5	6.8s	--	4.5	--	1.2
	Sept 12-14, 1978	50	7.3s	1.8	1.5	--	1.1
8	June 5-7, 1973	24.5	7.4s	--	5.0	--	2.1
	Aug 14-16, 1973	33	6.9s	--	2	--	1.7
	Sept 12-14, 1978	49	8.4s	1.4	1.2	--	.8
9	June 5-7, 1973	23.5	7.3s	--	3.5	--	2.1
	Aug 14-16, 1973	34.5	6.8s	--	3	--	1.5
	Sept 12-14, 1978	45	7.3s	1.5	1.8	--	.8
10	June 5-7, 1973	22.5	7.3s	--	2.5	--	2.3
	Aug 14-16, 1973	36.5	7.0s	--	2.5	--	.9
	Sept 12-14, 1978	46	7.3s	1.3	1.2	--	.5
11	June 5-7, 1973	23.5	5.7s	--	4.5	--	2.3
	Aug 14-16, 1973	34.5	7.0s	--	4	--	2.5
	Sept 12-14, 1978	46	7.3s	1.4	2.5	--	.9
12	June 5-7, 1973	23	6.2s	--	5.5	--	2.5
	Aug 14-16, 1973	37	6.9s	--	2.5	--	1.5
	Sept 12-14, 1978	48	7.3s	2.0	1.0	--	1.4
13	June 5-7, 1973	23.5	6.4s	--	4	--	2.0
	Aug 14-16, 1973	36.5	6.7s	--	3.5	--	1.1
	Sept 12-14, 1978	48	7.3s	1.0	2.5	--	1.1

Table 3.--Miscellaneous water-quality data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name) and site No.	Date	Alkalinity, total (mg/L as CaCO ₃)	pH (field measurement, standard units)	Turbidity (NTU)	Suspended solids (mg/L)	Color (Pt-Co units)	Biochemical oxygen demand (mg/L)
AREA 3--Continued							
Shawsheen River (Merrimack)							
1	June 25-27, 1974	44	7.3s	--	12	--	1.8
	Aug 27-29, 1974	32	7.3s	--	9	--	4.1
2	June 25-27, 1974	32	7.3s	--	7	--	1.4
	Aug 27-29, 1974	28	7.0s	--	8	--	3.5
3	June 25-27, 1974	34	7.5s	--	3	--	2.6
	Aug 27-29, 1974	32	7.1s	--	8	--	4.4
4	June 25-27, 1974	38	7.6s	--	18	--	2.6
	Aug 27-29, 1974	32	7.0s	--	8	--	2.6
5	June 25-27, 1974	36	7.2s	--	8	--	1.2
	Aug 27-29, 1974	32	7.2s	--	5	--	3.2
6	June 25-27, 1974	34	7.4s	--	8	--	1.6
	Aug 27-29, 1974	32	7.2s	--	4	--	2.9
7	June 25-27, 1974	33	7.3s	--	10	--	1.4
	Aug 27-29, 1974	36	7.3s	--	5	--	2.9
8	June 25-27, 1974	32	7.4s	--	10	--	1.2
	Aug 27-29, 1974	36	7.3s	--	2	--	3.3
9	June 25-27, 1974	32	7.4s	--	16	--	2.4
	Aug 27-29, 1974	37	7.2s	--	13	--	4.7
AREA 4							
Beaver Brook (Taunton)							
1	June 10-12, 1975	14.5	7.1c	--	3.3	--	1.8
	July 22-24, 1975	17.0	6.7c	--	1.5	87	1.1
2	June 10-12, 1975	15.0	6.7c	--	2.8	--	4.2
	July 22-24, 1975	16.5	6.7c	--	2.8	100	1.8
3	June 10-12, 1975	24.5	7.1c	--	3.3	--	4.7
	July 22-24, 1975	30.0	7.1c	--	1.5	80	.5
Charles River (Charles)							
1	June 13-15, 1978	31	7.2s	2.3	5.0	--	4.8
	July 18-20, 1978	38	7.2s	3.9	6.0	--	2.4
	June 23-25, 1981	41	6.9s	--	5.8	--	5.0
2	June 13-15, 1978	23	7.2s	2.4	7.0	--	3.1
	July 18-20, 1978	36	7.4s	3.5	6.2	--	3.3
	June 23-25, 1981	45	7.0s	--	23.8	--	5.6
3	June 13-15, 1978	22	7.2s	1.7	6.0	--	1.9
	July 18-20, 1978	37	7.2s	3.6	4.2	--	2.5
	June 23-25, 1981	39	7.1s	--	1.3	--	3.0
4	June 13-15, 1978	19	7.3s	2.0	5.2	--	2.7
	July 18-20, 1978	32	7.3s	3.1	.5	--	1.6
	June 23-25, 1981	34	7.0s	--	2.3	--	3.5
5	June 23-25, 1981	30	7.1s	--	15.5	--	3.2

Table 3.--Miscellaneous water-quality data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name) and site No.	Date	Alkalinity, total (mg/L as CaCO ₃)	pH (field measurement, standard units)	Turbidity (NTU)	Suspended solids (mg/L)	Color (Pt-Co units)	Biochemical oxygen demand (mg/L)
AREA 4--Continued							
Charles River--Continued							
(Charles)							
6	June 13-15, 1978	21	7.1s	1.4	12	--	2.2
	July 18-20, 1978	33	7.3s	4.7	11	--	6.3
	June 23-25, 1981	28	7.1s	--	5.0	--	3.5
7	June 13-15, 1978	21	7.4s	1.9	10	--	2.7
	July 18-20, 1978	28	7.3s	4.9	18	--	5.1
	June 23-25, 1981	28	7.6s	--	3.0	--	3.6
Chicken Brook							
(Charles)							
1	June 23-25, 1981	17	7.3s	--	2.3	--	2.4
2	June 23-25, 1981	21	7.6s	--	.0	--	2.1
3	June 23-25, 1981	26	6.5s	--	6.0	--	3.5
4	June 23-25, 1981	26	7.0s	--	.8	--	2.3
Dopping Brook							
(Charles)							
1	June 23-25, 1981	18	6.6s	--	.8	--	2.3
2	June 23-25, 1981	23	7.5s	--	.0	--	2.1
Mine Brook							
(Charles)							
2	June 26-28, 1973	19	7.2s	--	3	--	3.5
	Sept 4-6, 1973	24	7.0s	--	20	--	2.3
	June 6-8, 1978	28	6.7s	1.8	5.5	--	4.6
	July 25-27, 1978	25	7.1s	4.9	3.2	--	1.6
3	June 26-28, 1973	33	7.1s	--	3	--	5.6
	Sept 4-6, 1973	44	7.3s	--	22	--	5.0
	June 6-8, 1978	28	6.9s	4.0	6.8	--	3.6
	July 25-27, 1978	63	7.2s	9.6	16	--	10.7
Robinson Brook							
(Taunton)							
1	June 17-19, 1975	24.5	7.1c	--	9.5	--	10.1
	Aug 05-July, 1975	22.5	6.6c	--	6.3	38	5.2
2	June 17-19, 1975	21.0	7.4c	--	8.8	--	8.0
	Aug 05-July, 1975	16.0	6.6c	--	3.0	25	8.7
3	June 17-19, 1975	15.5	6.9c	--	6.3	--	2.3
	Aug 5-6, 1975	13.5	7.2c	--	14.0	35	3.2
Town River							
(Taunton)							
1	June 10-12, 1975	13.5	6.8c	--	8.5	--	1.8
	July 22-24, 1975	18.0	7.1c	--	1.8	182	1.2
2	June 10-12, 1975	9.0	6.7c	--	3.3	--	1.5
	July 22-24, 1975	12.5	6.9c	--	3.9	112	1.6
3	June 10-12, 1975	10.0	6.6c	--	3.5	--	2.6
	July 22-24, 1975	16.0	6.9c	--	1.5	125	1.7
4	June 10-12, 1975	9.5	6.5c	--	3.8	--	1.8
	July 22-24, 1975	14.5	7.2c	--	.8	112	2.1
5	June 10-12, 1975	12.0	6.8c	--	4.5	--	3.5
	July 22-24, 1975	16.5	7.3c	--	3.8	125	2.6

Table 4.--Nutrient data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection

[All data in this table are from Massachusetts Department of Environmental Protection water-quality data reports; stream names and site Nos. are located in figures 2-5. Sample type: A, average concentration of multiple samples; C, composite sample concentration; S, single sample concentration; mg/L, milligram per liter; --, no data]

Stream name, (river basin name), and site No.	Date	Sample type	Nitrogen, ammonia (mg/L as N)	Nitrogen, nitrate (mg/L as N)	Nitrogen, total kjeldahl (mg/L as N)	Phos-phorus, ortho (mg/L as P)	Phos-phorus, total (mg/L as P)
AREA 1							
Otter River (Millers)							
1	June 18-19, 1979	A	0.06	0.1	0.81	--	0.23
	Aug 20-21, 1979	A	.05	.1	.55	--	.10
	June 23-24, 1980	C	.10	.1	.77	--	.05
	July 21-22, 1980	C	.17	.0	.64	--	.24
	July 27-28, 1981	C	.12	.1	.80	--	.07
	July 28-29, 1982	C	.07	.0	.90	.04	.08
	Aug 30-31, 1982	C	.01	.0	.95	.04	.13
2	June 18-19, 1979	A	.09	.1	.89	--	.41
	Aug 20-21, 1979	A	.05	.1	.62	--	.18
	June 23-24, 1980	C	.10	.1	.53	--	.11
	July 21-22, 1980	C	.10	.1	.55	--	.27
	July 27-28, 1981	C	.16	.1	.71	--	.08
	July 28-29, 1982	C	.12	.1	.81	.08	.11
	Aug 30-31, 1982	C	.02	.1	.76	.07	.16
3	June 18-19, 1979	A	3.0	1.2	4.0	--	2.2
	Aug 20-21, 1979	A	1.5	.7	1.9	--	.81
	June 23-24, 1980	C	--	--	2.5	--	.72
	July 21-22, 1980	C	6.0	1.7	7.3	--	1.74
	July 27-28, 1981	C	1.4	1.1	3.6	--	.54
	July 28-29, 1982	C	1.1	.5	2.0	.40	.48
	Aug 30-31, 1982	C	2.6	2.1	3.9	1.1	1.2
4	June 18-19, 1979	A	2.8	1.3	3.3	--	1.6
	Aug 20-21, 1979	A	.61	.9	1.3	--	.38
	June 23-24, 1980	C	1.9	1.1	2.1	--	.60
	July 21-22, 1980	C	3.7	1.1	3.9	--	1.12
	July 27-28, 1981	C	.86	.7	1.5	--	.37
	July 28-29, 1982	C	.72	.4	1.6	.32	.44
	Aug 30-31, 1982	C	3.3	1.1	3.7	.76	.85
Quaboag River (Ware)							
1	July 16, 1974	S	.08	.4	--	--	--
	July 16-18, 1974	A	--	--	--	--	.15
	July 23-25, 1979	A	.05	.1	1.11	--	.14
2	July 16, 1974	S	.07	.0	--	--	--
	July 16-18, 1974	A	--	--	--	--	.07
	July 23-25, 1979	A	.08	.0	1.13	--	.17
3	July 16, 1974	S	.14	.1	--	--	--
	July 16-18, 1974	A	--	--	--	--	.08
Sevenmile River (Quaboag)							
2	July 16, 1974	S	.01	.3	--	--	--
	July 16-18, 1974	A	--	--	--	--	.04
4	July 16, 1974	S	.09	.4	--	--	--
	July 16-18, 1974	A	--	--	--	--	.04

Table 4.--Nutrient data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--Continued

Stream name, (river basin name), and site No.	Date	Sample type	Nitrogen, ammonia (mg/L as N)	Nitrogen, nitrate (mg/L as N)	Nitrogen, total kjeldahl (mg/L as N)	Phosphorus, ortho (mg/L as P)	Phosphorus, total (mg/L as P)
AREA 2							
Assabet River (Concord)							
1	June 4-6, 1974	A	0.06	0.1	--	--	0.16
	Sept 17-19, 1974	A	.24	.2	--	--	.10
2	June 4-6, 1974	A	.16	.2	--	--	.15
	Sept 17-19, 1974	A	.18	.4	--	--	.10
2A	June 4-6, 1974	A	.02	.2	--	--	.03
	Sept 17-19, 1974	A	.01	.0	--	--	.02
Concord River (Merrimack)							
1	June 11-13, 1979	A	.07	.4	1.1	--	.21
	Aug 13-15, 1979	A	.11	.4	.96	--	.26
2	July 10-12, 1973	A	.14	.2	--	--	.25
	Aug 28-30, 1973	A	.02	.3	--	--	.18
	June 11-13, 1979	A	.07	.3	1.2	--	.21
	Aug 13-15, 1979	A	.11	.4	1.1	--	.22
3	July 10-12, 1973	A	.15	.2	--	--	.21
	Aug 28-30, 1973	A	.03	.4	--	--	.18
Stony Brook (Merrimack)							
1	June 25-27, 1975	A	.13	.05	--	--	.07
	Aug 27-29, 1974	A	.08	.00	--	--	.06
2	June 25-27, 1975	A	.02	.00	--	--	.05
	Aug 27-29, 1974	A	.06	.00	--	--	.03
3	June 25-27, 1975	A	.06	.10	--	--	.04
	Aug 27-29, 1974	A	.10	.35	--	--	.04
4	June 25-27, 1975	A	.14	.00	--	--	.04
	Aug 27-29, 1974	A	.04	.00	--	--	.04
5	June 25-27, 1975	A	.06	.10	--	--	.04
	Aug 27-29, 1974	A	.06	.10	--	--	.05
Sudbury River (Concord)							
1	July 10-12, 1973	A	.15	.3	--	--	.12
	Aug 28-30, 1973	A	.37	.2	--	--	.26
	June 11-13, 1979	A	.08	.3	.84	--	.09
	Aug 13-15, 1979	A	.09	.1	.83	--	.10
2	July 10-12, 1973	A	.24	.1	--	--	.16
	Aug 28-30, 1973	A	.26	.4	--	--	.16
	June 11-13, 1979	A	.09	.1	.89	--	.14
	Aug 13-15, 1979	A	.07	.2	.63	--	.09
3	July 10-12, 1973	A	.24	.1	--	--	.68
	Aug 28-30, 1973	A	.28	.4	--	--	.25
	June 11-13, 1979	A	.06	.2	1.0	--	.14
	Aug 13-15, 1979	A	.05	.1	.85	--	.11
4	July 10-12, 1973	A	.08	.0	--	--	.32
	Aug 28-30, 1973	A	.16	.4	--	--	.18
	June 11-13, 1979	A	.04	.1	1.2	--	.15
	Aug 13-15, 1979	A	.06	.3	1.1	--	.07

Table 4.--Nutrient data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name), and site No.	Date	Sample type	Nitrogen, ammonia (mg/L as N)	Nitrogen, nitrate (mg/L as N)	Nitrogen, total kjeldahl (mg/L as N)	Phosphorus, ortho (mg/L as P)	Phosphorus, total (mg/L as P)
AREA 2--Continued							
Sudbury River--Continued (Concord)							
5	July 10-12, 1973	A	0.11	0.0	--	--	0.36
	Aug 28-30, 1973	A	.06	.2	--	--	.19
	June 11-13, 1979	A	.04	.1	1.2	--	.16
	Aug 13-15, 1979	A	.08	.2	1.0	--	.09
AREA 3							
Ipswich River (Ipswich)							
1	June 5-7, 1973	A	.08	.3	--	--	.09
	Aug 14-16, 1973	A	.37	.2	--	--	.14
2	June 5-7, 1973	A	.13	.3	--	--	.09
	Aug 14-16, 1973	A	.17	.3	--	--	.09
3	June 5-7, 1973	A	.06	.1	--	--	.09
	Aug 14-16, 1973	A	.23	.3	--	--	.11
4	June 5-7, 1973	A	.06	.1	--	--	.09
	Aug 14-16, 1973	A	.18	.3	--	--	.09
	Sept 12-14, 1978	A	.24	.2	--	--	.14
5	June 5-7, 1973	A	.06	.1	--	--	.08
	Aug 14-16, 1973	A	.11	.4	--	--	.09
	Sept 12-14, 1978	A	.18	.3	--	--	.12
6	June 5-7, 1973	A	.07	.2	--	--	.09
	Aug 14-16, 1973	A	.10	.5	--	--	.09
	Sept 12-14, 1978	A	.22	.4	--	--	.10
7	June 5-7, 1973	A	.07	.2	--	--	.09
	Aug 14-16, 1973	A	.10	.5	--	--	.07
	Sept 12-14, 1978	A	.26	.2	--	--	.08
8	June 5-7, 1973	A	.06	.2	--	--	.07
	Aug 14-16, 1973	A	.07	.5	--	--	.07
	Sept 12-14, 1978	A	.26	.2	--	--	.08
9	June 5-7, 1973	A	.05	.2	--	--	.07
	Aug 14-16, 1973	A	.08	.4	--	--	.05
	Sept 12-14, 1978	A	.31	.2	--	--	.08
10	June 5-7, 1973	A	.07	.2	--	--	.07
	Aug 14-16, 1973	A	.08	.5	--	--	.05
	Sept 12-14, 1978	A	.34	.2	--	--	.06
11	June 5-7, 1973	A	.06	.2	--	--	.07
	Aug 14-16, 1973	A	.09	.5	--	--	.05
	Sept 12-14, 1978	A	.32	.2	--	--	.07
12	June 5-7, 1973	A	.01	.0	--	--	.06
	Aug 14-16, 1973	A	.14	.4	--	--	.05
	Sept 12-14, 1978	A	.28	.2	--	--	.08
13	June 5-7, 1973	A	.01	.0	--	--	.05
	Aug 14-16, 1973	A	.14	.5	--	--	.05
	Sept 12-14, 1978	A	.06	.1	--	--	.07

Table 4.--Nutrient data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--Continued

Stream name, (river basin name), and site No.	Date	Sample type	Nitrogen, ammonia (mg/L as N)	Nitrogen, nitrate (mg/L as N)	Nitrogen, total kjeldahl (mg/L as N)	Phos-phorus, ortho (mg/L as P)	Phos-phorus, total (mg/L as P)
AREA 3--Continued							
Shawsheen River (Merrimack)							
1	June 25-27, 1975	A	0.29	1.0	--	--	0.10
	Aug 27-29, 1974	A	.29	.9	--	--	.10
2	June 25-27, 1975	A	.18	.9	--	--	.10
	Aug 27-29, 1974	A	.22	.8	--	--	.07
3	June 25-27, 1975	A	.49	.9	--	--	.24
	Aug 27-29, 1974	A	.27	.8	--	--	.15
4	June 25-27, 1975	A	.31	.8	--	--	.18
	Aug 27-29, 1974	A	.16	.6	--	--	.14
5	June 25-27, 1975	A	.16	1.0	--	--	.16
	Aug 27-29, 1974	A	.27	1.0	--	--	.36
6	June 25-27, 1975	A	.06	.9	--	--	.11
	Aug 27-29, 1974	A	.09	.4	--	--	.06
7	June 25-27, 1975	A	.04	.9	--	--	.08
	Aug 27-29, 1974	A	.06	.8	--	--	.04
8	June 25-27, 1975	A	.04	1.0	--	--	.14
	Aug 27-29, 1974	A	.04	1.1	--	--	.11
9	June 25-27, 1975	A	.08	1.1	--	--	.14
	Aug 27-29, 1974	A	.04	.7	--	--	.10
AREA 4							
Beaver Brook (Taunton)							
1	June 10-12, 1975	A	.09	.1	--	--	.10
	July 22-24, 1975	A	.03	.2	--	--	.05
2	June 10-12, 1975	A	.04	.2	--	--	.07
	July 22-24, 1975	A	.04	.3	--	--	.05
3	June 10-12, 1975	A	.09	1.4	--	--	.08
	July 22-24, 1975	A	.02	1.5	--	--	.04
Charles River (Charles)							
1	June 13-15, 1978	A	.03	.4	.72	--	.09
	July 18-20, 1978	A	.10	.3	1.4	--	1.6
	June 23-25, 1981	A	.26	.2	1.5	--	.15
2	June 13-15, 1978	A	.04	1.1	1.4	--	.60
	July 18-20, 1978	A	.19	.5	1.2	--	1.5
	June 23-25, 1981	A	1.1	.2	14.0	--	2.4
3	June 13-15, 1978	A	.02	1.1	.72	--	.57
	July 18-20, 1978	A	.10	.6	1.4	--	1.2
	June 23-25, 1981	A	.71	.4	2.0	--	2.4
4	June 13-15, 1978	A	.04	.8	.84	--	.47
	July 18-20, 1978	A	.08	.5	1.5	--	1.0
	June 23-25, 1981	A	.43	.4	1.5	--	1.5
5	June 23-25, 1981	A	.08	.5	.95	--	.50
6	June 13-15, 1978	A	.02	.5	.38	--	.39
	July 18-20, 1978	A	.01	.0	1.2	--	.40

Table 4.--Nutrient data for wetland-stream stations collected by the Massachusetts Department of Environmental Protection--*Continued*

Stream name, (river basin name), and site No.	Date	Sample type	Nitrogen, ammonia (mg/L as N)	Nitrogen, nitrate (mg/L as N)	Nitrogen, total kjeldahl (mg/L as N)	Phosphorus, ortho (mg/L as P)	Phosphorus, total (mg/L as P)
AREA 4--Continued							
Charles River--Continued (Charles)							
7	June 23-25, 1981	A	.05	.4	.85	--	.43
	June 13-15, 1978	A	.03	.5	.98	--	.34
	July 18-20, 1978	A	.05	.1	1.5	--	.44
	June 23-25, 1981	A	.07	.4	1.2	--	.37
Chicken Brook (Charles)							
1	June 23-25, 1981	A	0.22	0.2	0.90	--	0.04
2	June 23-25, 1981	A	.08	.6	.69	--	.13
3	June 23-25, 1981	A	3.1	1.0	3.5	--	.26
4	June 23-25, 1981	A	.13	.5	1.04	--	.23
Dopping Brook (Charles)							
1	June 23-25, 1981	A	.13	.3	1.0	--	.15
2	June 23-25, 1981	A	.05	.1	.49	--	.13
Mine Brook (Charles)							
2	June 26-28, 1973	A	.47	.2	--	--	.40
	Sept 4-6, 1973	A	.12	.3	--	--	.12
	June 06-08 1978	A	.01	.2	.42	--	.05
	July 25-27, 1978	A	.15	.2	1.2	--	.07
3	June 26-28, 1973	A	3.35	.1	--	--	1.80
	Sept 4-6, 1973	A	3.7	.2	--	--	1.95
	June 6-8, 1978	A	1.0	.4	1.6	--	.54
	July 25-27, 1978	A	6.2	.1	7.8	--	2.8
Robinson Brook (Taunton)							
1	June 17-19, 1975	A	3.2	2.3	--	--	.35
	Aug 5, 1975	S	--	--	7.8	--	--
	Aug 5-7, 1975	A	4.95	3.0	--	--	.47
2	June 17-19, 1975	A	2.5	2.3	--	--	.27
	Aug 5, 1975	S	--	--	3.8	--	--
	Aug 5-7, 1975	A	2.50	3.5	--	--	.34
3	June 17-19, 1975	A	.03	1.4	--	--	.14
	Aug 5-7, 1975	A	.11	1.7	--	--	.22
Town River (Taunton)							
1	June 10-12, 1975	A	.04	.4	--	--	.07
	July 22-24, 1975	A	.05	.3	--	--	.30
2	June 10-12, 1975	A	.03	.2	--	--	.06
	July 22-24, 1975	A	.04	.4	--	--	.41
3	June 10-12, 1975	A	.03	.3	--	--	.07
	July 22-24, 1975	A	.04	.3	--	--	.10
4	June 10-12, 1975	A	.03	.3	--	--	.06
	July 22-24, 1975	A	.02	.4	--	--	.07
5	June 10-12, 1975	A	.00	.2	--	--	.08
	July 22-24, 1975	A	.10	.3	--	--	.08

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89

[Stream names and site Nos. are shown in figures 2-5; all values represent single sample concentrations; Pt-Co unit, platinum-cobalt unit; m³/s, cubic meter per second; μ S/cm, microsiemen per centimeter at 25 °Celsius; mg/L, milligram per liter; NTU, nephelometric-turbidity unit; <, actual value is less than value shown; --, no data]

Stream name, (river basin name), and site No.	Date	Time	Discharge, instantaneous (m ³ /s)	Specific conductance (μ S/cm)	pH (field measurement, standard units)	Temperature (deg C)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Bio-chemical oxygen demand (mg/L)	Chem-ical oxygen demand (mg/L)	Alkalinity total (mg/L as CaCO ₃)
AREA 1											
Natty Pond Brook (Ware)											
2	Sept 17, 1985	0830	0.023	35	--	10.0	--	7.4	--	--	--
	June 26, 1986	1445	.062	--	--	--	--	--	--	--	--
	June 27, 1986	1015	.059	--	--	--	--	--	--	--	--
3	Sept 19, 1985	1030	.037	--	--	--	--	--	--	--	--
4	Aug 20, 1985	0830	--	49	--	--	--	--	--	--	--
5	Aug 21, 1985	1330	.065	--	--	-	--	--	--	--	--
Quaboag River (Ware)											
1A	Aug 2, 1988	0915	3.087	81	7.1	24.5	1.6	8.5	4.5	32	11
2	Aug 2, 1988	1200	3.087	87	6.5	26.0	1.7	6.0	5.1	36	12
Sevenmile River (Quaboag)											
1	July 19, 1988	0830	.102	61	6.7	21.5	2.2	7.4	3.0	5	12
2	July 19, 1988	1030	.340	96	7.0	21.0	1.8	7.9	4.2	19	13
3	July 19, 1988	1315	--	77	6.8	21.0	2.4	6.9	3.3	14	13
4	July 19, 1988	1445	.368	103	6.8	23.0	3.6	5.4	3.9	29	20
Ware River (Chicopee)											
1	June 28, 1988	0900	1.133	49	6.5	17.0	1.7	8.4	--	--	6
2	June 28, 1988	1200	1.189	51	6.2	19.0	1.9	6.6	--	--	5
West Branch Ware River (Ware)											
1	July 6, 1988	0845	.079	42	6.1	21.0	1.1	5.6	2.7	27	4
2	July 6, 1988	1030	.065	42	6.5	19.0	1.1	8.6	2.7	18	4
AREA 2											
Assabet River (Concord)											
2	Aug 22, 1989	0815	.122	135	7.1	23.0	2.0	6.8	5.4	89	22
2A	Aug 22, 1989	1230	.018	147	7.3	26.5	1.7	8.3	2.4	35	31
3	Aug 22, 1989	1030	.159	143	6.9	22.5	1.5	5.0	6.0	49	24
Beaver Brook (Merrimack)											
1	Aug 9, 1988	0900	.008	641	6.5	17.0	1.2	8.8	3.6	86	17
2	Aug 9, 1988	1215	.015	301	6.3	24.0	1.5	.40	4.2	60	25
3	Aug 9, 1988	1515	.034	250	6.5	25.0	3.0	.80	3.9	83	29
Stony Brook (Merrimack)											
2	Aug 1, 1989	0800	.147	252	7.5	24.5	1.5	7.0	--	--	29
3	Aug 1, 1989	1000	.190	263	7.1	23.0	2.0	5.5	--	--	30
4	Aug 1, 1989	1145	.255	268	7.3	23.0	1.1	7.2	--	--	34

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--Continued

Stream name, (river basin name), and site No.	Date	Time	Discharge, instantaneous (m ³ /s)	Specific conductance (μS/cm)	pH (field measurement, standard units)	Temperature (deg C)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Bio-chemical oxygen demand (mg/L)	Chem-ical oxygen demand (mg/L)	Alkalinity total (mg/L as CaCO ₃)
AREA 4											
Beaver Brook (Taunton)											
1	Aug 29, 1989	0900	0.045	133	6.6	17.0	1.3	6.1	0.9	47	19
2	Aug 29, 1989	1015	.065	152	6.7	16.5	1.2	6.5	2.1	43	18
3	Aug 29, 1989	1200	.096	191	7.1	17.0	1.6	8.9	4.8	43	23
Bogastow Brook (Charles)											
1	July 18, 1989	1015	.425	197	6.6	16.0	1.8	4.7	<2.0	26	18
Bungay River (Ten Mile)											
1	June 21, 1989	0845	.091	214	6.8	19.5	1.0	6.9	2.4	31	18
2	June 21, 1989	1000	.204	217	6.5	17.0	1.7	5.9	6.0	16	19
3	June 21, 1989	1130	.425	182	6.3	19.5	1.8	1.4	3.6	36	19
4	June 21, 1989	1315	.368	175	6.3	20.0	1.8	2.0	2.7	36	18
Chicken Brook (Charles)											
2	July 25, 1989	0800	.024	180	7.1	17.5	1.6	7.3	1.8	21	24
3	July 25, 1989	0830	.059	175	6.5	20.0	2.5	2.5	2.7	42	19
4	July 25, 1989	1100	.178	161	7.0	22.0	1.3	7.3	2.7	42	17
Dopping Brook (Charles)											
1	July 18, 1989	0715	.027	123	6.3	13.0	1.2	5.9	<2.0	37	16
2	July 18, 1989	0900	.042	135	6.5	15.0	2.0	6.2	<2.0	32	15
Hockomock River (Taunton)											
1	Sept 12, 1989	0815	.252	192	6.9	21.5	.90	5.1	1.8	28	21
Mine Brook (Charles)											
1	July 11, 1989	0830	.034	105	6.8	17.0	1.8	6.7	1.8	21	15
2	July 11, 1989	1030	.198	262	6.7	14.0	3.1	5.9	1.8	26	26
3	July 11, 1989	1230	.249	268	6.7	21.0	1.6	3.1	1.2	26	30
Robinson Brook (Taunton)											
1	June 21, 1988	0830	.012	431	6.6	15.5	1.8	6.8	2.1	43	30
2	June 21, 1988	1115	.024	395	6.7	16.5	1.3	6.4	2.1	43	29
3	June 21, 1988	1345	.028	493	7.3	24.5	2.4	7.0	1.5	52	--
Town River (Taunton)											
2	Sept 12, 1989	1000	.453	160	6.6	21.5	1.2	4.5	.9	50	15
3	Sept 12, 1989	1130	.425	157	6.5	22.5	1.80	4.8	2.7	57	14
5	Sept 12, 1989	1315	.453	158	6.8	24.0	1.6	7.0	3.0	47	14

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--*Continued*

[Stream names and site Nos. are shown in figures 2-5; <, less than; mg/L, milligram per liter; --, no data]

Stream name, (river, basin name), and site No.	Date	Time	Nitrogen, nitrate total (mg/L as N)	Nitrogen, nitrite total (mg/L as N)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, ammonia total (mg/L as N)	Nitrogen, ammonia dissolved (mg/L as N)	Nitrogen, ammonia + organic total (mg/L as N)	Nitrogen, ammonia + organic dissolved (mg/L as N)
AREA 1									
Natty Pond Brook (Ware)									
2	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
Quaboag River (Ware)									
1A	Aug 2, 1988	0915	--	<.010	<.010	<.010	0.020	0.60	0.20
2	Aug 2, 1988	1200	--	<.010	<.010	<.010	.010	1.0	.20
Sevenmile River (Quaboag)									
1	July 19, 1988	0830	--	<.010	<.010	<.010	<.010	.50	.40
2	July 19, 1988	1030	--	<.010	<.010	<.010	<.010	.60	.40
3	July 19, 1988	1315	--	<.010	<.010	<.010	<.010	.40	.30
4	July 19, 1988	1445	--	<.010	<.010	.020	.030	.50	.50
Ware River (Chicopee)									
1	June 28, 1988	0900	--	<.010	<.010	.020	<.010	.50	.40
2	June 28, 1988	1200	--	<.010	<.010	.030	.020	.50	.50
West Branch Ware River (Ware)									
1	July 6, 1988	0845	--	<.010	<.010	.060	.030	.30	.20
2	July 6, 1988	1030	--	<.010	<.010	.040	.030	.40	.30
AREA 2									
Assabet River (Concord)									
2	Aug 22, 1989	0815	--	<.010	<.010	.190	.190	1.4	1.1
2A	Aug 22, 1989	1230	--	<.010	<.010	.050	.060	.40	<.20
3	Aug 22, 1989	1030	.090	.010	.010	.260	.260	1.8	2.0
Beaver Brook (Merrimack)									
1	Aug 9, 1988	0900	.890	.010	<.010	.150	.110	1.6	1.6
2	Aug 9, 1988	1215	--	<.010	<.010	<.010	.040	.80	.80
3	Aug 9, 1988	1515	--	<.010	<.010	<.010	.090	1.1	1.4
Stony Brook (Merrimack)									
2	Aug 1, 1989	0800	--	<.010	<.010	.030	.030	.80	.60
3	Aug 1, 1989	1000	--	<.010	.010	.080	.090	.80	.50
4	Aug 1, 1989	1145	.390	.010	.020	.090	.100	.80	.50

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--*Continued*

Stream name, (river, basin name), and site No.	Date	Time	Nitrogen, nitrate total (mg/L as N)	Nitrogen, nitrite total (mg/L as N)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, ammonia total (mg/L as N)	Nitrogen, ammonia dissolved (mg/L as N)	Nitrogen, ammonia + organic total (mg/L as N)	Nitrogen, ammonia + organic dissolved (mg/L as N)
AREA 4									
Beaver Brook (Taunton)									
1	Aug 29, 1989	0900	--	<0.010	<0.010	0.040	0.040	0.80	0.80
2	Aug 29, 1989	1015	--	<.010	<.010	.040	.040	2.1	.80
3	Aug 29, 1989	1200	1.07	.030	.030	.070	.050	1.0	1.2
Bogastow Brook (Charles)									
1	July 18, 1989	1015	--	<.010	<.010	.030	.020	.70	.50
Bungay River (Ten Mile)									
1	June 21, 1989	0845	--	<.010	<.010	.060	.060	.30	.20
2	June 21, 1989	1000	--	<.010	.010	.080	.090	.30	<.20
3	June 21, 1989	1130	--	<.010	<.010	.050	.060	.50	.40
4	June 21, 1989	1315	--	<.010	<.010	.070	.070	.90	.50
Chicken Brook (Charles)									
2	July 25, 1989	0800	.690	.010	<.010	.050	.040	.40	.50
3	July 25, 1989	0830	.180	.020	.020	.180	.170	.80	1.0
4	July 25, 1989	1100	.390	.010	<.010	.060	.040	.70	.60
Dopping Brook (Charles)									
1	July 18, 1989	0715	--	<.010	<.010	.090	.090	.80	.80
2	July 18, 1989	0900	--	<.010	<.010	.080	.070	.70	.80
Hockomock River (Taunton)									
1	Sept 12, 1989	0815	--	<.010	.010	.020	.030	.40	.50
Mine Brook (Charles)									
1	July 11, 1989	0830	--	<.010	<.010	.080	.060	.40	.50
2	July 11, 1989	1030	--	<.010	<.010	.040	.040	.50	.70
3	July 11, 1989	1230	--	<.010	<.010	.030	.040	1.1	.80
Robinson Brook (Taunton)									
1	June 21, 1988	0830	4.59	.110	.100	1.90	1.80	2.1	2.1
2	June 21, 1988	1115	4.56	.440	1.10	.310	.300	1.2	.90
3	June 21, 1988	1345	1.89	.010	<.010	.060	.030	.30	.30
Town River (Taunton)									
2	Sept 12, 1989	1000	.190	.010	.010	.030	.060	.90	1.1
3	Sept 12, 1989	1130	--	<.010	.010	.040	.050	.90	.80
5	Sept 12, 1989	1315	--	<.010	.010	.020	.020	1.6	.90

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--Continued

[Stream names and station identifiers are located in figures 2-5; <, less than; mg/L, milligram per liter]

Stream name, (river basin name) and site No.	Date	Time	Nitrogen NO ₂ +NO ₃ , total (mg/L as N)	Nitrogen NO ₂ +NO ₃ , dissolved (mg/L as N)	Phos- phorous ortho, total (mg/L as P)	Phos- phorous ortho, dissolved (mg/L as P)	Phos- phorous hydro+ ortho, total (mg/L as P)	Phos- phorous hydro+ ortho, dissolved (mg/L as P)	Carbon organic, dissolved (mg/L as C)	Carbon organic suspended, total (mg/L as C)
AREA 1										
Natty Pond Brook (Ware River)										
2	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--
Quaboag River (Ware)										
1A	Aug 2, 1988	0915	<0.100	<0.100	0.010	<0.010	0.05	0.01	7.0	0.9
2	Aug 2, 1988	1200	<.100	<.100	.020	.010	.05	.02	8.2	.7
Sevenmile River (Quaboag)										
1	July 19, 1988	0830	.100	<.100	<.01	<.010	.02	.01	6.3	.3
2	July 19, 1988	1030	<.100	.100	<.010	<.010	.01	<.01	5.4	.4
3	July 19, 1988	1315	.100	.130	<.010	.010	.03	<.01	5.2	.5
4	July 19, 1988	1445	<.100	.100	<.010	.010	.05	<.01	7.0	.3
Ware River (Chicopee)										
1	June 28, 1988	0900	<.100	<.100	<.010	<.010	.02	.01	8.6	.5
2	June 28, 1988	1200	<.100	<.100	<.010	<.010	.02	<.01	8.7	.6
West Branch Ware River (Ware)										
1	July 6, 1988	0845	<.100	<.100	<.010	.020	.02	.01	10	.4
2	July 6, 1988	1030	<.100	<.100	<.010	.010	.02	.01	9.6	.3
AREA 2										
Assabet River (Concord)										
2	Aug 22, 1989	0815	.100	.110	<.010	.010	.02	<.01	9.9	1.6
2A	Aug 22, 1989	1230	<.100	<.100	<.010	<.010	.03	<.01	4.7	.4
3	Aug 22, 1989	1030	.100	.120	<.010	<.010	.11	.02	8.6	.7
Beaver Brook (Merrimack)										
1	Aug 9, 1988	0900	.900	.850	.010	<.010	.02	.02	18	.3
2	Aug 9, 1988	1215	<.100	<.100	.010	<.010	.03	.01	19	1.1
3	Aug 9, 1988	1515	<.100	<.100	.030	<.010	.07	.02	16	2.8
Stony Brook (Merrimack)										
2	Aug 1, 1989	0800	<.100	<.100	.020	<.010	.01	<.01	6.6	1.8
3	Aug 1, 1989	1000	.300	.250	.020	<.010	.02	<.01	6.2	1.2
4	Aug 1, 1989	1145	.400	.410	.040	<.010	.02	<.01	5.7	.5

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--Continued

Stream name, (river basin name) and site No.	Date	Time	Nitrogen NO ₂ +NO ₃ , total (mg/L as N)	Nitrogen NO ₂ +NO ₃ , dissolved (mg/L as N)	Phos-phorous ortho, total (mg/L as P)	Phos-phorous ortho, dissolved (mg/L as P)	Phos-phorous hydro+ ortho, total (mg/L as P)	Phos-phorous hydro+ ortho, dissolved (mg/L as P)	Carbon organic, dissolved (mg/L as C)	Carbon organic, suspended, total (mg/L as C)
AREA 4										
Beaver Brook (Taunton)										
1	Aug 29, 1989	0900	0.300	0.210	0.010	0.010	0.03	0.03	10	0.2
2	Aug 29, 1989	1015	.400	.340	.020	.020	.03	.02	9.3	.2
3	Aug 29, 1989	1200	1.10	1.00	.270	.010	.04	.03	9.3	.2
Bogastow Brook (Charles)										
1	July 18, 1989	1015	.200	.150	.020	.020	.02	.02	7.8	.3
Bungay River (Ten Mile)										
1	June 21, 1989	0845	.500	.480	<.010	<.010	.01	<.01	4.1	.2
2	June 21, 1989	1000	.700	.710	<.010	.020	.04	<.01	3.7	.3
3	June 21, 1989	1130	.200	.170	.030	.030	.08	.03	11	.3
4	June 21, 1989	1315	.100	.120	.030	.030	.08	.03	12	.3
Chicken Brook (Charles)										
2	July 25, 1989	0800	.700	.560	.030	.020	.03	.01	5.9	.3
3	July 25, 1989	0830	.200	.210	.160	.130	.18	.13	9.8	.5
4	July 25, 1989	1100	.400	.330	.100	.070	.10	.07	11	.4
Dopping Brook (Charles)										
1	July 18, 1989	0715	.300	.310	.030	.030	.03	.03	16	.2
2	July 18, 1989	0900	.100	.130	.030	.020	.03	.02	14	.3
Hockomock River (Taunton)										
1	Sept 12, 1989	0815	.400	.350	.020	<.010	.03	.01	6.4	.4
Mine Brook (Charles)										
1	July 11, 1989	0830	.300	.320	.040	.010	.03	<.01	7.4	.4
2	July 11, 1989	1030	.300	.260	.020	<.010	.01	<.01	5.5	.4
3	July 11, 1989	1230	<.100	<.100	.050	.030	.05	<.01	7.2	.6
Robinson Brook (Taunton)										
1	June 21, 1988	0830	4.70	4.60	.040	.020	.06	.03	3.2	.4
2	June 21, 1988	1115	5.00	5.10	.040	.020	.09	.03	2.7	.3
3	June 21, 1988	1345	1.90	1.90	.030	.020	.08	.02	3.6	.5
Town River (Taunton)										
2	Sept 12, 1989	1000	.200	.190	.030	.020	.05	.03	14	.4
3	Sept 12, 1989	1130	.200	.180	.020	.020	.05	.02	14	.3
5	Sept 12, 1989	1315	.200	.140	.030	.030	.06	.05	13	.6

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--Continued

[Stream names and station identifiers are located in figures 2-5; mg/L, milligram per liter, µg/L, microgram per liter]

Stream name, (river basin name) and site No.	Date	Time	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L as Cl)	Iron, dissolved (µg/L as Fe)
AREA 1									
Natty Brook Brook (Ware)									
2	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
Quaboag River (Ware)									
1A	Aug 2, 1988	0915	5.4	1.4	7.9	1.5	13	10	430
2	Aug 2, 1988	1200	5.8	1.5	8.6	1.6	15	11	610
Sevenmile River (Quaboag)									
1	July 19, 1988	0830	4.9	1.1	4.2	1.1	13	6.7	710
2	July 19, 1988	1030	5.9	1.2	4.9	1.5	12	9.8	480
3	July 19, 1988	1315	6.0	1.2	5.6	1.4	13	10	290
4	July 19, 1988	1445	7.9	1.6	8.4	1.8	13	12	360
Ware River (Chicopee)									
1	June 28, 1988	0900	3.0	.69	5.2	.60	17	8.7	350
2	June 28, 1988	1200	3.1	.76	5.4	.70	19	8.7	390
West Branch Ware River (Ware)									
1	July 6, 1988	0845	2.8	.53	4.0	.50	19	6.2	260
2	July 6, 1988	1030	2.8	.45	4.1	.60	14	6.0	870
AREA 2									
Assabet River (Concord)									
2	Aug 22, 1989	0815	9.6	2.1	12	1.7	5.0	20	600
2A	Aug 22, 1989	1230	12	3.0	9.8	2.0	6.0	17	210
3	Aug 22, 1989	1030	10	2.2	12	1.8	5.0	20	520
Beaver Brook (Merrimack)									
1	Aug 9, 1988	0900	29	5.2	84	3.1	33	180	780
2	Aug 9, 1988	1215	18	3.1	32	1.9	15	68	630
3	Aug 9, 1988	1515	15	2.8	25	1.9	20	49	1300
Stony Brook (Merrimack)									
2	Aug 1, 1989	0800	15	2.6	27	3.6	9.0	10	70
3	Aug 1, 1989	1000	15	2.6	28	3.7	9.0	26	150
4	Aug 1, 1989	1145	16	2.7	29	3.3	9.0	4.8	150

Table 5.--Miscellaneous water-quality data for wetland-stream stations, 1985-89--Continued

Stream name, (river basin name) and site No.	Date	Time	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L as Cl)	Iron, dissolved (µg/L as Fe)
AREA 4									
Beaver Brook (Taunton)									
1	Aug 29, 1989	0900	7.1	2.1	15	1.1	6.0	19	920
2	Aug 29, 1989	1015	7.6	2.1	17	1.2	8.0	22	630
3	Aug 29, 1989	1200	10	3.0	21	2.1	10	27	880
Bogastow Brook (Charles)									
1	July 18, 1989	1015	9.2	2.2	20	1.7	13	32	490
Bungay River (Ten Mile)									
1	June 21, 1989	0845	10	2.2	23	1.0	11	40	160
2	June 21, 1989	1000	11	2.3	24	1.1	12	43	380
3	June 21, 1989	1130	9.9	2.2	19	1.1	7.0	32	930
4	June 21, 1989	1315	9.9	2.3	19	1.1	7.0	33	820
Chicken Brook (Charles)									
2	July 25, 1989	0800	12	2.6	16	1.7	10	26	390
3	July 25, 1989	0830	10	2.2	17	2.1	12	27	1500
4	July 25, 1989	1100	9.8	2.2	16	1.9	9.0	24	620
Dopping Brook (Charles)									
1	July 18, 1989	0715	8.8	2.8	7.5	2.2	15	12	600
2	July 18, 1989	0900	7.5	2.6	10	1.7	13	17	750
Hockomock River (Taunton)									
1	Sept 12, 1989	0815	10	2.3	22	1.8	10	32	220
Mine Brook (Charles)									
1	July 11, 1989	0830	7.3	1.3	10	1.0	6.0	14	460
2	July 11, 1989	1030	11	2.6	32	1.3	8.0	52	410
3	July 11, 1989	1230	12	2.4	35	1.3	<1.0	58	590
Robinson Brook (Taunton)									
1	June 21, 1988	0830	15	3.8	52	4.4	20	70	78
2	June 21, 1988	1115	16	3.6	51	4.4	28	73	49
3	June 21, 1988	1345	16	3.3	67	3.2	20	110	160
Town River (Taunton)									
2	Sept 12, 1989	1000	7.8	2.0	19	1.5	8.0	25	670
3	Sept 12, 1989	1130	7.5	1.9	18	1.4	8.0	28	740
5	Sept 12, 1989	1315	7.6	2.0	19	1.4	9.0	28	1200

Table 5.--Miscellaneous water-quality data for wetland-stream stations 1985-89--Continued

[Stream names and station identifiers are located in figures 2-5; µg/L, microgram per liter; mg/L, milligram per liter; --, no data]

Stream name, (river basin basin name), and site No.	Date	Time	Chlorophyll a phytoplankton chromo fluorom (µg/L) (estimated)	Chlorophyll b phytoplankton chromo fluorom (µg/L) (estimated)	Suspended sediment (mg/L)
AREA 1					
Natty Brook Brook (Ware)					
2	--	--	--	--	--
3	--	--	--	--	--
4	--	--	--	--	--
5	--	--	--	--	--
Quaboag River (Ware)					
1A	Aug 2, 1988	0915	25.0	3.50	
	Aug 2, 1988	0915	21.0	3.40	1
2	Aug 2, 1988	1200	19.0	4.10	
	Aug 2, 1988	1200	19.0	3.10	3
Sevenmile River (Quaboag)					
1	July 19, 1988	0830	.70	.10	
	July 19, 1988	0830	.90	.20	5
2	July 19, 1988	1030	1.10	.100	
	July 19, 1988	1030	1.10	.100	8
3	July 19, 1988	1315	1.60	.200	
	July 19, 1988	1315	1.30	.200	8
4	July 19, 1988	1445	1.00	.200	
	July 19, 1988	1445	.800	.100	9
Ware River (Chicopee)					
1	June 28, 1988	0900	.600	.100	
	June 28, 1988	0900	.600	.100	2
2	June 28, 1988	1200	1.00	.100	
	June 28, 1988	1200	.800	.100	6
West Branch Ware River (Ware)					
1	July 6, 1988	0845	1.00	.200	
	July 6, 1988	0845	.900	.200	2
2	July 6, 1988	1030	.400	<.100	
	July 6, 1988	1030	.500	<.100	6
AREA 2					
Assabet River (Concord)					
2	Aug 22, 1989	0815	23.0	.500	
	Aug 22, 1989	0815	21.0	.300	6
2A	Aug 22, 1989	1230	2.90	.300	
	Aug 22, 1989	1230	2.10	.200	5
3	Aug 22, 1989	1030	16.0	.300	
	Aug 22, 1989	1030	18.0	.300	6

Table 5.--Miscellaneous water-quality data for wetland-stream stations 1985-89--Continued

Stream name, (river basin name), and site No.	Date	Time	Chlorophyll a phytoplankton chromo fluorom (µg/L) (estimated)	Chlorophyll b phytoplankton chromo fluorom (µg/L) (estimated)	Suspended sediment (mg/L)
AREA 2--Continued					
Beaver Brook (Merrimack)					
1	Aug 9, 1988	0900	0.300	0.100	
	Aug 9, 1988	0900	.500	.100	3
2	Aug 9, 1988	1215	--	--	
	Aug 9, 1988	1215	1.30	.200	5
3	Aug 9, 1988	1515	1.20	.200	
	Aug 9, 1988	1515	2.00	.300	9
AREA 4					
Beaver Brook (Taunton)					
1	Aug 29, 1989	0900	.200	<.100	
	Aug 29, 1989	0900	.200	<.100	3
2	Aug 29, 1989	1015	.300	<.100	
	Aug 29, 1989	1015	.300	<.100	5
3	Aug 29, 1989	1200	.100	<.100	
	Aug 29, 1989	1200	.100	<.100	9
Bogastow Brook (Charles)					
1	July 18, 1989	1015	1.60	<.100	
	July 18, 1989	1015	3.40	.100	1
Bungay River (Ten Mile)					
1	June 21, 1989	0845	1.30	.100	
	June 21, 1989	0845	1.60	.100	1
2	June 21, 1989	1000	1.70	.100	
	June 21, 1989	1000	1.30	.100	2
3	June 21, 1989	1130	.400	<.100	
	June 21, 1989	1130	.400	<.100	3
4	June 21, 1989	1315	.300	<.100	
	June 21, 1989	1315	.300	<.100	5
Chicken Brook (Charles)					
2	July 25, 1989	0800	<.100	<.100	
	July 25, 1989	0800	<.100	<.100	3
3	July 25, 1989	0830	.200	<.100	
	July 25, 1989	0830	.300	<.100	7
4	July 25, 1989	1100	1.60	.300	
	July 25, 1989	1100	1.50	.300	12
Dopping Brook (Charles)					
1	July 18, 1989	0715	.300	<.100	
	July 18, 1989	0715	.400	<.100	5
2	July 18, 1989	0900	1.10	.200	
	July 18, 1989	0900	1.00	.200	2

Table 5.--Miscellaneous water-quality data for wetland-stream stations 1985-89--*Continued*

Stream name, basin (river basin name), and site No.	Date	Time	Chlorophyll a phytoplankton chromo fluorom (µg/L) (estimated)	Chlorophyll b phytoplankton chromo fluorom (µg/L) (estimated)	Suspended sediment (mg/L)
AREA 4--Continued					
Hockomock River (Taunton)					
1	Sept 12, 1989	0815	8.10	1.40	
	Sept 12, 1989	0815	8.80	1.60	7
Mine Brook (Charles)					
1	July 11, 1989	0830	0.300	<0.100	
	July 11, 1989	0830	.200	<.100	1
2	July 11, 1989	1030	1.00	.100	
	July 11, 1989	1030	.900	.100	1
3	July 11, 1989	1230	3.10	.400	
	July 11, 1989	1230	2.80	.400	2
Robinson Brook (Taunton)					
1	June 21, 1988	0830	1.70	.500	
	June 21, 1988	0830	2.20	.700	3
2	June 21, 1988	1115	.800	.300	
	June 21, 1988	1115	1.000	.300	3
3	June 21, 1988	1345	.800	.100	
	June 21, 1988	1345	.700	.100	2
Town River (Taunton)					
2	Sept 12, 1989	1000	4.10	.800	
	Sept 12, 1989	1000	3.80	.800	2
3	Sept 12, 1989	1130	.800	<.100	
	Sept 12, 1989	1130	.800	<.100	5
5	Sept 12, 1989	1315	12.0	.400	
	Sept 12, 1989	1315	12.0	.400	3

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites

[Stream names and site Nos. are located in figures 2-5. Data for the late 1960's through the early 1980's was collected by the Massachusetts Department of Environmental Protection. Data for 1985-89 was collected by the U.S. Geological Survey; mg/L, milligram per liter]

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 1								
Sampling site:			2400	7.0	68	1200	7.8	72
Natty Pond Brook (Ware),			June 27, 1986			1300	8.1	78
Site 1			0100	6.9	67	1400	8.3	81
June 25, 1986			0200	6.9	67	1500	8.4	83
1000	8.7	85	0300	6.9	67	1600	8.5	85
1100	8.9	89	0400	7.0	67	1700	8.4	85
1200	9.1	93	0500	7.0	67	1800	8.5	86
1300	9.2	94	0600	7.0	67	1900	8.4	84
1400	9.2	95	0700	7.1	69	2000	8.3	82
1500	9.2	96	0800	7.5	72	2100	8.2	80
1600	9.1	96	0900	8.0	78	2200	8.0	77
1700	9.0	95	1000	8.4	84	2300	7.9	76
1800	8.9	93	1100	8.6	89	2400	7.8	74
1900	8.7	90	Natty Pond Brook (Ware),			Sept 18, 1985		
2000	8.2	83	Site 2			0100	7.7	73
2100	7.8	77	Sept 16, 1985			0200	7.5	70
2200	7.5	72	1000	8.0	74	0300	7.4	69
2300	7.3	70	1100	8.0	75	0400	7.4	69
2400	7.3	69	1200	8.3	79	0500	7.3	68
June 26, 1986			1300	8.6	84	0600	7.3	67
0100	7.4	69	1400	8.5	85	0700	7.2	66
0200	7.4	69	1500	8.6	88	0800	7.3	67
0300	7.4	69	1600	8.6	89	0900	7.5	69
0400	7.5	69	1700	8.6	89	1000	7.6	70
0500	7.5	69	1800	8.6	88	1100	7.7	72
0600	7.6	69	1900	8.5	86	1200	7.9	75
0700	7.7	70	2000	8.3	83	1300	8.1	79
0800	7.9	73	2100	8.2	81	June 26, 1986		
0900	8.3	77	2200	8.0	79	1100	8.9	90
1000	8.7	83	2300	7.9	77	1200	8.9	91
1100	9.0	89	2400	7.8	75	1300	9.2	95
1200	9.2	93	Sept 17, 1985			1400	9.3	98
1300	9.2	97	0100	7.7	74	1500	10.0	106
1400	9.1	98	0200	7.6	72	1600	10.5	111
1500	9.2	100	0300	7.5	71	1700	11.0	116
1600	9.1	98	0400	7.4	70	1800	11.2	120
1700	8.9	96	0500	7.4	69	1900	11.2	121
1800	8.8	94	0600	7.4	69	2000	11.7	125
1900	8.6	90	0700	7.4	69	2100	12.0	129
2000	8.2	84	0800	7.4	69	2200	11.7	125
2100	7.6	77	0900	7.5	70	2300	11.3	121
2200	7.3	72	1000	7.5	70	2400	11.3	121
2300	7.1	69	1100	7.6	70			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 1--Continued								
June 27, 1986			0600	9.9	92	0300	9.3	91
0100	11.2	119	0700	10.0	92	0400	9.4	91
0200	10.9	115	0800	10.1	92	0500	9.5	92
0300	10.5	111	0900	10.2	93	0600	9.6	92
0400	10.0	105	1000	10.2	93	0700	9.6	92
0500	9.8	102	1100	10.3	95	0800	9.7	92
0600	9.2	95	1200	10.2	95	Natty Pond Brook (Ware), Site 4		
0700	8.9	92	1300	10.2	95	Aug 19, 1985		
0800	8.6	89	1400	10.2	96	0800	4.0	44
0900	8.6	88	1500	10.1	96	0900	4.0	44
1000	8.6	89	1600	10.0	95	1000	4.0	44
1100	8.9	93	1700	9.9	94	1100	4.1	45
1200	8.9	96	1800	9.7	93	1200	4.1	45
1300	8.9	97	1900	9.5	92	1300	4.1	45
1400	9.3	102	2000	9.4	91	1400	4.1	45
1500	9.6	106	2100	9.3	91	1500	4.4	48
1600	10.0	110	2200	9.3	91	1600	4.4	48
1700	10.5	117	2300	9.3	91	1700	4.4	48
1800	10.9	122	2400	9.3	90	1800	4.4	48
1900	10.9	122	Sept 18, 1985			1900	4.4	48
2000	11.0	123	0100	9.4	91	2000	4.4	48
2100	10.9	122	0200	9.5	91	2100	4.4	48
2200	11.0	122	0300	9.6	92	2200	4.5	49
2300	10.6	119	0400	9.7	92	2300	4.5	49
2400	10.5	118	0500	9.8	92	2400	4.4	48
June 28, 1986			0600	9.8	91	Aug 20, 1985		
0100	10.2	114	0700	9.9	92	0100	4.4	48
0200	9.7	108	0800	10.0	92	0200	4.4	48
0300	9.2	103	0900	10.1	93	0300	4.3	47
0400	8.8	96	1000	10.1	93	0400	4.3	47
0500	8.6	94	1100	10.2	95	0500	4.2	46
0600	8.2	90	1200	10.2	96	0600	4.4	48
0700	7.7	84	1300	10.1	96	0700	4.4	48
0800	7.6	82	1400	10.0	96	0800	4.5	49
0900	7.3	78	1500	10.0	96	0900	4.7	51
1000	7.2	77	1600	9.8	95	1000	4.8	52
1100	7.4	81	1700	9.7	94	1100	4.8	53
Natty Pond Brook (Ware), Site 3			1800	9.5	93	1200	4.9	54
Sept 16, 1985			1900	9.4	93	1300	4.9	54
2400	9.4	91	2000	9.2	91	1400	4.9	55
Sept 17, 1985			2100	9.2	91	1500	4.8	54
0100	9.5	92	2200	9.1	91	1600	4.8	54
0200	9.5	91	2300	9.1	91	1700	4.7	53
0300	9.6	91	2400	9.1	90	1800	4.6	51
0400	9.7	91	Sept 19, 1985			1900	4.6	51
0500	9.8	91	0100	9.2	91	2000	4.6	51
			0200	9.3	91			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation
AREA 1--Continued								
2100	4.6	51	0200	2.8	31	1300	1.9	21
2200	4.7	52	0300	2.9	32	Aug 20, 1979		
2300	4.7	51	0400	2.8	31	1408	3.3	34
2400	4.7	51	0500	2.8	31	1745	5.1	56
Aug 21, 1985			0600	2.8	31	2218	3.9	41
0100	4.7	51	0700	2.7	29	Aug 21, 1979		
0200	4.8	52	0800	2.7	29	0132	3.4	35
0300	4.7	51	0900	2.7	29	0600	2.1	21
0400	4.7	51	1000	2.7	29	1002	1.9	19
0500	4.7	51	1100	2.7	29	1409	--	--
0600	4.7	50	1200	2.7	30	1717	5.4	62
0700	4.7	50	1300	2.7	30	2051	3.7	40
0800	4.7	50	1400	2.7	30	Aug 22, 1979		
0900	4.8	51	1500	2.7	30	0120	3.0	31
1000	4.8	51	1600	2.7	30	0600	2.3	23
Natty Pond Brook			1700	2.7	30	1000	1.4	15
(Ware), Site 5			1800	2.8	31	1350	3.3	37
Aug 20, 1985			1900	2.8	31	1725	3.9	45
1000	2.5	27	2000	2.8	31	2049	4.3	48
1100	2.5	28	2100	3.0	34	Aug 23, 1979		
1200	2.4	27	2200	3.1	35	0104	2.3	25
1300	2.5	28	2300	3.1	35	0520	1.8	19
1400	2.5	28	2400	3.0	34	0957	0.9	9
1500	2.6	29	Sampling site:			1410	1.3	14
1600	2.6	30	Otter River (Millers), Site 1			June 23, 1980		
1700	2.7	31	6-18, 1979			1255	--	--
1800	2.7	31	1403	2.3	28	1605	3.4	41
1900	2.7	31	1840	3.3	39	2015	3.1	34
2000	2.6	29	2050	1.7	19	June 24, 1980		
2100	2.6	29	June 19, 1979			0122	2.6	28
2200	2.6	29	0200	1.3	14	0430	2.9	31
2300	2.5	28	0611	0.8	8	0832	2.6	28
2400	2.5	28	0955	1.7	18	1244	3.2	36
Aug 21, 1985			1347	2.3	26	July 21, 1980		
0100	2.5	28	1824	4.1	46	1156	0.9	11
0200	2.5	28	2056	3.7	42	1646	1.0	13
0300	2.6	29	June 20, 1979			1955	1.4	18
0400	2.5	28	0200	2.2	24	July 22, 1980		
0500	2.5	27	0546	1.3	14	0027	0.9	11
0600	2.5	27	1100	2.1	22	0516	0.6	7
0700	2.4	26	1331	3.0	33	0820	1.2	14
0800	2.4	26	1814	4.4	52	1135	--	--
0900	2.4	26	2137	4.3	48	July 27, 1981		
1000	2.4	26	June 21, 1979			1225	1.9	22
2400	2.8	31	0145	3.3	34	1608	2.1	26
Aug 22, 1985			0525	1.6	16	2025	3.3	40
0100	2.8	31	0930	1.2	13			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 1--Continued								
July 28, 1981			0518	4.5	48	2005	4.2	51
0129	2.2	24	0922	4.4	49	July 28, 1981		
0353	2.0	22	1252	5.1	60	0115	5.3	60
0833	1.6	17	Aug 20, 1979			0350	4.5	52
1208	1.8	21	1356	5.9	63	0822	4.0	43
July 28, 1982			1736	5.8	63	1155	3.4	40
0805	3.0	33	2205	5.5	59	July 28, 1982		
1315	4.2	45	Aug 21, 1979			0755	4.4	51
1755	4.1	46	0126	6.1	65	1300	5.6	60
2205	2.2	24	0547	5.7	56	1745	4.6	51
July 29, 1982			0948	5.9	62	2150	4.7	51
0013	2.2	23	1355	6.1	69	July 29, 1982		
0450	1.8	19	1710	6.1	69	0002	3.1	34
0808	1.8	19	2042	5.5	61	0437	2.8	30
Aug 30, 1982			Aug 22, 1979			0800	2.8	30
0805	3.1	29	0110	6.3	66	Aug 30, 1982		
1602	5.8	62	0545	5.8	58	0757	5.4	51
1950	5.8	60	0945	5.2	56	1553	6.4	69
Aug 31, 1982			1337	5.6	65	1938	6.3	66
0159	4.8	49	1705	6.1	70	Aug 31, 1982		
0755	3.8	37	2042	6.0	66	0151	6.3	64
1400	4.1	43	Aug 23, 1979			0745	5.6	56
1950	4.3	45	0055	5.7	61	1350	5.3	53
Sept 1, 1982			0513	5.2	55	1938	5.8	62
0237	3.8	39	0945	5.2	57	Sept 1, 1982		
Otter River (Millers), Site 2			1358	5.2	58	0227	4.9	52
June 18, 1979			June 23, 1980			Otter River (Millers), Site 3		
1354	5.1	65	1245	6.4	73	June 18, 1979		
1830	4.7	56	1555	6.8	83	1345	4.2	53
2040	3.1	35	1957	6.2	73	1823	4.3	51
June 19, 1979			June 24, 1980			2035	3.2	36
0150	3.6	40	0111	5.8	68	June 19, 1979		
0602	3.5	39	0415	5.3	59	0140	3.2	35
0947	4.3	47	0821	5.6	64	0556	3.0	32
1338	4.7	56	1235	7.1	84	0940	5.0	53
1813	5.6	66	July 22, 1980			1333	3.9	46
2050	5.5	65	1148	2.4	29	1805	4.4	50
June 20, 1979			1625	3.2	41	2044	3.6	41
0150	4.4	50	1944	3.5	45	June 20, 1979		
0535	4.2	45	July 23, 1980			0147	3.9	43
1045	4.4	50	0020	3.3	42	0527	4.2	44
1321	5.5	65	0508	2.7	32	1040	4.1	46
1803	5.5	66	0812	2.6	31	1315	4.6	54
2128	5.2	62	1124	1.2	14	1755	4.7	56
June 21, 1979			July 27, 1981			2121	4.6	52
0135	4.7	53	1213	3.5	41			
			1555	3.0	37			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 1--Continued								
June 21, 1979			1205	4.0	48	2111	5.7	63
0125	4.2	47	1548	5.0	61	June 21, 1979		
0510	4.0	43	2000	4.8	58	0115	5.3	58
0915	4.0	44	July 28, 1981			0500	6.7	71
1247	5.0	59	0104	4.5	50	0905	6.0	65
Aug 20, 1979			0340	4.3	49	1231	6.2	71
1348	5.4	58	0815	3.9	43	Aug 20, 1979		
1730	5.4	59	1148	4.0	47	1337	7.0	75
2158	4.9	52	July 28, 1982			1722	6.5	72
Aug 21, 1979			0749	4.5	51	2145	6.5	69
0120	4.4	46	1245	4.7	52	Aug 21, 1979		
0535	4.7	47	1740	4.4	49	0114	6.7	71
0942	4.8	51	2130	4.8	52	0532	6.9	69
1350	5.6	63	2354	3.6	39	0931	6.5	69
1705	5.9	67	July 29, 1982			1340	6.0	66
2042	5.3	58	0430	2.6	28	1655	6.1	67
Aug 22, 1979			0751	2.4	25	2030	6.0	66
0103	4.7	50	Aug 30, 1982			Aug 22, 1979		
0537	4.8	48	0752	5.1	49	0055	6.7	71
0938	4.5	49	1537	5.7	62	0530	6.7	68
1330	5.4	62	1930	4.9	51	0926	5.9	63
1700	5.4	63	Aug 31, 1982			1321	5.7	64
2036	5.2	57	0146	5.0	51	1655	5.8	65
Aug 23, 1979			0740	4.6	47	2026	6.0	65
0047	4.3	46	1345	4.7	50	Aug 23, 1979		
0507	4.6	49	1930	4.9	52	0041	6.4	69
0935	4.3	46	Sept 1, 1982			0500	6.6	70
1350	4.8	54	0219	4.4	47	0926	6.5	70
June 23, 1980			Otter River (Millers)			1342	6.0	65
1235	5.8	68	Site 4			June 23, 1980		
1548	6.0	73	June 18, 1979			1225	6.2	69
1949	5.8	68	1336	5.1	62	1538	6.0	71
June 24, 1980			1813	5.0	58	1940	5.0	56
0102	4.3	48	2026	3.6	41	June 24, 1980		
0407	4.7	51	June 19, 1979			0043	5.7	64
0809	4.5	51	0130	5.4	60	0353	6.0	66
1224	6.8	83	0546	5.3	58	0800	6.4	71
July 21, 1980			0930	6.0	65	1210	6.2	71
1140	1.6	20	1321	5.8	68	July 21, 1980		
1612	2.9	37	1755	5.0	56	1130	4.0	49
1936	2.1	26	2035	5.5	62	1603	4.3	54
July 22, 1980			June 20, 1979			1926	4.4	55
0015	2.1	26	0135	5.8	64	July 22, 1980		
0502	1.7	20	0517	5.9	63	0005	4.5	55
0805	1.4	17	1030	6.1	67	0454	4.5	54
1116	1.7	21	1304	6.3	73	0755	4.6	55
July 27, 1981			1746	5.6	65	1108	4.2	51

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 1--Continued								
July 27, 1981			July 18, 1974			Aug 2, 1988		
1155	5.6	65	0235	6.5	77	0100	7.6	95
1539	5.7	70	0621	5.4	63	0200	7.7	96
1950	5.2	62	1030	4.1	48	0300	7.7	96
July 28, 1981			1427	7.0	84	0400	7.6	95
0055	5.9	66	1833	--	--	0500	7.4	92
0333	6.1	69	2230	7.4	88	0600	7.2	89
0805	5.9	64	July 19, 1974			0700	7.3	90
1138	6.0	68	0245	6.4	75	0800	7.4	92
July 28, 1982			July 23, 1979			0900	8.3	103
0736	5.9	68	0715	4.2	49	1000	8.6	107
1235	6.6	73	1050	5.0	59	1100	9.0	112
1730	6.5	72	1613	5.8	75	1200	9.5	119
2120	6.9	75	1854	5.6	70	1300	9.9	125
2344	6.7	73	2255	5.2	60	1400	9.9	124
July 29, 1982			July 24, 1979			1500	10.2	130
0420	6.5	72	0300	3.3	40	1600	10.2	130
0740	6.2	65	0635	4.5	54	1700	10.2	130
Aug 30, 1982			1037	4.4	53	1800	10.2	130
0740	6.0	57	1459	4.2	52	1900	10.2	130
1530	6.2	65	1901	4.1	50	2000	10.2	130
1918	5.6	57	2310	4.6	53	2100	9.8	124
Aug 31, 1982			July 25, 1979			2200	9.5	120
0135	6.0	60	0240	4.0	48	2300	8.9	112
0730	6.2	62	0715	4.0	48	2400	8.5	107
1335	6.1	61	1036	4.0	49	Aug 3, 1988		
1920	6.1	64	1454	5.6	74	0100	8.5	107
Sept 1, 1982			1849	5.6	72	0200	8.6	108
0207	6.1	63	2320	4.5	52	0300	8.8	111
Sampling site:			July 26, 1979			0400	8.7	110
Quaboag River (Ware),			0305	5.3	62	0500	8.6	108
Site 1			0700	3.6	41	0600	8.5	107
July 16, 1974			Quaboag River (Ware),			0700	8.4	106
0310	5.7	69	Site 1A			0800	8.6	109
0627	5.2	60	Aug 1, 1988			0900	9.0	114
1034	4.6	54	1300	8.2	102	1000	9.2	117
1445	7.4	93	1400	8.7	108	1100	9.5	121
1827	7.9	99	1500	8.7	109	1200	10.1	129
1105	7.3	88	1600	8.9	111	1300	10.2	131
July 17, 1974			1700	9.1	114	1400	10.2	131
0310	5.1	61	1800	8.3	103	1500	10.2	132
0625	4.5	53	1900	8.0	100	1600	10.2	131
1023	5.3	63	2000	7.3	91	1700	10.0	128
1430	7.3	91	2100	6.9	86	1800	9.8	125
1832	8.0	99	2200	6.7	83	1900	8.8	112
2225	6.6	79	2300	7.0	87	2000	8.1	103
			2400	7.4	92			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 1--Continued								
2100	7.7	98	0627	5.7	68	2200	7.3	92
2200	7.4	94	1030	5.2	62	2300	7.3	92
2300	7.0	88	1450	5.3	66	2400	7.0	88
2400	7.4	93	1852	6.5	80	Aug 3, 1988		
Aug 4, 1988			2300	5.9	72	0100	7.0	88
0100	7.6	96	July 25, 1979			0200	6.6	83
0200	7.7	97	0233	5.0	61	0300	6.3	79
0300	7.6	96	0700	5.0	56	0400	6.0	75
0400	7.4	93	1026	5.1	63	0500	5.7	71
0500	7.4	93	1445	6.1	80	0600	5.4	67
0600	7.0	88	1840	7.0	91	0700	5.3	66
0700	7.2	90	2310	5.7	67	0800	5.3	66
0800	7.2	90	July 26, 1979			0900	5.7	71
0900	7.8	98	0300	4.3	51	1000	5.7	71
Quaboag River (Ware), Site 2			0650	4.5	52	1100	5.8	72
July 16, 1974			Aug 1, 1988			1200	5.6	70
0320	4.9	60	1600	5.8	71	1300	6.3	79
0634	4.6	55	1700	5.8	72	1400	7.2	91
1041	4.3	52	1800	6.4	80	1500	7.2	91
1455	4.8	59	1900	6.5	81	1600	7.7	97
1835	5.6	70	2000	6.6	82	1700	7.4	94
1110	5.1	63	2100	6.9	86	1800	7.7	98
July 17, 1974			2200	6.5	81	1900	8.6	111
0320	4.6	56	2300	6.4	79	2000	8.1	104
0634	4.3	51	2400	6.2	77	2100	8.0	103
1030	4.8	56	Aug 2, 1988			2200	7.5	96
1435	5.5	67	0100	6.0	74	2300	7.2	92
1846	6.2	76	0200	5.7	70	2400	6.9	88
2235	6.3	77	0300	5.6	69	Aug 4, 1988		
July 18, 1974			0400	5.3	65	0100	6.7	85
0245	5.2	62	0500	5.2	64	0200	6.5	82
0629	4.9	58	0600	5.0	61	0300	6.1	77
1038	4.6	54	0700	5.0	61	0400	5.8	73
1435	5.7	69	0800	5.1	63	0500	5.5	69
1840	7.5	93	0900	5.3	65	0600	5.3	66
2240	6.3	76	1000	5.6	69	0700	5.3	66
July 19, 1974			1100	5.8	71	0800	5.3	66
0255	5.4	65	1200	6.0	74	0900	5.3	66
July 23, 1979			1300	6.2	77	1000	5.5	69
0700	5.5	65	1400	6.2	77	1100	5.4	68
1045	5.3	64	1500	6.4	79	Quaboag River (Ware), Site 3		
1605	5.7	76	1600	6.8	85	July 16, 1974		
1845	7.2	92	1700	6.7	83	0325	3.0	36
2245	6.3	72	1800	7.0	88	0644	2.9	34
July 24, 1979			1900	7.5	95	1050	3.5	42
0250	7.8	94	2000	7.0	88	1505	5.3	65
			2100	7.3	92			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 1--Continued								
1845	6.5	81	0900	7.2	82	1815	8.5	99
1125	5.4	66	1000	7.3	83	2210	7.3	82
July 17, 1974			1100	7.3	83	July 19, 1974		
0330	3.4	40	1200	7.3	83	0225	7.3	80
0645	3.8	44	1300	7.4	85	July 18, 1988		
1040	4.8	56	1400	7.5	86	1100	8.4	99
1450	6.8	85	1500	7.4	86	1200	8.6	103
1856	7.8	97	1600	7.4	86	1300	8.5	104
2245	6.1	75	1700	7.3	84	1400	8.4	103
July 18, 1974			1800	7.2	83	1500	8.2	102
0255	4.3	51	1900	7.2	83	1600	8.1	101
0640	4.7	55	2000	7.1	82	1700	7.8	98
1045	3.8	45	2100	7.0	81	1800	7.6	95
1500	5.9	72	2200	7.0	81	1900	7.4	91
1907	7.9	98	2300	7.0	81	2000	7.2	88
2250	6.7	81	2400	7.0	80	2100	7.0	84
July 19, 1974			July 20, 1988			2200	6.9	82
0305	4.7	56	0100	7.0	80	2300	7.0	83
Sampling site:			0200	7.0	80	2400	6.9	81
Sevenmile River (Quaboag),			0300	7.0	80	July 19, 1988		
Site 1			0400	7.0	80	0100	6.9	80
July 18, 1988			0500	7.0	80	0200	7.1	81
0900	7.4	85	0600	7.0	80	0300	7.1	81
1000	7.3	85	0700	7.1	81	0400	7.2	82
1100	7.4	87	0800	7.2	82	0500	7.2	82
1200	7.4	89	0900	7.2	82	0600	7.3	82
1300	7.4	91	Sevenmile River (Quaboag),			0700	7.4	83
1400	7.3	89	Site 2			0800	7.6	85
1500	7.2	90	July 16, 1974			0900	7.7	85
1600	7.0	88	0245	7.1	78	1000	7.8	87
1700	6.8	85	0610	7.4	82	1100	8.0	89
1800	6.7	83	1015	8.1	89	1200	8.1	91
1900	6.6	82	1410	8.0	92	1300	8.1	92
2000	6.6	81	1805	8.0	93	1400	8.4	95
2100	6.6	80	2240	7.2	79	1500	8.3	94
2200	6.7	80	July 17, 1974			1600	8.4	96
2300	6.7	80	0250	7.5	81	1700	8.2	94
2400	6.8	80	0607	8.2	85	1800	8.0	91
July 19, 1988			1000	8.4	91	1900	7.8	89
0100	6.9	81	1412	8.8	105	2000	7.6	87
0200	6.9	80	1810	7.6	89	2100	7.4	84
0300	7.0	81	2205	7.3	81	2200	7.3	83
0400	7.0	81	July 18, 1974			2300	7.3	82
0500	7.0	80	0215	7.8	82	2400	7.3	82
0600	7.1	81	0604	8.7	91	July 20, 1988		
0700	7.2	82	1015	8.2	87	0100	7.2	81
0800	7.2	82	1408	8.6	99	0200	7.3	82

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation
AREA 1--Continued								
0300	7.3	83	2400	6.3	71	2300	5.1	62
0400	7.3	83	July 20, 1988			2400	4.9	59
0500	7.3	83	0100	6.2	70	July 19, 1988		
0600	7.2	81	0200	6.2	70	0100	4.8	57
0700	7.3	82	0300	6.2	70	0200	4.6	55
0800	7.3	82	0400	6.1	69	0300	4.6	55
0900	7.4	83	0500	6.2	70	0400	4.5	53
1000	7.9	89	0600	6.2	70	0500	4.4	52
Sevenmile River (Quaboag), Site 3			0700	6.2	70	0600	4.4	52
July 18, 1988			0800	6.2	70	0700	4.4	51
1300	7.5	89	0900	6.3	71	0800	4.4	51
1400	7.6	92	1000	6.4	72	0900	4.4	51
1500	7.6	93	1100	6.6	74	1000	4.5	52
1600	7.5	92	1200	6.8	77	1100	4.7	55
1700	7.2	88	Sevenmile River (Quaboag), Site 4			1200	4.9	57
1800	7.0	86	July 16, 1974			1300	5.0	58
1900	6.7	82	0255	6.4	73	1400	5.3	62
2000	6.4	79	0615	6.4	70	1500	5.4	63
2100	6.2	76	1022	6.2	69	1600	5.7	66
2200	6.0	73	1810	7.1	82	1700	5.9	69
2300	5.9	71	2250	6.8	77	1800	5.7	66
2400	5.8	69	July 17, 1974			1900	5.6	65
July 19, 1988			0255	6.7	75	2000	5.5	64
0100	5.8	68	0614	6.7	73	2100	5.3	62
0200	5.8	68	1005	6.8	75	2200	5.2	60
0300	5.7	66	1418	7.1	84	2300	5.1	59
0400	5.8	67	1805	7.1	82	2400	4.9	56
0500	5.9	68	2215	7.0	79	July 20, 1988		
0600	5.9	67	July 18, 1974			0100	4.9	56
0700	6.0	68	0220	6.7	74	0200	4.8	55
0800	6.1	69	0609	6.6	72	0300	4.8	55
0900	6.2	70	1020	6.3	70	0400	4.7	54
1000	6.4	72	1413	6.7	76	0500	4.8	55
1100	6.5	73	1808	7.2	82	0600	4.8	55
1200	6.7	75	2215	7.2	81	0700	4.8	55
1300	6.9	77	July 19, 1974			0800	4.9	56
1400	7.0	79	0235	7.1	79	0900	5.4	62
1500	7.0	79	July 18, 1988			1000	5.4	62
1600	7.2	81	1500	7.2	90	1100	5.6	65
1700	7.2	82	1600	7.2	91	1200	6.1	71
1800	7.2	82	1700	7.0	88	1300	6.4	75
1900	7.2	82	1800	6.7	84	1400	6.4	74
2000	7.0	80	1900	6.4	80	Sampling site: Ware River (Chicopee), Site 1		
2100	6.8	77	2000	6.0	74	June 27, 1988		
2200	6.7	76	2100	5.7	70	1900	8.2	91
2300	6.5	74	2200	5.4	66			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 1--Continued								
2000	8.0	88	2100	6.5	71	1400	7.6	90
2100	7.9	86	2200	6.4	70	1500	7.8	93
2200	8.0	87	2300	6.5	71	1600	8.0	96
2300	8.0	87	2400	6.4	70	1700	8.1	97
2400	8.0	86	June 28, 1988			1800	8.1	97
June 28, 1988			0100	6.5	71	1900	8.1	97
0100	7.9	84	0200	6.4	70	2000	8.0	95
0200	8.1	86	0300	6.4	70	2100	7.8	92
0300	8.0	84	0400	6.3	69	2200	7.6	90
0400	8.0	84	0500	6.3	69	2300	7.3	86
0500	8.0	83	0600	6.4	70	2400	7.0	82
0600	8.2	85	0700	6.7	73	July 6, 1988		
0700	8.2	85	0800	6.8	74	0100	6.7	78
0800	8.4	87	0900	6.5	71	0200	6.5	75
0900	8.3	87	1000	6.5	71	0300	6.3	73
1000	8.3	87	1100	6.5	71	0400	6.1	70
1100	8.3	88	1200	6.6	71	0500	5.8	66
1200	8.4	91	1300	6.5	70	0600	5.7	65
1300	8.3	90	1400	6.6	71	0700	5.6	63
1400	8.3	92	1500	6.6	71	0800	5.6	63
1500	8.2	91	1600	6.5	71	0900	5.8	66
1600	8.2	92	1700	6.4	69	1000	6.1	70
1700	8.0	90	1800	6.5	71	1100	6.4	74
1800	8.0	90	1900	6.5	71	1200	6.6	78
1900	7.9	89	2000	6.5	71	1300	7.0	84
2000	7.8	87	2100	6.5	71	1400	7.2	87
2100	7.6	83	2200	6.5	71	1500	7.4	91
2200	7.6	82	2300	6.4	70	1600	7.6	94
2300	7.8	83	2400	6.4	70	1700	7.7	96
2400	7.8	83	June 29, 1988			1800	7.6	94
June 29, 1988			0100	6.3	68	1900	7.6	94
0100	7.8	82	0200	6.2	67	2000	7.5	92
0200	7.9	83	0300	6.2	67	2100	7.4	90
0300	7.9	83	0400	6.2	67	2200	7.1	86
0400	7.9	83	0500	6.2	67	2300	6.9	83
0500	7.9	82	0600	6.2	67	2400	6.6	80
0600	8.0	83	0700	6.3	68	July 7, 1988		
0700	8.0	83	0800	6.4	70	0100	6.3	76
0800	8.0	84	Sampling site:			0200	6.0	72
0900	8.0	83	West Branch Ware River			0300	5.8	69
Ware River (Chicopee),			(Chicopee), Site 1			0400	5.6	66
Site 2			July 5, 1988			0500	5.3	63
June 27, 1988			0900	5.9	65	0600	5.2	61
1700	7.1	78	1000	6.4	71	0700	5.0	59
1800	6.7	73	1100	6.8	77	0800	5.0	59
1900	6.6	72	1200	7.1	81	0900	5.0	59
2000	6.7	73	1300	7.4	86	1000	5.1	60

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation		
AREA 1--Continued										
1100	5.2	61	1800	7.2	84	0100	6.7	77		
1200	5.6	67	1900	7.0	81	0200	6.8	78		
1300	5.9	72	2000	6.9	79	0300	6.8	77		
1400	6.2	77	2100	6.7	76	0400	6.8	77		
1500	6.3	78	2200	6.7	76	0500	6.9	78		
1600	6.7	84	2300	6.7	75	0600	6.9	77		
1700	6.9	87	2400	6.8	76	0700	7.1	79		
1800	7.0	88	July 6, 1988			0800	7.3	81		
1900	7.0	88		0100	6.8	76	0900	7.6	85	
2000	6.9	86		0200	6.8	75	1000	7.7	86	
2100	6.8	84		0300	6.8	74	1100	7.7	87	
2200	6.6	81	0400	6.9	75	1200	8.0	92		
2300	6.4	78	0500	7.0	76	1300	8.0	94		
2400	6.2	76	0600	7.0	75	1400	7.9	95		
July 8, 1988			0700	7.2	77	1500	7.8	95		
	0100	6.0	73	0800	7.4	79	1600	7.6	93	
	0200	5.7	69	0900	7.6	82	1700	7.4	90	
	0300	5.5	66	1000	7.7	83	1800	7.1	86	
0400	5.3	64	1100	8.6	94	1900	6.8	82		
0500	5.1	61	1200	8.5	95	2000	6.7	81		
0600	4.9	58	1300	8.4	97	2100	6.5	78		
0700	4.8	57	1400	8.2	96	2200	6.4	76		
West Branch Ware River (Chicopee), Site 2			1500	8.0	95	2300	6.4	76		
			1600	7.8	93	2400	6.5	76		
	July 5, 1988			1700	7.6	91	July 8, 1988			
		1000	8.5	89	1800	7.3		87	0100	6.5
1100		8.6	92	1900	7.0	83		0200	6.6	76
1200		8.5	93	2000	6.8	80		0300	6.6	76
1300	8.3	93	2100	6.7	79	0400	6.6	76		
1400	8.1	93	2200	6.7	78	0500	6.7	76		
1500	7.8	90	2300	6.7	78	0600	6.7	76		
1600	7.7	90	2400	6.7	77	0700	6.9	78		
1700	7.5	88	July 7, 1988			0800	7.2	81		
AREA 2										
Sampling site:			June 5, 1974			0958	6.6	73		
Assabet River (Concord),			0202	7.7	83	1355	7.7	87		
Site 1			0557	7.3	73	1804	6.7	73		
June 4, 1974			0955	7.6	84	2203	8.1	90		
0202	8.3	86	1350	7.6	88	June 7, 1974				
0600	8.4	83	1800	6.7	82		0200	6.6	72	
1000	7.8	82	2202	6.7	77	Sept 17, 1974				
1357	7.5	81	June 6, 1974				0605	4.5	47	
1800	6.6	66		0200	7.2		81	1004	5.8	62
2205	7.4	81		0601	6.6		72	1405	8.6	102

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
1805	9.1	104	1800	6.3	70	1300	6.8	83
2209	6.8	75	2200	6.2	68	1400	6.7	83
Sept 18, 1974			July 18, 1974			1500	6.5	80
0208	6.0	66	0200	6.7	73	1600	6.4	79
0605	4.8	51	0600	6.1	64	1700	6.5	80
1011	5.8	64	1006	6.4	67	1800	6.4	78
1410	8.1	92	1400	5.7	64	1900	6.4	77
1800	8.6	97	1756	6.4	72	2000	6.3	76
2207	6.9	74	2202	6.6	70	2100	6.3	75
Sept 19, 1974			July 19, 1974			2200	6.3	75
0205	5.1	54	0200	5.9	62	2300	6.3	75
0605	5.0	53	0600	6.2	66	2400	6.3	75
1007	5.4	59	1005	6.3	68	Aug 23, 1989		
1405	9.8	110	1400	6.0	67	0100	6.3	75
1805	9.1	103	1800	6.2	70	0200	6.3	75
2205	6.8	77	2201	6.0	67	0300	6.3	75
Sept 20, 1974			July 20, 1974			0400	6.3	75
0210	5.6	62	0206	5.8	64	0500	6.3	75
0604	5.2	57	0600	5.7	62	0600	6.3	75
Assabet River (Concord), Site 2			Aug 21, 1989			0700	6.3	75
June 4, 1974			1100	6.9	82	0800	6.4	76
0208	8.1	87	1200	7.0	84	0900	6.5	77
0610	7.2	74	1300	7.0	85	1000	6.6	79
1008	10.5	112	1400	6.9	85	1100	6.7	80
1405	10.8	135	1500	6.8	83	1200	6.7	82
1808	11.1	139	1600	6.8	83	1300	6.4	79
2211	11.9	143	1700	6.8	83	1400	6.5	80
June 5, 1974			1800	6.7	82	1500	6.4	80
0206	8.8	100	1900	6.5	80	1600	6.5	80
0605	8.5	89	2000	6.4	79	1700	6.3	79
1002	9.4	111	2100	6.4	78	1800	6.2	78
1805	9.8	125	2200	6.4	78	1900	6.2	77
2206	10.6	126	2300	6.5	78	2000	6.1	75
June 6, 1974			2400	6.6	79	2100	6.1	74
0205	9.2	105	Aug 22, 1989			2200	6.1	74
0607	8.5	95	0100	6.6	78	2300	6.2	74
1004	7.3	83	0200	6.6	79	2400	6.2	74
1400	9.1	106	0300	6.6	78	Aug 24, 1989		
1809	9.6	107	0400	6.6	79	0100	6.3	75
2208	9.0	104	0500	6.6	79	0200	6.2	72
June 7, 1974			0600	6.7	79	0300	6.3	74
0205	6.9	77	0700	6.7	79	0400	6.4	75
July 17, 1974			0800	6.8	81	0500	6.5	76
0558	6.8	70	0900	6.9	81	0600	6.5	76
1000	6.8	70	1000	6.9	81	0700	6.6	76
1400	6.7	74	1100	6.8	81	0800	6.6	77
			1200	6.8	82			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 2--Continued								
0900	6.7	77	1008	8.2	95	0500	4.0	47
1000	6.8	79	1406	9.3	109	0600	3.8	44
1100	6.8	81	1814	10.2	116	0700	3.7	43
1200	6.9	82	2212	8.6	98	0800	4.0	46
1300	6.9	83	June 7, 1974			0900	5.0	59
1400	6.8	83	0209	6.7	76	1000	6.2	73
1500	6.8	82	Sept 17, 1974			1100	7.3	88
1600	6.7	81	0610	6.1	64	1200	8.3	102
1700	6.6	80	1010	6.7	71	1300	8.3	103
1800	6.5	78	1410	9.2	108	1400	8.7	111
1900	6.3	76	1810	9.3	105	1500	9.1	117
2000	6.4	76	2213	7.7	86	1600	9.4	122
2100	6.4	75	Sept 18, 1974			1700	9.6	124
2200	6.5	75	0213	6.5	71	1800	9.9	126
2300	6.5	75	0615	5.9	62	1900	8.9	112
2400	6.6	75	1016	7.3	80	2000	8.0	99
Aug 25, 1989			1415	9.0	101	2100	6.9	86
0100	6.7	76	1805	9.6	108	2200	6.2	76
0200	6.7	76	2214	7.5	81	2300	5.6	68
0300	6.8	76	Sept 19, 1974			2400	5.1	61
0400	6.8	76	0210	6.7	71	Aug 23, 1989		
0500	6.9	76	0612	5.9	62	0100	4.7	57
0600	6.9	76	1013	7.4	81	0200	4.4	53
0700	7.0	78	1410	9.2	104	0300	4.2	50
0800	7.1	78	1810	10.0	113	0400	3.9	46
0900	7.0	77	2212	8.7	97	0500	3.8	45
1000	7.2	79	Sept 20, 1974			0600	3.5	42
1100	7.2	80	0215	7.6	84	0700	3.3	39
Assabet River (Concord),			0610	6.6	72	0800	3.6	43
Site 2A			Aug 21, 1989			0900	4.6	55
June 4, 1974			1300	8.1	99	1000	5.9	71
0215	9.6	100	1400	8.3	103	1100	6.8	83
0620	8.4	87	1500	8.5	105	1200	7.9	99
1012	9.5	104	1600	8.5	106	1300	7.4	90
1413	9.7	117	1700	8.3	103	1400	7.8	97
1813	9.7	115	1800	8.2	102	1500	8.6	109
2217	8.3	94	1900	7.8	96	1600	8.6	109
June 5, 1974			2000	7.1	87	1700	8.4	106
0210	6.6	74	2100	6.5	79	1800	8.4	106
0610	6.3	65	2200	5.9	72	1900	8.1	102
1007	8.7	100	2300	5.4	66	2000	6.8	85
1410	9.8	119	2400	5.1	61	2100	6.2	77
1810	9.6	117	Aug 22, 1989			2200	5.3	65
2214	6.5	75	0100	5.0	59	2300	4.6	56
June 6, 1974			0200	4.6	55	2400	4.1	50
0211	5.9	66	0300	4.4	52	Aug 24, 1989		
0613	6.4	70	0400	4.2	49	0100	3.7	44

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
0200	3.4	41	1800	5.0	60	1500	5.0	60
0300	3.2	38	1900	4.8	58	1600	4.6	55
0400	2.9	34	2000	4.7	56	1700	4.5	55
0500	2.7	31	2100	4.5	54	1800	4.4	53
0600	2.4	28	2200	4.5	53	1900	4.2	51
0700	2.3	27	2300	4.5	53	2000	4.1	50
0800	2.6	30	2400	4.5	54	2100	4.0	48
0900	3.5	41	Aug 22, 1989			2200	4.0	48
1000	4.8	57	0100	4.6	54	2300	4.0	47
1100	6.1	74	0200	4.6	54	2400	4.1	48
1200	7.1	87	0300	4.7	55	Aug 24, 1989		
1300	8.0	99	0400	4.7	55	0100	4.2	49
1400	8.7	110	0500	4.8	56	0200	4.3	50
1500	9.2	116	0600	4.9	56	0300	4.6	53
1600	9.5	121	0700	4.9	57	0400	4.6	52
1700	9.8	125	0800	5.0	57	0500	4.7	53
1800	9.8	123	0900	5.0	58	0600	4.7	52
1900	9.1	113	1000	5.0	58	0700	4.8	54
2000	7.9	97	1100	5.0	58	0800	5.0	55
2100	6.8	83	1200	5.3	62	0900	5.0	56
2200	5.9	71	1300	5.6	66	1000	4.9	55
2300	5.2	62	1400	5.7	69	1100	5.0	57
2400	4.6	54	1500	5.6	67	1200	5.2	59
Aug 25, 1989			1600	5.2	63	1300	5.3	62
0100	4.2	49	1700	4.9	60	1400	5.5	65
0200	4.0	46	1800	4.7	56	1500	5.5	65
0300	3.7	42	1900	4.5	54	1600	5.3	63
0400	3.4	39	2000	4.4	52	1700	5.1	60
0500	3.1	35	2100	4.3	52	1800	4.8	56
0600	2.8	32	2200	4.3	51	1900	4.5	52
0700	2.7	31	2300	4.3	51	2000	4.3	50
0800	2.9	33	2400	4.5	52	2100	4.3	50
0900	3.8	43	Aug 23, 1989			2200	4.2	48
1000	6.1	70	0100	4.5	52	2300	4.3	49
1100	6.4	74	0200	4.4	51	2400	4.3	49
1200	7.6	89	0300	4.5	52	Aug 25, 1989		
Assabet River (Concord),			0400	4.6	53	0100	4.5	50
Site 3			0500	4.6	53	0200	4.6	51
Aug 21, 1989			0600	4.6	53	0300	4.8	52
1000	5.5	64	0700	4.6	53	0400	4.9	53
1100	5.4	63	0800	4.7	54	0500	5.0	54
1200	5.5	65	0900	4.8	55	0600	5.2	55
1300	6.6	79	1000	4.8	56	0700	5.3	56
1400	6.0	71	1100	4.9	57	0800	5.4	57
1500	5.5	66	1200	5.1	60	0900	5.4	56
1600	5.4	64	1300	5.1	61	1000	5.4	56
1700	5.2	62	1400	5.1	60			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
Sampling site:			0900	8.2	85	0200	0.3	4
Beaver Brook (Merrimack),			1000	8.2	86	0300	0.3	4
Site 1			1100	8.2	87	0400	0.3	4
Aug 8, 1988			Beaver Brook (Merrimack),			0500	0.3	4
1600	7.8	85	Site 2			0600	0.2	2
1700	7.3	80	Aug 8, 1988			0700	0.2	2
1800	7.8	85	1100	0.2	2	0800	0.2	2
1900	7.7	83	1200	0.2	2	Beaver Brook (Merrimack),		
2000	7.8	84	1300	0.2	2	Site 3		
2100	7.8	84	1400	0.2	2	Aug 8, 1988		
2200	7.8	82	1500	0.2	2	1300	1.8	22
2300	7.9	82	1600	0.4	5	1400	1.8	22
2400	7.9	83	1700	0.5	6	1500	1.8	22
Aug 9, 1988			1800	0.5	6	1600	1.8	22
0100	8.0	84	1900	0.4	5	1700	1.8	22
0200	8.0	83	2000	0.4	5	1800	1.8	22
0300	8.0	83	2100	0.4	5	1900	1.8	22
0400	8.1	84	2200	0.4	5	2000	1.8	22
0500	8.1	83	2300	0.4	5	2100	1.8	22
0600	8.1	83	2400	0.3	4	2200	1.9	23
0700	8.2	84	Aug 9, 1988			2300	1.9	23
0800	8.2	84	0100	0.3	4	2400	2.0	24
0900	8.2	84	0200	0.3	4	Aug 9, 1988		
1000	8.6	90	0300	0.3	4	0100	2.0	24
1100	8.5	89	0400	0.2	2	0200	2.0	24
1200	8.5	91	0500	0.2	2	0300	2.0	24
1300	8.4	91	0600	0.2	2	0400	2.0	24
1400	8.3	90	0700	0.1	1	0500	2.0	24
1500	8.2	89	0800	0.1	1	0600	2.0	24
1600	8.1	88	0900	0.1	1	0700	2.0	24
1700	8.0	87	1000	0.1	1	0800	1.9	22
1800	8.0	87	1100	0.2	2	0900	1.9	22
1900	7.9	84	1200	0.3	4	1000	1.9	23
2000	7.9	84	1300	0.4	5	1100	1.9	23
2100	8.0	85	1400	0.5	6	1200	1.9	23
2200	8.0	84	1500	0.5	6	1300	1.9	23
2300	8.0	84	1600	0.5	6	1400	1.9	23
2400	8.1	84	1700	0.4	5	1500	1.9	23
Aug 10, 1988			1800	0.5	6	1600	1.9	23
0100	8.1	84	1900	0.5	6	1700	1.9	23
0200	8.1	84	2000	0.4	5	1800	1.9	23
0300	8.2	84	2100	0.3	4	1900	2.0	24
0400	8.2	84	2200	0.4	5	2000	2.0	24
0500	8.2	84	2300	0.4	5	2100	2.0	24
0600	8.2	84	2400	0.4	5	2200	2.1	25
0700	8.2	84	Aug 10, 1988			2300	2.2	27
0800	8.2	84	0100	0.3	4	2400	2.2	27

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
Aug 10, 1988			2031	7.2	77	1711	5.7	68
0100	2.2	27	Aug 15, 1979			2148	6.7	77
0200	2.2	27	0045	6.9	73	June 12, 1979		
0300	2.2	27	0601	6.9	71	0147	5.6	65
0400	2.2	27	0838	6.8	70	0512	5.3	60
0500	2.1	25	1319	6.8	73	0945	5.0	57
0600	2.1	25	1659	7.5	79	1310	5.4	62
0700	2.1	25	2032	7.1	76	1710	6.1	70
0800	2.0	24	2312	7.2	74	2105	6.0	67
0900	2.0	24	Aug 16, 1979			June 13, 1979		
Sampling site:			0440	6.6	65	0125	5.9	65
Concord River (Merrimack)			0850	6.1	64	0512	5.9	63
Site 1			Concord River (Merrimack),			0920	5.7	64
June 11, 1979			Site 2			1312	6.9	79
1326	5.9	69	July 10, 1973			1650	7.1	82
1652	6.0	71	0625	1.2	14	2110	7.7	84
2135	8.4	98	1220	2.7	34	June 14, 1979		
June 12, 1979			1905	3.5	44	0050	6.5	72
0133	5.7	66	July 11, 1973			0452	6.0	64
0459	5.8	65	0125	1.5	19	0840	6.3	69
0935	4.9	55	0620	1.3	15	1305	7.4	85
1258	5.6	62	1200	1.9	23	Aug 13, 1979		
1700	6.8	77	1816	3.1	39	0942	6.2	65
2053	6.9	76	July 12, 1973			1402	6.3	69
June 13, 1979			0041	1.1	13	1706	6.3	69
0113	6.5	72	0625	1.2	14	2047	6.8	73
0459	6.2	66	1320	2.4	28	Aug 14, 1979		
0910	5.8	64	1923	2.3	27	0117	6.7	70
1302	6.4	72	July 13, 1973			0637	6.9	73
1638	7.5	85	0133	2.0	23	0930	6.5	69
2053	7.8	86	Aug 28, 1973			1234	6.7	72
June 14, 1979			0600	8.7	97	1715	6.4	68
0035	6.6	73	1157	8.2	95	2041	6.6	70
0442	6.0	64	1810	10.8	138	Aug 15, 1979		
0830	5.7	61	Aug 29, 1973			0055	6.7	71
1255	6.6	73	0016	7.7	93	0614	6.7	70
Aug 13, 1979			0545	7.2	81	0852	6.3	65
0932	6.9	71	1229	10.0	121	1329	6.6	72
1355	6.0	65	1800	12.2	154	1707	6.6	70
1655	7.1	76	2354	11.7	148	2043	6.7	71
2036	6.8	72	Aug 30, 1973			2323	6.7	69
Aug 14, 1979			0542	9.7	112	Aug 16, 1979		
0100	6.7	69	1158	12.1	145	0514	6.6	66
0625	7.1	75	1805	10.1	129	0900	6.3	66
0925	6.8	72	2357	10.8	132	Concord River (Merrimack),		
1222	6.6	71	June 11, 1979			Site 3		
1704	6.3	68	1339	6.4	75	July 10, 1973		

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 2--Continued								
0635	1.9	23	0620	1.1	11	0215	7.3	81
1235	1.6	20	1005	1.2	12	0625	7.0	75
1925	2.2	28	1410	2.2	24	1010	7.2	79
July 11, 1973			1811	2.4	26	1420	7.8	88
0145	1.7	21	2215	1.5	16	1819	8.6	97
0635	1.7	21	June 28, 1974			2220	8.4	94
1210	1.3	16	0225	1.2	12	June 28, 1974		
1833	1.7	21	Aug 27, 1974			0232	8.0	88
July 12, 1973			0307	2.0	23	Aug 27, 1974		
0058	1.7	21	0700	1.9	22	0301	7.2	82
0640	1.5	17	1048	1.9	22	0655	6.4	75
1340	1.8	21	1444	3.5	41	1042	6.3	73
1947	2.3	27	1920	4.5	53	1435	7.9	93
July 13, 1973			2320	3.0	35	1915	8.2	96
0153	2.0	24	Aug 28, 1974			2310	7.9	93
Aug 28, 1973			0308	2.0	23	Aug 28, 1974		
0615	4.9	55	0704	1.5	17	0305	7.0	80
1211	7.2	83	1027	2.1	24	0700	6.1	71
1830	8.1	101	1435	4.7	57	1033	6.7	79
Aug 29, 1973			1904	3.6	41	1431	8.4	102
0032	7.6	93	2312	2.8	30	1857	8.8	104
0555	6.6	74	Aug 29, 1974			2303	8.1	86
1240	7.9	94	0237	2.7	30	Aug 29, 1974		
1810	7.8	98	0715	1.0	12	0323	7.3	84
Aug 30, 1973			1037	1.1	12	0708	6.3	73
0007	8.5	105	1440	1.0	11	1031	6.1	70
0554	7.7	87	1846	1.0	11	1435	6.4	74
1210	8.5	100	2252	0.7	8	1840	7.5	85
Sampling site:			Aug 30, 1974			2245	6.0	73
Stony Brook (Merrimack),			0237	1.1	12	Aug 30, 1974		
Site 1			Stony Brook (Merrimack),			0231	6.4	71
June 25, 1974			Site 2			July 31, 1989		
0224	0.9	10	June 25, 1974			0900	6.8	79
0614	0.5	6	0232	7.0	81	1000	7.5	88
1015	0.8	9	0620	7.1	81	1100	8.5	100
1410	1.3	14	1020	7.0	81	1200	9.2	110
1807	1.7	19	1420	8.6	98	1300	9.6	117
2230	1.9	20	1815	7.4	84	1400	10.0	121
June 26, 1974			2240	7.2	81	1500	10.2	124
0215	1.3	14	June 26, 1974			1600	10.3	128
0615	1.0	11	0220	7.4	82	1700	10.3	129
1007	1.2	13	0620	6.7	73	1800	10.4	130
1412	1.6	17	1014	7.0	77	1900	10.3	128
1820	1.2	13	1417	7.5	83	2000	10.1	125
2221	1.6	17	1830	7.7	86	2100	9.9	121
June 27, 1974			2231	8.7	95	2200	9.6	117
0210	0.8	8	June 27, 1974			2300	9.1	111

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
2400	8.5	103	2100	9.5	118	0654	3.1	36
Aug 1, 1989			2200	9.0	111	1028	6.1	72
0100	8.6	104	2300	9.2	115	1427	9.0	110
0200	8.4	101	2400	9.0	110	1853	5.1	60
0300	8.2	98	Aug 3, 1989			2255	3.7	39
0400	7.9	94	0100	8.9	109	Aug 29, 1974		
0500	7.6	90	0200	8.8	107	0224	4.6	52
0600	7.3	87	0300	8.5	103	0700	3.5	40
0700	7.0	83	0400	8.3	101	1027	4.3	48
0800	7.0	83	0500	8.1	98	1428	4.9	56
0900	7.0	81	0600	7.9	95	1837	4.4	49
1000	6.8	81	0700	7.7	92	2238	3.4	38
1100	6.8	80	0800	7.6	91	Aug 30, 1974		
1200	7.5	88	0900	7.4	88	0224	4.5	50
1300	8.0	96	Stony Brook (Merrimack),			July 31, 1989		
1400	9.1	110	Site 3			1100	6.5	77
1500	10.0	122	June 25, 1974			1200	6.7	80
1600	10.3	126	0235	7.1	82	1300	6.0	72
1700	10.3	126	0624	7.0	80	1400	6.1	73
1800	10.2	125	1025	7.7	87	1500	7.1	87
1900	10.0	124	1425	7.7	87	1600	6.9	84
2000	9.8	122	1822	7.3	82	1700	6.8	83
2100	9.6	118	2245	7.3	81	1800	6.4	78
2200	9.5	117	June 26, 1974			1900	6.0	73
2300	9.3	114	0227	7.3	80	2000	5.7	69
2400	9.2	112	0630	7.9	87	2100	5.3	64
Aug 2, 1989			1017	7.5	83	2200	5.0	61
0100	9.0	108	1835	7.8	86	2300	5.0	59
0200	8.7	105	2240	7.9	87	2400	4.9	58
0300	8.2	99	June 27, 1974			Aug 1, 1989		
0400	7.9	94	0223	7.4	81	0100	4.8	57
0500	7.5	89	0630	7.7	81	0200	4.8	56
0600	7.3	87	1015	8.2	90	0300	4.8	57
0700	7.1	83	1430	8.3	93	0400	4.9	57
0800	7.0	83	1825	8.2	91	0500	4.9	57
0900	7.0	83	2230	7.7	85	0600	4.9	57
1000	7.4	88	June 28, 1974			0700	5.0	58
1100	8.1	96	0238	7.7	85	0800	5.2	61
1200	9.1	110	Aug 27, 1974			0900	5.5	64
1300	9.7	122	0255	3.5	39	1000	5.7	67
1400	9.8	122	0650	3.2	36	1100	6.2	72
1500	10.0	126	1035	6.1	70	1200	6.2	73
1600	10.2	129	1429	7.8	94	1300	6.7	80
1700	10.2	129	1908	5.8	70	1400	7.0	84
1800	10.0	126	2300	3.9	46	1500	7.2	86
1900	9.8	123	Aug 28, 1974			1600	7.1	86
2000	9.7	121	0258	3.2	36	1700	6.8	82

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 2--Continued								
1800	6.4	77	0245	3.8	44	1300	6.9	79
1900	5.9	71	0630	3.3	38	1400	7.0	81
2000	5.5	65	1030	2.9	33	1500	6.9	80
2100	5.0	60	1430	2.8	31	1600	6.9	80
2200	4.7	56	1828	2.6	29	1700	6.8	79
2300	4.5	53	2255	2.6	29	1800	6.7	78
2400	4.4	52	June 26, 1974			1900	6.6	77
Aug 2, 1989			0232	2.7	29	2000	6.6	76
0100	4.3	50	0635	2.6	28	2100	6.6	76
0200	4.2	49	1025	2.2	24	2200	6.6	75
0300	4.2	49	1430	3.1	33	2300	6.7	77
0400	4.1	48	1845	2.4	26	2400	6.7	76
0500	4.2	48	2245	2.4	26	Aug 1, 1989		
0600	4.2	48	June 27, 1974			0100	6.7	76
0700	4.4	51	0230	2.6	28	0200	6.8	77
0800	4.8	55	0635	2.0	21	0300	6.8	78
0900	5.2	61	1020	2.6	28	0400	6.8	77
1000	6.0	70	1435	3.1	34	0500	6.8	78
1100	6.6	78	1831	4.0	44	0600	6.9	78
1200	7.0	84	2235	4.0	43	0700	6.9	78
1300	7.3	88	June 28, 1974			0800	7.0	78
1400	7.2	88	0243	3.5	38	0900	7.0	79
1500	7.3	89	Aug 27, 1974			1000	7.0	80
1600	7.1	87	0249	5.2	59	1100	7.2	81
1700	6.7	83	0640	4.6	52	1200	7.2	82
1800	6.3	77	1027	4.4	50	1300	7.2	82
1900	6.0	73	1423	5.0	58	1400	7.2	83
2000	5.4	66	1900	6.1	72	1500	7.2	83
2100	4.9	60	2256	5.2	60	1600	7.1	83
2200	4.6	56	Aug 28, 1974			1700	7.0	81
2300	4.4	53	0248	5.0	57	1800	6.9	80
2400	4.2	51	0647	5.3	60	1900	6.8	79
Aug 3, 1989			1022	5.3	61	2000	6.7	78
0100	4.1	50	1422	5.7	68	2100	6.7	78
0200	4.0	48	1849	6.2	71	2200	6.8	78
0300	4.0	48	2249	6.0	63	2300	6.9	78
0400	4.0	47	Aug 29, 1974			2400	6.9	79
0500	4.0	47	0219	5.9	65	Aug 2, 1989		
0600	4.0	48	0650	3.5	40	0100	6.9	79
0700	4.2	49	1020	2.4	27	0200	7.0	79
0800	4.6	54	1423	3.0	34	0300	7.0	79
0900	5.1	60	1829	2.7	29	0400	7.0	79
1000	5.8	70	2232	2.7	30	0500	7.0	79
1100	6.4	78	Aug 30, 1974			0600	7.0	79
Stony Brook (Merrimack), Site 4			0219	2.7	29	0700	7.1	80
June 25, 1974			July 31, 1989			0800	7.1	80
			1200	7.1	82	0900	7.2	81

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 2--Continued								
1000	7.2	81	1445	7.5	81	1441	7.5	86
1100	7.3	82	1835	7.4	80	1855	7.5	85
1200	7.3	82	2245	9.6	102	2300	7.9	89
1300	7.2	83	June 28, 1974			June 13, 1979		
1400	7.1	82	0250	4.1	44	0243	7.5	83
1500	7.0	82	Aug 27, 1974			0655	8.0	88
1600	7.0	82	0236	1.5	17	1031	8.1	86
1700	6.8	80	0626	0.9	10	1447	8.1	89
1800	6.7	79	1020	2.3	26	1845	8.1	87
1900	6.8	79	1416	3.8	43	2257	8.3	88
2000	6.6	77	1845	4.8	56	June 14, 1979		
2100	6.7	77	2243	3.9	45	0249	8.8	94
2200	6.7	78	Aug 28, 1974			0645	8.1	86
2300	6.8	78	0243	1.8	20	1035	8.3	90
2400	6.8	79	0640	1.4	16	1446	8.4	93
Aug 3, 1989			1015	1.7	20	1854	8.6	92
0100	6.9	79	1416	4.0	47	2243	8.2	88
0200	6.9	79	1842	5.3	61	June 15, 1979		
0300	6.9	79	2243	2.1	22	0254	9.0	95
0400	6.9	79	Aug 29, 1974			0622	8.6	92
0500	7.0	79	0210	1.4	16	1034	8.7	93
0600	7.0	79	0642	1.2	14	Aug 13, 1979		
0700	7.0	80	1014	1.3	14	0702	7.4	75
0800	7.1	81	1417	2.2	25	1112	5.5	59
0900	7.2	82	1825	3.0	33	1441	8.1	87
1000	7.2	82	2223	2.3	26	1833	10.5	113
1100	7.2	82	Aug 30, 1974			2257	8.3	88
Stony Brook (Merrimack), Site 5			0214	1.4	15	Aug 14, 1979		
June 25, 1974			Sampling site:			0410	8.4	91
0322	3.3	37	Sudbury River (Concord), Site 1			0654	8.1	85
0635	2.4	27	July 10, 1973			1022	8.4	91
1035	3.6	40	0445	6.8	81	1455	10.0	110
1440	4.9	54	1035	6.8	83	1840	8.1	89
1835	4.8	52	1655	6.7	84	2256	8.1	87
2300	3.1	33	2313	6.4	79	Aug 15, 1979		
June 26, 1974			July 11, 1973			0327	8.6	93
0240	3.0	32	0455	6.6	78	0638	7.9	81
0645	3.2	34	1030	6.3	75	1138	8.7	96
1030	4.1	43	1633	6.5	81	1503	8.5	91
1439	5.6	60	2246	6.4	78	1835	8.5	92
1855	5.5	58	July 12, 1973			2134	8.2	87
2254	4.1	43	0455	7.3	83	Aug 16, 1979		
June 27, 1974			1115	7.3	84	0240	8.8	95
0235	3.6	38	1658	7.0	81	0652	8.2	84
0640	3.3	34	June 12, 1979			Sudbury River (Concord), Site 2		
1030	5.4	57	1042	8.2	91	July 10, 1973		

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 2--Continued								
0535	0.5	6	1137	4.1	44	1953	8.1	87
1130	0.2	2	1609	6.4	69	2336	6.8	73
1800	1.2	15	1945	6.2	67	June 14, 1979		
July 11, 1973			2356	6.2	66	0349	6.0	64
0015	0.7	9	Aug 15, 1979			0730	5.3	56
0540	0.2	2	0500	6.0	63	1155	6.2	67
1115	0.5	6	0743	5.1	53	Aug 13, 1979		
1718	0.5	6	1240	6.1	66	0833	5.1	51
2345	0.9	11	1609	4.9	52	1245	5.4	57
July 12, 1973			1943	6.6	71	1600	6.1	65
0540	0.3	3	2230	5.5	58	1950	5.1	54
1215	1.4	16	Aug 16, 1979			2400	4.7	49
1807	1.4	16	0351	5.9	62	Aug 14, 1979		
July 13, 1973			0805	4.6	48	0519	4.4	46
0012	1.4	16	Sudbury River (Concord), Site 3			0825	4.5	47
June 11, 1979			July 10, 1973			1130	5.0	53
1231	5.7	65	0528	0.4	5	1602	4.4	47
1554	6.5	77	1125	0.3	4	1941	5.0	53
2020	7.3	84	1754	0.8	10	2352	4.8	52
June 12, 1979			July 11, 1973			Aug 15, 1979		
0025	3.4	38	0009	0.5	6	0453	4.5	47
0359	5.5	61	0530	0.2	2	0738	4.3	45
0830	5.2	57	1110	0.3	4	1235	4.8	52
1204	5.9	64	1714	0.6	7	1605	5.5	59
1603	5.6	62	2338	0.8	10	1938	5.3	57
1953	7.9	86	July 12, 1973			2225	5.3	57
June 13, 1979			0535	1.1	13	Aug 16, 1979		
0010	4.0	43	1200	1.0	12	0346	4.8	51
0359	6.4	67	1755	1.2	14	0800	4.2	45
0808	5.5	57	June 11, 1979			Sudbury River (Concord), Site 4		
1206	6.5	70	1225	5.4	62	July 10, 1973		
1546	6.9	78	1549	6.0	71	0555	0.4	4
1958	8.9	97	2012	6.4	75	1145	0.1	1
2342	7.7	83	June 12, 1979			1817	0.4	5
June 14, 1979			0015	6.2	70	July 11, 1973		
0353	7.0	71	0354	5.3	59	0030	0.4	5
0733	2.4	25	0825	7.4	82	0550	0.1	1
1159	6.5	69	1200	5.7	62	1125	0.0	0
Aug 13, 1979			1558	6.7	75	1735	0.5	6
0838	4.5	45	1947	7.1	77	July 12, 1973		
1250	5.4	57	June 13, 1979			0002	0.8	10
1604	6.8	73	0004	6.7	71	0555	0.3	3
1955	7.0	75	0353	6.1	64	1235	0.6	7
Aug 14, 1979			0802	5.0	53	1830	0.4	5
0008	6.0	63	1203	6.0	65	July 13, 1973		
0529	6.0	63	1540	6.8	76	0034	0.9	10
0834	5.2	55						

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 2--Continued								
June 11, 1979			0530	3.9	40	2038	6.7	76
1259	4.7	55	0813	3.9	41	June 13, 1979		
1622	5.4	65	1300	4.1	44	0055	6.4	71
2053	7.0	82	1633	4.0	43	0445	6.1	66
June 12, 1979			2007	4.1	44	0850	5.6	62
0055	4.8	55	2250	4.0	43	1249	6.2	71
0427	5.1	58	Aug 16, 1979			1625	6.7	77
0900	4.0	45	0415	3.8	38	2045	7.7	85
1230	4.0	45	0828	3.1	32	June 14, 1979		
1630	5.4	61	Sudbury River (Concord), Site 5			0023	6.2	68
2019	6.1	67	July 10, 1973			0430	5.9	63
June 13, 1979			0610	0.1	1	0815	5.5	59
0038	5.6	60	1205	0.3	4	1239	6.5	73
0429	5.6	60	1845	0.4	5	Aug 13, 1979		
0840	4.9	52	July 11, 1973			0918	5.7	59
1235	5.3	58	0105	0.3	4	1335	5.2	57
1611	5.9	67	0610	0.3	4	1640	6.4	70
2026	6.8	73	1145	0.5	6	2025	5.8	63
June 14, 1979			1806	0.5	6	Aug 14, 1979		
0006	5.9	64	July 12, 1973			0045	6.2	66
0419	5.9	63	0027	0.8	10	0610	5.8	62
0803	5.3	57	0615	0.5	6	0913	6.2	65
1226	5.7	62	1300	1.2	14	1210	6.4	70
Aug 13, 1979			1907	1.4	17	1650	6.0	65
0902	5.2	52	July 13, 1973			2020	5.6	60
1315	5.1	54	0112	0.6	7	Aug 15, 1979		
1627	5.2	55	June 11, 1979			0030	5.9	63
2011	5.0	53	1313	5.0	59	0547	5.9	62
Aug 14, 1979			1637	5.5	66	0828	5.6	59
0030	5.0	52	2115	7.3	85	1308	6.7	74
0555	4.9	51	June 12, 1979			1646	5.9	64
0900	4.6	48	0110	5.6	65	2019	6.0	65
1158	4.8	51	0443	5.1	58	2300	5.6	59
1635	6.2	66	0920	5.0	56	Aug 16, 1979		
2009	4.6	48	1245	5.5	63	0426	5.4	54
Aug 15, 1979			1646	6.6	75	0841	4.7	49
0018	4.4	46						

AREA 3

Sampling site:			June 5, 1973			0410	3.2	32
Ipswich River (Ipswich), Site 1			0410	2.3	24	1013	3.6	36
June 4, 1973			0955	4.5	49	1635	6.9	74
1730	6.3	67	1620	6.9	74	2210	3.8	40
2230	3.3	36	2222	2.9	28	June 7, 1973		
			June 6, 1973			0413	2.6	27

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of saturation	Date and time	Dis-solved oxygen (mg/L)	Percent age of saturation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of saturation
AREA 3--Continued								
1027	5.0	54	1612	1.9	21	1030	3.2	35
1615	6.2	70	2205	1.2	13	1645	3.0	32
2245	2.8	31	Aug 15, 1973			2307	3.1	33
June 8, 1973			0410	1.5	17	Ipswich River (Ipswich),		
0434	1.4	15	1005	2.1	23	Site 4		
1027	4.1	46	1615	2.2	23	June 4, 1973		
Aug 14, 1973			2235	1.5	16	1810	5.6	60
0400	0.8	9	Aug 16, 1973			2250	4.3	47
1606	1.2	13	0410	1.1	12	June 5, 1973		
2200	1.0	11	1020	1.7	18	0435	4.1	43
Aug 15, 1973			1635	2.3	25	1020	4.4	47
0405	0.9	10	2259	1.4	15	1647	4.5	47
1000	1.5	16	Ipswich River (Ipswich),			2255	4.3	45
1610	2.5	27	Site 3			June 6, 1973		
2230	1.4	15	June 4, 1973			0433	4.2	44
Aug 16, 1973			1800	3.9	42	1035	4.5	46
0400	1.1	12	2245	3.2	35	1700	4.8	52
1015	1.6	16	June 5, 1973			2240	4.7	50
1630	1.7	18	0428	3.2	33	June 7, 1973		
2250	1.6	17	1013	3.2	35	0440	4.1	43
Ipswich River			1640	3.7	39	1052	5.3	58
(Ipswich),			2245	3.4	35	1645	5.0	56
Site 2			June 6, 1973			2306	4.7	52
June 4, 1973			0426	3.2	33	June 8, 1973		
1745	3.9	42	1030	3.5	36	0457	3.8	41
2240	3.0	33	1652	6.8	73	1049	3.8	42
June 5, 1973			2233	3.7	39	Aug 14, 1973		
0420	2.7	28	June 7, 1973			0425	2.9	33
1003	3.9	43	0438	3.1	33	1030	5.0	58
1630	3.9	42	1045	3.5	37	1626	4.7	54
2230	2.7	28	1635	3.6	40	2220	4.0	44
June 6, 1973			2300	3.3	37	Aug 15, 1973		
0416	3.0	31	June 8, 1973			0420	3.1	35
1018	3.7	37	0451	3.3	36	1017	3.8	42
1640	5.1	56	1043	3.0	33	1627	4.7	50
2223	3.0	32	Aug 14, 1973			2250	4.5	49
June 7, 1973			0420	2.4	27	Aug 16, 1973		
0423	2.9	30	1020	4.1	47	0425	3.9	42
1035	4.2	46	1620	4.9	54	1038	3.9	42
1625	4.2	48	2215	3.8	42	1650	4.0	44
2259	2.3	26	Aug 15, 1973			2314	3.8	41
June 8, 1973			0415	2.9	33	Sept 12, 1978		
0440	2.8	30	1012	3.0	33	0500	5.8	62
1033	3.1	34	1620	3.3	35	1033	5.2	56
Aug 14, 1973			2245	3.2	35	1630	5.7	60
0410	1.1	12	Aug 16, 1973			2145	5.3	56
1010	1.9	21	0415	2.9	31			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 3--Continued								
Sept 13, 1978			2326	7.1	74	1641	4.4	47
0433	5.0	49	Sept 12, 1978			2305	3.7	39
0952	5.1	50	0515	6.4	68	Aug 16, 1973		
1735	5.9	63	1041	6.4	70	0445	3.2	35
2232	6.4	64	1637	7.1	77	1050	4.2	46
Sept 14, 1978			2155	6.6	67	1705	4.1	45
0415	5.9	59	Sept 13, 1978			2334	3.6	39
1035	6.0	60	0441	7.0	67	Sept 12, 1978		
1614	4.5	45	0958	6.7	67	0525	4.4	46
2230	6.5	64	1740	7.3	76	1050	6.3	67
Ipswich River (Ipswich),			2238	7.1	69	1647	6.0	63
Site 5			Sept 14, 1978			2205	4.7	48
June 4, 1973			0420	7.5	73	Sept 13, 1978		
1820	5.0	53	1040	7.5	73	0452	4.8	46
2308	4.9	48	1618	6.4	66	1006	4.8	48
June 5, 1973			2245	8.1	78	1746	6.7	71
0445	4.7	49	Ipswich River (Ipswich),			2245	5.9	59
1025	4.3	47	Site 6			Sept 14, 1978		
1700	4.7	50	June 4, 1973			0430	4.9	49
2305	4.7	49	1835	5.9	64	0150	5.8	58
June 6, 1973			2315	3.8	41	1625	3.7	38
0444	4.8	51	June 5, 1973			2250	6.3	61
1044	4.7	50	0455	3.4	36	Ipswich River (Ipswich),		
1707	4.6	50	1037	5.0	53	Site 7		
2250	5.0	53	1710	5.2	55	June 4, 1973		
June 7, 1973			2320	4.3	45	1845	5.7	62
0450	5.1	54	June 6, 1973			2320	5.4	59
1101	5.3	58	0505	4.2	43	June 5, 1973		
1700	5.3	58	1106	4.9	50	0505	4.3	45
2326	5.8	65	1720	6.7	73	1045	5.0	54
June 8, 1973			2300	5.0	53	1720	5.4	57
0505	5.0	55	June 7, 1973			2330	5.1	53
1157	4.5	51	0509	4.1	43	June 6, 1973		
Aug 14, 1973			1120	5.3	58	0515	4.3	44
0440	2.6	30	1705	5.7	64	1117	4.3	44
1035	2.2	26	2330	4.2	47	Aug 14, 1973		
1635	2.9	33	June 8, 1973			0505	2.7	31
2230	3.0	34	0516	4.0	44	1056	3.4	39
Aug 15, 1973			1108	4.3	48	1650	3.8	44
0430	3.0	35	Aug 14, 1973			2245	3.0	33
1025	2.7	30	0455	2.3	26	Aug 15, 1973		
1635	6.2	67	1050	2.5	29	0445	3.1	35
2300	3.8	43	1645	3.6	41	1055	3.8	42
Aug 16, 1973			2235	3.8	42	1647	5.1	54
0435	3.5	39	Aug 15, 1973			2312	4.1	43
1045	3.9	43	0435	3.3	37	Aug 16, 1973		
1655	3.8	41	1035	3.7	41			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 3--Continued								
0455	4.1	45	Aug 15, 1973			1132	5.5	61
1100	4.5	50	0450	4.7	54	Aug 14, 1973		
1710	4.6	52	1100	4.8	54	0525	5.3	60
2344	4.4	47	1655	5.3	57	1115	5.5	63
Sept 12, 1978			2315	5.2	55	1703	5.6	64
0535	4.6	50	Aug 16, 1973			2255	5.6	62
1059	4.7	51	0500	5.0	54	Aug 15, 1973		
1711	7.5	80	1105	5.1	56	0455	5.7	64
2215	5.5	57	1715	5.3	59	1107	6.2	68
Sept 13, 1978			2355	5.5	59	1700	6.4	67
0500	4.4	43	Sept 12, 1978			2325	6.6	70
1035	4.6	46	0545	6.7	71	Aug 16, 1973		
1753	8.4	90	1107	6.7	72	0510	6.0	66
2250	8.1	82	1720	7.6	80	1722	6.2	68
Sept 14, 1978			2240	6.8	71	Aug 17, 1973		
0437	5.3	53	Sept 13, 1978			0015	6.1	65
1058	5.0	50	0508	6.2	61	Sept 12, 1978		
1630	8.0	83	1044	6.9	68	0603	7.8	83
2307	8.4	86	1758	7.5	79	1117	7.3	78
Ipswich River (Ipswich),			2300	7.8	76	1730	7.7	81
Site 8			Sept 14, 1978			2320	7.5	75
June 4, 1973			0444	7.2	72	Sept 13, 1978		
1850	5.6	62	1104	7.3	73	0518	7.7	73
2325	5.5	59	1637	6.7	70	1055	8.1	79
June 5, 1973			2315	8.4	82	1803	8.1	81
0510	5.4	58	Ipswich River (Ipswich),			2320	8.7	81
1054	5.2	57	Site 9			Sept 14, 1978		
1730	5.5	58	June 4, 1973			0455	8.2	78
2340	6.2	64	1900	5.9	64	1114	8.8	84
June 6, 1973			2335	5.6	58	1644	8.4	84
0423	5.6	58	June 5, 1973			2330	8.7	81
1123	5.1	53	0518	5.6	60	Ipswich River (Ipswich),		
1735	6.0	65	1105	6.1	65	Site 10		
2320	6.0	64	1740	5.8	61	June 4, 1973		
June 7, 1973			2350	6.3	66	1905	5.6	61
0527	5.7	60	June 6, 1973			2340	6.2	67
1138	6.6	72	0532	6.3	65	June 5, 1973		
1720	5.9	67	1131	6.0	62	0525	5.9	63
2345	5.8	65	1745	6.3	66	1110	6.1	67
June 8, 1973			2330	5.6	59	1750	6.5	69
0528	5.6	62	June 7, 1973			2400	6.0	63
1123	5.1	58	0540	6.3	66	June 6, 1973		
Aug 14, 1973			1150	6.5	70	0537	6.5	67
0515	4.7	54	1735	6.3	70	1135	6.4	66
1105	4.4	51	2355	6.2	69	1750	6.5	69
1656	4.7	54	June 8, 1973			2340	5.6	59
2250	4.8	54	0534	5.6	62			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 3--Continued								
June 7, 1973			1755	6.0	63	Ipswich River (Ipswich), Site 12		
0545	6.5	69	June 6, 1973			June 4, 1973		
1155	6.5	70	0010	6.0	63	1930	4.7	51
1750	6.2	69	0544	6.5	67	2400	3.9	42
June 8, 1973			1145	5.5	57	June 5, 1973		
0005	5.5	61	1758	6.3	66	0542	3.9	42
0535	5.9	65	2345	6.5	69	1137	3.3	36
1137	5.5	61	June 7, 1973			1810	4.3	45
Aug 14, 1973			0552	5.9	62	June 6, 1973		
0530	5.3	60	1203	6.3	68	0020	3.2	34
1120	5.3	61	1750	6.2	69	0552	3.8	39
1710	5.5	63	June 8, 1973			1157	3.7	38
2300	5.6	62	0010	6.2	68	1825	7.8	83
Aug 15, 1973			0545	5.9	65	June 7, 1973		
0500	5.3	60	1143	5.3	59	0015	7.9	83
1111	5.8	64	Aug 14, 1973			0629	6.8	73
1703	6.4	68	0540	5.1	58	1238	7.8	86
2330	6.1	64	1130	4.9	56	1815	7.7	86
Aug 16, 1973			1715	5.5	63	June 8, 1973		
0515	5.9	64	2306	5.6	62	0032	7.7	86
1120	6.0	66	Aug 15, 1973			0618	6.2	68
1725	6.4	71	0510	5.0	56	1212	7.1	81
Aug 17, 1973			1117	5.5	61	Aug 14, 1973		
0030	6.3	66	1710	5.9	63	0550	4.0	46
Sept 12, 1978			2335	6.0	63	1140	3.6	41
0610	7.3	77	Aug 16, 1973			1750	3.9	43
124	7.6	81	0520	5.7	62	2340	3.6	40
1735	7.7	81	1125	6.0	65	Aug 15, 1973		
2340	7.1	71	1732	6.1	67	0515	4.0	46
Sept 13, 1978			Aug 17, 1973			1125	4.0	45
0525	6.7	65	0100	6.3	68	1745	4.4	47
1100	7.3	73	Sept 12, 1978			Aug 16, 1973		
1807	7.7	80	0620	7.2	--	0005	4.5	47
2322	8.3	80	1133	7.3	78	0530	4.1	45
Sept 14, 1978			1745	8.0	83	1130	4.4	49
0500	7.9	77	Sept 13, 1978			1810	5.8	64
1120	7.8	78	0001	7.2	72	Aug 17, 1973		
1657	6.8	64	0534	7.1	68	0134	4.8	51
2335	8.5	--	1108	7.4	74	Sept 12, 1978		
Ipswich River (Ipswich), Site 11			1813	7.2	72	0655	6.2	--
June 4, 1973			2325	7.8	75	1147	6.1	66
1915	5.9	64	Sept 14, 1978			1757	7.2	75
2350	--	--	0510	7.5	73	Sept 13, 1978		
June 5, 1973			1128	7.5	75	0020	5.9	61
0532	5.7	61	1703	8.3	83	0550	5.5	55
1127	6.3	67	2345	7.8	75	1126	5.8	58

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 3--Continued								
1820	6.7	70	0642	7.1	--	0020	6.1	69
2340	6.5	65	1150	7.3	79	0435	5.1	56
Sept 14, 1978			1800	7.4	77	0800	5.7	62
0522	6.0	60	Sept 13, 1978			1128	8.0	91
1145	5.8	60	0035	6.6	69	Aug 29, 1974		
1712	7.0	73	0558	6.2	62	0003	10.1	119
2400	7.1	71	1130	6.3	63	2000	8.0	90
Ipswich River (Ipswich),			1823	7.2	75	Aug 30, 1974		
Site 13			2345	7.2	72	0003	4.9	55
June 4, 1973			Sept 14, 1978			0324	6.8	73
1935	5.0	55	0527	7.0	70	0815	5.9	64
June 5, 1973			1150	6.8	70	Aug 27, 1974		
0016	4.9	52	1715	6.5	66	1124	5.9	63
0547	3.7	40	Sept 15, 1978			1530	7.0	74
1147	3.7	40	0010	7.2	72	1935	6.4	67
1815	4.5	47	Sampling site:			2345	6.4	68
June 6, 1973			Shawsheen River (Merrimack),			Aug 31, 1974		
0030	4.1	43	Site 1			0317	6.7	70
0557	3.8	40	June 25, 1974			Shawsheen River (Merrimack),		
1202	3.4	35	0151	6.1	64	Site 2		
1815	5.0	53	0600	6.9	69	June 25, 1974		
2355	5.3	57	1010	7.7	77	0200	6.5	70
June 7, 1973			1347	9.4	97	0603	7.2	75
0608	3.7	39	1806	9.3	94	1017	7.3	73
1220	4.1	45	2202	7.8	80	1355	7.9	80
1800	4.7	53	June 26, 1974			1816	8.8	89
June 8, 1973			0200	6.9	69	2211	7.6	75
0025	4.7	18	0605	7.2	70	June 26, 1974		
0601	3.6	40	0950	8.5	83	0209	7.6	76
1156	2.8	32	1800	9.5	96	0610	7.7	76
Aug 14, 1973			2158	8.6	85	0956	8.0	78
0555	7.6	81	June 27, 1974			1405	9.1	89
1150	3.2	38	0203	8.1	79	1805	9.5	94
1725	3.7	44	0555	7.6	74	2204	8.9	87
2315	3.5	39	1000	9.3	92	June 27, 1974		
Aug 15, 1973			1358	11.0	113	0210	8.6	83
0520	3.5	40	1752	9.8	103	0600	9.1	88
1130	3.9	44	2154	8.3	85	1005	8.5	83
1717	4.3	46	June 28, 1974			1405	9.8	100
2345	4.2	44	0205	7.9	77	1758	9.3	96
Aug 16, 1973			Aug 27, 1974			2200	8.5	87
0535	4.0	44	0359	6.1	67	June 28, 1974		
1145	4.3	48	0800	6.4	67	0212	8.0	78
1745	4.0	45	1138	8.2	89	Aug 27, 1974		
Aug 17, 1973			1536	9.8	115	0407	6.4	69
0111	5.0	54	2015	8.3	95	0807	6.0	65
Sept 12, 1978			Aug 28, 1974					

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 3--Continued								
1145	6.2	68	1149	7.3	80	1205	6.5	73
1540	9.1	103	1544	9.1	103	1554	7.4	85
2022	9.2	105	2030	7.4	84	2041	6.3	73
Aug 28, 1974			Aug 28, 1974			Aug 28, 1974		
0037	7.5	85	0040	7.2	81	0103	5.8	67
0440	7.3	81	0442	6.5	72	0453	5.5	62
0805	5.5	61	0807	6.1	68	0823	5.1	58
1136	5.9	68	0139	7.8	90	1150	6.8	80
1528	8.6	99	1530	8.4	97	1540	7.2	85
2004	7.5	85	2007	7.0	79	2020	5.9	67
Aug 29, 1974			Aug 29, 1974			Aug 29, 1974		
0010	5.5	62	0333	5.6	61	0032	5.5	63
0330	6.0	66	0830	5.1	56	0343	5.9	65
0823	5.5	60	1135	5.3	57	0900	5.3	58
1130	5.3	57	1545	5.8	63	1200	5.8	62
1540	5.7	64	1945	5.7	60	1558	5.8	64
1941	5.9	62	2359	5.6	60	1955	5.5	59
2353	5.8	63	Aug 30, 1974			Aug 30, 1974		
Aug 30, 1974			0325	5.8	60	0013	5.4	58
0328	6.2	65	Shawsheen River (Merrimack), Site 4			Shawsheen River (Merrimack), Site 5		
Shawsheen River (Merrimack), Site 3			June 25, 1974			June 25, 1974		
June 25, 1974			0215	6.0	65	0225	4.3	48
0203	5.8	63	0723	6.1	64	0730	3.8	41
0613	6.0	63	1030	6.4	67	1042	5.3	57
1020	6.6	67	1415	7.1	75	1424	8.0	84
1400	7.3	76	1813	7.6	79	1841	8.1	85
1817	8.0	80	2228	6.3	65	2238	6.2	64
2215	7.4	74	June 26, 1974			June 26, 1974		
June 26, 1974			0220	5.9	59	0234	5.1	52
0212	7.2	71	0624	6.0	60	0630	4.4	44
0613	7.3	72	1008	6.0	60	1015	7.0	70
1000	7.4	73	1419	6.0	60	1429	9.2	93
1408	8.2	81	1816	7.7	77	1824	--	--
1808	8.7	86	2218	7.4	74	2225	7.6	76
2208	8.1	81	June 27, 1974			June 27, 1974		
June 27, 1974			0225	7.9	79	0233	7.2	72
0215	8.1	80	0613	7.2	71	0620	5.8	58
0605	8.2	80	1021	7.7	77	1030	9.7	99
1008	7.7	76	1419	8.5	89	1427	11.3	115
1407	8.8	90	1809	8.6	89	1820	10.6	112
1802	8.6	89	2215	7.9	81	2222	8.1	83
2204	7.7	78	June 28, 1974			June 28, 1974		
June 28, 1974			0230	7.1	71	0239	6.3	63
0215	7.6	74	Aug 27, 1974					
0412	6.6	70	0425	4.9	53			
0812	5.9	64	0830	5.4	60			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 3--Continued								
Aug 27, 1974			0245	8.1	81	June 28, 1974		
0436	2.1	23	Aug 27, 1974			0253	8.0	81
0837	1.7	19	0447	5.5	61	Aug 27, 1974		
1215	5.3	61	0847	4.5	51	0448	4.4	49
1601	8.1	96	1226	6.9	80	0900	5.0	55
2101	7.0	82	1611	9.0	106	1237	9.2	104
Aug 28, 1974			2115	8.4	98	1620	10.8	124
0115	5.1	59	Aug 28, 1974			2121	8.3	95
0502	3.2	36	0137	7.1	82	Aug 28, 1974		
0830	2.4	27	0510	5.6	64	0115	5.8	66
1200	5.9	69	0845	4.8	55	0418	4.3	48
1545	8.4	99	1208	6.8	78	0854	4.2	47
2029	6.7	77	1555	8.7	102	1238	8.0	92
Aug 29, 1974			2039	7.3	83	1605	9.8	113
0052	5.6	65	Aug 29, 1974			2045	6.9	77
0351	3.2	36	0103	6.0	69	Aug 29, 1974		
0910	2.1	23	0400	6.2	69	0113	5.3	60
1238	2.4	26	0918	3.6	41	0408	4.3	47
1607	4.7	52	1248	3.5	39	0930	4.2	46
2003	4.4	47	1616	4.1	45	1300	4.9	53
Aug 30, 1974			2018	4.1	44	1625	5.8	63
0026	3.4	37	Aug 30, 1974			2027	5.1	54
0341	4.4	46	0037	3.0	33	Aug 30, 1974		
Shawsheen River (Merrimack), Site 6			0350	3.0	32	0047	4.8	53
June 25, 1974			Shawsheen River (Merrimack), Site 7			0358	5.0	52
0233	6.0	67	June 25, 1974			Shawsheen River (Merrimack), Site 8		
0742	4.9	53	0240	5.7	63	June 25, 1974		
1053	5.7	62	0750	5.8	22	0245	6.1	67
1433	7.0	75	1107	6.8	73	0755	5.8	63
1852	7.2	77	1442	7.4	80	1112	6.5	69
2255	6.5	68	1901	7.4	78	1447	7.0	74
June 26, 1974			2306	6.3	66	1906	7.2	76
0240	5.8	60	June 26, 1974			2311	6.9	71
0640	5.3	54	0250	5.8	60	June 26, 1974		
1024	5.8	59	0646	6.3	64	0255	6.5	66
1437	7.8	79	1033	7.0	72	0650	6.5	66
1834	8.4	84	1446	7.8	79	1038	7.2	73
2235	7.8	78	1839	8.1	81	1449	7.2	73
June 27, 1974			2245	7.8	78	1844	8.2	82
0242	7.0	70	June 27, 1974			2250	7.8	79
0630	7.0	70	0250	7.0	70	June 27, 1974		
1042	8.5	87	0637	6.9	69	0255	7.2	72
1436	10.3	106	1053	8.7	90	0642	8.2	82
1829	10.0	103	1444	9.6	99	1100	8.1	82
2230	8.5	88	1837	9.9	102	1448	9.1	93
June 28, 1974			2240	9.1	94	1841	9.6	99

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 3--Continued								
2244	8.3	85	1635	5.0	56	0920	7.5	85
June 28, 1974			2032	4.2	45	1312	7.5	86
0256	5.6	56	Aug 30, 1974			1640	6.2	72
Aug 27, 1974			0056	4.2	46	2136	7.4	85
0503	5.7	64	0401	4.7	49	Aug 28, 1974		
0907	6.1	68	Shawsheen River (Merrimack),			0202	7.4	84
1300	9.0	104	Site 9			0534	7.0	79
1625	9.4	109	June 25, 1974			0913	7.6	87
2125	7.4	85	0255	6.4	71	1300	7.4	86
Aug 28, 1974			0803	6.8	74	1616	7.1	83
0153	5.8	66	1120	6.6	71	2110	6.9	79
0526	5.2	59	1455	7.4	80	Aug 29, 1974		
0900	5.7	64	1915	7.4	78	0132	6.7	77
1245	8.5	100	2320	6.7	70	0423	7.6	85
1609	9.3	108	June 26, 1974			0943	6.5	73
2059	6.5	74	0303	6.4	66	1315	5.6	62
Aug 29, 1974			0700	6.5	65	1643	5.5	61
0121	5.3	60	1044	7.5	76	2042	5.1	54
0412	5.1	56	1455	7.5	77	Aug 30, 1974		
0934	4.3	48	Aug 27, 1974			0110	5.3	58
1305	4.8	52	0518	7.5	85	0409	3.3	34
AREA 4								
Sampling site:			1945	5.7	61	1530	4.9	61
Beaver Brook (Taunton),			June 13, 1975			1913	5.6	69
Site 1			0002	5.1	51	2325	5.0	60
June 10, 1975			0327	5.6	59	July 25, 1975		
0437	6.0	57	July 22, 1975			0305	4.0	48
0815	6.6	63	0345	3.8	46	Aug 28, 1989		
1151	7.3	74	0705	3.9	44	1200	6.2	65
1725	6.4	71	1132	5.8	71	1300	6.2	66
2010	6.0	64	1547	5.8	72	1400	6.1	66
June 11, 1975			1931	5.1	64	1500	6.1	65
0023	5.5	59	July 23, 1975			1600	6.0	64
0330	5.7	59	0031	4.0	45	1700	5.9	63
0755	5.9	59	0325	4.2	48	1800	5.8	63
1110	6.6	71	0708	3.8	42	1900	5.8	62
1555	5.7	66	1116	5.8	68	2000	5.7	61
1908	6.0	70	1525	6.5	81	2100	5.7	61
2352	5.2	55	1932	5.5	70	2200	5.6	60
June 12, 1975			2335	4.2	49	2300	5.6	60
0440	5.4	58	July 24, 1975			2400	5.6	60
0741	5.5	55	0310	4.1	47	Aug 29, 1989		
1135	6.2	67	0700	4.0	46	0100	5.7	60
1600	6.3	66	1128	6.1	74	0200	5.7	61

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
0300	5.8	61	Aug 31, 1989			July 23, 1975		
0400	5.9	61	0100	5.2	57	0045	3.8	45
0500	5.9	61	0200	5.2	57	0330	3.4	41
0600	6.0	62	0300	5.3	58	0715	3.2	36
0700	6.0	62	0400	5.5	59	1122	3.7	44
0800	6.1	63	0500	5.4	59	1531	4.1	49
0900	6.1	63	0600	5.5	59	1939	4.3	54
1000	6.1	64	0700	5.6	59	2341	4.1	49
1100	6.2	65	0800	5.7	60	July 24, 1975		
1200	6.2	66	0900	5.8	61	0315	3.3	40
1300	6.2	65	1000	5.8	62	0710	2.8	32
1400	6.1	65	1200	5.9	63	1133	3.5	42
1500	6.0	64	1300	6.1	65	1537	4.3	53
1600	5.9	63	1400	6.2	66	1920	4.5	57
1700	5.8	63	1500	6.2	67	2336	3.4	42
1800	5.7	61	1600	6.2	67	July 25, 1975		
1900	5.5	60	Beaver Brook (Taunton), Site 2			0310	3.2	38
2000	5.5	59	June 10, 1975			Aug 28, 1989		
2100	5.4	59	0437	6.0	57	1000	6.0	61
2200	5.5	59	0815	6.6	63	1100	6.1	63
2300	5.5	60	1151	7.3	74	1200	6.2	64
2400	5.7	62	1725	6.4	71	1300	6.2	65
Aug 30, 1989			2010	6.0	64	1400	6.3	66
0100	6.2	66	June 11, 1975			1500	6.3	67
0200	6.1	66	0023	5.5	59	1600	6.2	66
0300	6.2	67	0330	5.7	59	1700	6.1	65
0400	5.4	58	0755	5.9	59	1800	6.1	65
0500	5.2	56	1110	6.6	71	1900	6.0	64
0600	5.2	56	1555	5.7	66	2000	5.9	63
0700	5.2	56	1908	6.0	70	2100	5.8	62
0800	5.2	56	2352	5.2	55	2200	5.8	61
0900	5.2	56	June 12, 1975			2300	5.7	60
1000	5.1	56	0440	5.4	58	2400	5.8	60
1100	5.1	56	0741	5.5	55	Aug 29, 1989		
1200	5.1	55	1135	6.2	67	0100	5.8	60
1300	5.1	55	1600	6.3	66	0200	5.8	61
1400	5.1	56	1945	5.7	61	0300	5.8	60
1500	5.2	56	June 13, 1975			0400	5.8	60
1600	5.1	56	0002	5.1	51	0500	5.9	60
1700	5.0	56	0327	5.6	59	0600	5.9	61
1800	5.0	55	July 22, 1975			0700	6.0	61
1900	5.0	55	0350	3.2	39	0800	6.0	61
2000	5.0	55	0710	2.8	32	0900	6.1	62
2100	5.0	55	1140	3.3	40	1000	6.2	63
2200	5.0	56	1553	4.1	50	1100	6.5	66
2300	5.1	56	1937	4.2	54	1200	6.6	68
2400	5.1	56				1300	6.7	69

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1400	6.7	69	1100	5.6	59	1545	7.2	89
1500	6.4	67	1200	5.7	60	1928	6.9	85
1600	6.4	67	1300	5.8	62	2345	4.7	55
1700	6.4	67	1400	5.9	64	July 25, 1975		
1800	6.3	66	1500	5.9	63	0320	5.7	68
1900	6.2	65	Beaver Brook (Taunton),			Aug 28, 1989		
2000	6.1	64	Site 3			0900	8.3	82
2100	6.0	63	June 10, 1975			1000	8.2	82
2200	5.9	62	0500	8.4	78	1100	8.5	86
2300	5.8	62	0825	8.5	79	1200	8.2	84
2400	6.3	68	1200	9.0	93	1300	8.2	85
Aug 30, 1989			1735	7.8	82	1400	8.0	84
0100	6.7	73	2018	6.9	71	1500	7.8	82
0200	6.4	69	June 11, 1975			1600	7.7	81
0300	6.0	64	0029	7.5	75	1700	7.4	79
0400	5.7	61	0340	8.1	80	1800	7.3	77
0500	5.5	59	0804	8.1	81	1900	7.1	74
0600	5.3	57	1118	8.3	91	2000	6.9	73
0700	5.1	54	1600	6.8	76	2100	6.9	72
0800	4.9	53	1915	7.1	80	2200	6.9	71
0900	4.9	52	2358	7.1	71	2300	6.9	71
1000	4.9	53	June 12, 1975			2400	6.9	71
1100	5.0	54	0446	7.4	78	Aug 29, 1989		
1200	5.2	56	0750	7.6	76	0100	7.0	71
1300	5.4	58	1145	7.8	83	0200	7.0	71
1400	5.4	60	1610	7.2	74	0300	7.0	71
1500	5.5	60	1955	7.3	76	0400	7.0	71
1600	5.4	60	June 13, 1975			0500	7.0	70
1700	5.4	59	0010	7.1	71	0600	7.1	71
1800	5.3	58	0334	7.0	74	0700	7.2	71
1900	5.2	57	July 22, 1975			0800	7.4	73
2000	5.1	56	0400	5.7	67	0900	7.6	76
2100	5.0	55	0725	6.3	71	1000	7.7	77
2200	5.0	55	1150	8.8	109	1100	7.8	79
2300	5.0	54	1600	8.3	104	1200	8.9	92
2400	5.0	54	1945	6.0	75	1300	8.8	92
Aug 31, 1989			July 23, 1975			1400	8.5	89
0100	5.0	54	0105	5.2	59	1500	8.4	88
0200	5.0	54	0335	6.1	71	1600	8.3	87
0300	5.1	55	0720	5.1	56	1700	8.2	86
0400	5.2	55	1130	9.3	113	1800	8.1	85
0500	5.2	55	1947	6.5	81	1900	7.9	83
0600	5.3	55	2349	4.1	49	2000	7.8	82
0700	5.3	56	July 24, 1975			2100	7.8	82
0800	5.4	56	0325	5.7	66	2200	7.8	81
0900	5.5	57	0720	6.2	70	2300	7.8	81
1000	5.6	58	1140	9.5	117	2400	7.7	81

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
Aug 30, 1989			2230	8.2	99	1700	7.5	86
0100	7.5	80	July 17, 1968			1800	7.5	85
0200	7.5	80	1000	5.5	59	1900	7.5	86
0300	7.4	80	1630	8.2	99	2000	7.4	85
0400	7.6	81	2230	8.4	96	2100	7.3	83
0500	7.5	79	July 18, 1968			2200	7.3	83
0600	7.5	80	0515	7.3	72	2300	7.2	82
0700	7.6	80	1035	6.8	67	2400	7.2	81
0800	7.6	80	1630	9.3	107	June 21, 1989		
0900	7.4	80	2315	9.0	95	0100	7.2	81
1000	7.3	79	July 19, 1968			0200	7.1	80
1100	7.3	80	0530	7.4	76	0300	7.1	79
1200	7.4	82	0935	7.7	80	0400	6.9	77
1300	7.4	83	1645	4.5	51	0500	6.9	76
1400	7.4	84	2215	8.7	96	0600	6.9	76
1500	7.4	84	June 19, 1989			0700	6.9	76
1600	7.3	82	1100	7.3	81	0800	6.9	76
1700	7.3	82	1200	7.4	83	0900	6.9	77
1800	7.2	81	1300	7.2	81	1000	7.0	76
1900	7.2	80	1400	7.1	82	1100	7.0	77
2000	7.1	80	1500	7.1	82	1200	7.0	78
2100	7.1	79	1600	7.0	82	1300	7.0	79
2200	7.2	80	1700	7.0	83	1400	7.0	80
2300	7.3	80	1800	7.0	82	1500	7.1	81
2400	7.3	80	1900	6.9	81	1600	7.1	81
Aug 31, 1989			2000	6.9	79	1700	7.2	82
0100	7.4	81	2100	6.8	79	1800	7.2	82
0200	7.5	81	2200	6.8	79	1900	7.2	82
0300	7.5	81	2300	6.8	77	2000	7.2	82
0400	7.6	82	2400	6.8	76	2100	7.0	80
0500	7.7	82	June 20, 1989			2200	7.0	79
0600	7.7	82	0100	6.7	76	2300	6.9	78
0700	7.8	83	0200	6.7	75	2400	6.9	77
0800	7.9	84	0300	6.7	74	June 22, 1989		
0900	8.0	85	0400	6.7	74	0100	6.8	77
1000	8.2	87	0500	6.7	74	0200	6.8	77
1100	8.2	88	0600	6.8	74	0300	6.7	76
1200	8.3	89	0700	7.0	77	0400	6.7	75
1300	8.3	88	0800	7.0	77	0500	6.6	74
1400	8.2	90	0900	7.0	78	0600	6.6	74
Sampling site:			1000	7.1	79	0700	6.6	73
Bungay River (Ten Mile),			1100	7.1	80	0800	6.6	74
Site 1			1200	7.1	80	0900	6.7	74
July 16, 1968			1300	7.2	83	1000	6.8	77
0500	7.2	78	1400	7.3	84	1100	6.8	78
1030	7.9	87	1500	7.4	84	1200	6.8	79
1630	8.8	111	1600	7.4	85	1300	6.7	79

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1400	6.6	79	1700	6.9	78	1400	6.5	71
1500	6.5	79	1800	5.8	65	1500	6.7	73
1600	6.4	78	1900	5.6	63	1600	6.6	73
1700	6.4	78	2000	5.4	59	1700	6.6	73
1800	6.4	77	2100	5.2	57	1800	6.4	70
1900	6.4	76	2200	5.0	55	1900	6.1	67
2000	6.3	75	2300	5.0	54	2000	5.8	64
2100	6.2	73	2400	5.0	54	2100	5.6	60
2200	6.2	72	June 20, 1989			2200	5.4	58
2300	6.2	72	0100	5.0	54	2300	5.2	56
2400	6.1	71	0200	5.1	54	2400	5.2	55
June 23, 1989			0300	5.2	55	June 22, 1989		
0100	6.1	71	0400	5.3	55	0100	5.2	55
0200	6.0	69	0500	5.3	55	0200	5.2	55
0300	6.0	69	0600	5.4	56	0300	5.2	55
0400	6.0	69	0700	5.4	57	0400	5.1	54
0500	6.0	69	0800	5.5	58	0500	5.1	54
0600	6.0	68	0900	5.7	59	0600	5.1	54
0700	6.1	69	1000	5.8	61	0700	5.2	54
0800	6.1	69	1100	6.1	65	0800	5.2	55
Bungay River (Ten Mile), Site 2			1200	6.4	68	0900	5.4	57
July 16, 1968			1300	6.6	71	1000	5.6	59
0530	4.5	44	1400	6.7	74	1100	5.9	63
1040	5.8	61	1500	6.8	77	1200	6.0	66
1625	6.8	83	1600	7.0	79	1300	6.2	69
2215	3.7	40	1700	7.7	87	1400	6.3	71
July 17, 1968			1800	7.4	83	1500	6.3	71
0510	4.0	40	1900	6.8	76	1600	6.1	70
0950	5.2	52	2000	6.4	70	1700	6.0	69
1620	6.5	78	2100	6.2	66	1800	5.7	65
2220	4.1	43	2200	5.9	63	1900	5.5	62
July 18, 1968			2300	5.5	58	2000	5.3	59
0455	5.6	51	2400	5.3	56	2100	5.1	57
1025	6.9	68	June 21, 1989			2200	5.0	55
1610	7.4	85	0100	5.2	55	2300	4.9	54
2307	4.9	50	0200	5.2	55	2400	4.9	53
July 19, 1968			0300	5.2	55	June 23, 1989		
0525	5.1	51	0400	5.2	55	0100	4.9	53
0925	6.2	64	0500	5.2	55	0200	5.0	54
1640	7.3	81	0600	5.3	55	0300	5.0	53
2205	4.7	49	0700	5.3	56	0400	5.0	53
June 19, 1989			0800	5.4	57	0500	5.0	53
1300	6.1	66	0900	5.7	59	0600	5.1	54
1400	6.1	67	1000	5.9	62	0700	5.0	53
1500	7.0	77	1100	6.2	65	0800	5.1	54
1600	7.0	78	1200	6.4	68	0900	5.2	56
			1300	6.4	69			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
Bungay River (Ten Mile), Site 3			1000	1.8	20	0700	1.3	14
July 16, 1968			1100	2.0	23	0800	1.2	13
0440	2.1	24	1200	2.3	26	0900	1.2	13
1020	2.0	23	1300	2.5	29	1000	1.2	14
1605	2.0	24	1400	2.7	31	1100	1.3	15
2202	1.7	20	1500	2.8	32	1200	1.4	16
July 17, 1968			1600	2.8	32	1300	1.5	17
0455	1.4	16	1700	2.8	32	1400	1.6	19
0935	1.4	16	1800	2.7	31	1500	1.7	20
1610	1.3	16	1900	2.6	29	1600	1.8	21
2210	0.9	11	2000	2.5	28	1700	1.8	21
July 18, 1968			2100	2.4	27	1800	1.7	20
0440	4.2	43	2200	2.3	26	1900	1.9	22
1005	5.1	53	2300	2.2	25	2000	1.7	19
1600	5.7	61	2400	2.1	23	2100	1.6	19
2250	5.3	58	June 21, 1989			2200	1.6	18
July 19, 1968			0100	2.0	22	2300	1.5	17
0515	4.4	47	0200	1.9	21	2400	1.5	17
0910	4.6	45	0300	1.8	19	June 23, 1989		
1630	4.9	54	0400	1.6	18	0100	1.5	17
2155	3.6	40	0500	1.5	17	0200	1.4	16
June 19, 1989			0600	1.4	16	0300	1.4	15
1100	1.8	20	0700	1.4	15	0400	1.3	14
1200	2.0	22	0800	1.2	14	0500	1.2	13
1300	2.1	24	0900	1.4	15	0600	1.1	12
1400	2.3	26	1000	1.4	16	0700	1.0	11
1500	2.3	26	1100	1.6	17	0800	1.0	11
1600	2.4	27	1200	1.7	19	0900	1.0	11
1700	2.4	27	1300	2.0	23	Bungay River (Ten Mile), Site 4		
1800	2.4	27	1400	2.1	24	July 16, 1968		
1900	2.3	26	1500	2.2	25	0435	1.8	20
2000	2.2	25	1600	2.3	27	1010	1.5	17
2100	2.1	23	1700	2.4	27	1600	2.6	32
2200	2.0	22	1800	2.5	28	2155	1.4	16
2300	2.0	21	1900	2.5	29	July 17, 1968		
2400	1.9	20	2000	2.4	27	0445	1.2	14
June 20, 1989			2100	2.3	26	0930	1.3	15
0100	1.7	19	2200	2.2	25	1600	1.3	16
0200	1.6	17	2300	2.2	24	2200	0.7	8
0300	1.5	16	2400	2.1	23	July 18, 1968		
0400	1.4	15	June 22, 1989			0430	2.0	21
0500	1.3	14	0100	2.0	22	1000	2.8	30
0600	1.3	14	0200	1.9	21	1555	1.8	20
0700	1.3	14	0300	1.8	20	2245	1.0	11
0800	1.4	15	0400	1.7	19	July 19, 1968		
0900	1.5	17	0500	1.5	17	0500	3.1	33
			0600	1.4	15			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation
AREA 4--Continued								
0905	3.3	36	0800	1.5	16	0500	0.7	8
1620	4.0	45	0900	1.6	18	0600	0.7	8
2145	3.1	35	1000	1.8	20	0700	0.7	8
June 19, 1989			1100	2.0	22	0800	0.9	10
1500	2.3	26	1200	1.9	22	0900	1.1	12
1600	2.1	23	1300	2.0	22	1000	1.4	16
1700	2.0	22	1400	2.2	25	Sampling site:		
1800	1.7	19	1500	2.2	24	Charles River (Charles),		
1900	1.6	19	1600	2.2	25	Site 1		
2000	1.6	18	1700	2.2	25	June 13, 1978		
2100	1.5	17	1800	2.0	23	0210	2.8	30
2200	1.5	17	1900	1.8	21	0630	4.0	43
2300	1.5	16	2000	1.7	19	1015	5.7	62
2400	1.5	16	2100	1.5	18	1410	6.9	74
June 20, 1989			2200	1.4	16	1813	7.9	85
0100	1.5	16	2300	1.4	16	2230	4.9	52
0200	1.5	17	2400	1.3	15	June 14, 1978		
0300	1.5	17	June 22, 1989			0210	4.0	41
0400	1.5	17	0100	1.3	14	0619	3.6	35
0500	1.5	17	0200	1.3	14	1008	6.1	61
0600	1.5	17	0300	1.3	14	1415	8.6	95
0700	1.6	17	0400	1.3	14	1817	8.5	91
0800	1.7	18	0500	1.4	15	2225	5.9	59
0900	1.8	20	0600	1.2	14	June 15, 1978		
1000	1.8	20	0700	1.2	14	0210	5.7	55
1100	1.9	22	0800	1.3	14	0617	4.9	49
1200	2.0	23	0900	1.5	17	1110	7.1	74
1300	2.1	24	1000	1.7	19	1415	9.5	104
1400	2.2	25	1100	2.0	22	1814	8.4	94
1500	2.2	25	1200	2.2	25	2225	5.8	61
1600	2.1	24	1300	2.3	27	July 18, 1978		
1700	1.9	22	1400	2.5	29	0208	3.6	39
1800	1.9	21	1500	2.4	28	0607	3.7	39
1900	1.8	20	1600	2.1	24	1007	4.6	50
2000	1.8	20	1700	2.0	24	1355	7.7	92
2100	1.7	19	1800	1.8	22	1829	8.2	100
2200	1.6	18	1900	1.6	18	2220	5.2	62
2300	1.6	18	2000	1.3	16	July 19, 1978		
2400	1.5	17	2100	1.2	14	0208	3.5	39
June 21, 1989			2200	1.0	12	0608	2.8	31
0100	1.4	16	2300	0.9	11	1020	4.4	50
0200	1.4	16	2400	0.9	11	1405	5.5	67
0300	1.4	16	June 23, 1989			1815	8.5	106
0400	1.4	15	0100	0.8	9	July 20, 1978		
0500	1.3	15	0200	0.8	9	0218	3.4	38
0600	1.3	15	0300	0.7	9	0620	2.8	31
0700	1.4	15	0400	0.7	8	1007	4.8	56

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1406	5.5	67	July 19, 1978			2323	7.9	85
1815	9.3	116	0250	4.4	51	June 16, 1978		
2230	5.6	67	0640	3.7	42	0250	7.0	71
July 21, 1978			1110	5.3	64	July 18, 1978		
0218	3.7	43	1435	7.5	93	0245	4.8	52
June 23, 1981			1853	7.6	93	0646	6.9	75
0430	3.0	32	July 20, 1978			1046	6.1	72
1055	3.5	38	0300	3.7	44	1440	8.2	99
1705	4.5	54	0655	3.8	43	1923	8.4	101
2340	2.8	31	1047	5.3	64	2320	6.1	73
June 24, 1981			1445	7.4	93	July 19, 1978		
0445	3.1	31	1856	7.2	90	0255	4.8	56
1100	3.6	40	2310	5.3	64	0645	3.6	41
1646	5.3	64	July 21, 1978			1113	5.8	70
2246	3.3	37	0300	3.7	44	1440	7.1	88
Charles River (Charles),			June 23, 1981			1900	8.0	99
Site 2			0520	0.7	8	July 20, 1978		
June 13, 1978			1215	2.7	32	0305	4.2	49
0250	6.0	67	1734	3.2	38	0700	6.9	80
0703	5.5	60	June 24, 1981			1054	5.2	64
1050	6.1	69	0129	1.2	13	1448	6.4	79
1500	7.1	80	0525	0.9	10	1900	7.6	93
1848	8.0	87	1136	1.7	20	2320	5.7	64
2320	6.7	72	1712	3.6	43	July 21, 1978		
June 14, 1978			2333	0.9	10	0304	4.8	56
0253	4.5	48	Charles River (Charles),			June 23, 1981		
0650	3.0	31	Site 3			0545	3.9	42
1047	7.0	73	June 13, 1978			1245	5.4	63
1455	9.1	100	0254	6.6	72	1750	9.8	114
1855	9.6	104	0708	5.2	57	June 24, 1981		
2310	8.1	83	1052	5.4	61	0205	4.6	52
June 15, 1978			1505	6.8	77	0550	4.8	51
0245	7.8	78	1855	7.1	77	1201	6.2	71
0650	6.8	68	2330	6.7	72	1726	5.5	64
1225	8.7	93	June 14, 1978			2357	4.7	54
1450	10.0	112	0300	5.1	54	Charles River (Charles),		
1852	10.2	114	0655	5.9	61	Site 4		
2317	8.8	95	1053	6.5	68	June 13, 1978		
June 16, 1978			1503	8.1	87	0307	6.0	66
0241	8.7	91	1902	8.7	94	0718	6.2	68
July 18, 1978			2317	7.8	80	1106	6.9	76
0243	4.0	44	June 15, 1978			1520	7.1	79
0641	3.8	41	0250	8.1	84	1908	7.7	82
1041	5.6	63	0655	6.8	68	2345	7.4	79
1434	7.3	89	1234	8.0	84	June 14, 1978		
1917	7.9	95	1455	9.4	103	0310	6.3	66
2315	5.5	65	1859	9.4	104	0705	7.1	73

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
1108	7.8	81	June 23, 1981			1558	10.2	128
1520	8.0	87	0638	4.5	50	2030	10.1	123
1913	7.8	83	1340	6.7	79	July 20, 1978		
June 15, 1978			1821	7.4	88	0400	7.5	88
0030	8.1	81	June 24, 1981			0807	7.5	90
0304	7.5	77	0247	5.5	63	1202	8.1	101
0703	7.7	77	0630	4.7	52	1555	9.5	120
1250	0.0	0	1305	6.9	81	2003	10.0	123
1509	8.2	88	1753	8.0	95	July 21, 1978		
1909	8.1	87	June 25, 1981			0020	8.2	100
2340	7.5	75	0045	6.6	75	0415	7.3	86
June 16, 1978			Charles River (Charles),			June 23, 1981		
0303	7.5	75	Site 6			0646	4.5	50
July 18, 1978			June 13, 1978			1350	7.8	93
0300	5.7	62	0410	4.9	55	1828	7.6	89
0658	5.7	62	0817	5.0	55	June 24, 1981		
1056	7.4	86	1204	5.7	64	0300	6.5	75
1452	9.3	112	1620	6.7	76	0638	5.4	61
1934	8.4	100	2024	3.3	36	1320	6.7	79
2335	6.1	72	June 14, 1978			1758	7.5	89
July 19, 1978			0100	3.8	41	June 25, 1981		
0304	5.3	61	0420	3.9	41	0047	6.9	80
0654	5.7	65	0810	5.1	54	Charles River (Charles),		
1135	7.4	91	1217	5.0	53	Site 7		
1500	9.2	116	1628	4.6	50	June 13, 1978		
1910	7.9	97	2016	5.5	59	0422	4.1	46
July 20, 1978			June 15, 1978			0830	4.3	48
0315	5.1	58	0148	6.2	63	1226	4.3	48
0710	5.2	62	0400	5.8	60	1640	5.1	58
1105	5.2	63	0749	5.9	60	2032	5.5	60
1500	8.0	103	1400	7.1	77	June 14, 1978		
1912	8.3	102	1610	6.7	72	0125	6.1	66
2330	5.4	65	2005	5.2	57	0433	2.8	30
July 21, 1978			June 16, 1978			0819	2.7	29
0315	4.9	58	0038	5.4	58	1228	4.5	48
June 23, 1981			0402	5.6	58	1637	5.1	56
0545	3.9	42	July 18, 1978			2027	5.7	61
1245	5.4	63	0430	6.8	76	June 15, 1978		
1750	9.8	114	0755	6.7	76	0200	4.3	44
June 24, 1981			1156	8.3	98	0412	4.4	46
0205	4.6	52	1542	9.6	118	0800	4.3	44
0550	4.8	51	2032	9.7	117	1407	5.9	64
1201	6.2	71	July 19, 1978			1620	5.7	63
1726	5.5	64	0102	8.8	108	2016	5.9	64
2357	4.7	54	0402	8.0	93	June 16, 1978		
Charles River (Charles),			0807	7.3	85	0055	5.6	56
Site 5			1255	8.9	111	0416	5.9	63

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--*Continued*

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
July 18, 1978			Chicken Brook (Charles),			1700	7.4	85
0440	4.3	48	Site 2			1800	7.4	84
0801	4.8	55	June 23, 1981			1900	7.2	83
1204	5.0	61	0757	5.7	60	2000	7.1	81
1550	7.7	95	1505	6.2	70	2100	7.0	80
2039	8.0	96	1916	5.8	63	2200	6.9	79
July 19, 1978			June 24, 1981			2300	6.9	78
0110	6.7	81	0430	6.5	67	2400	6.8	78
0410	5.4	64	0749	6.8	68	July 26, 1989		
0814	4.2	49	1427	7.0	76	0100	6.7	77
1303	6.8	85	1841	6.0	65	0200	6.7	76
1605	8.5	109	June 25, 1981			0300	6.7	77
2038	8.2	101	0200	6.0	65	0400	6.7	77
July 20, 1978			July 24, 1989			0500	6.8	77
0408	5.1	61	0900	7.4	80	0600	6.8	77
0815	4.0	48	1000	7.5	83	0700	6.8	77
1210	5.6	70	1100	7.8	86	0800	7.0	79
1600	6.6	83	1200	7.8	87	0900	7.1	80
2012	6.6	83	1300	7.8	87	1000	7.2	82
July 21, 1978			1400	7.8	88	1100	7.2	83
0025	5.1	63	1500	7.8	88	1200	7.3	84
0420	4.0	47	1600	7.7	86	1300	7.4	86
June 23, 1981			1700	7.6	86	1400	7.4	86
0656	5.6	62	1800	7.5	84	1500	7.4	86
1400	7.3	87	1900	7.4	83	1600	7.3	85
1833	8.9	105	2000	7.3	82	1700	7.2	84
June 24, 1981			2100	7.2	81	1800	7.1	83
0303	7.0	81	2200	7.1	80	1900	7.0	81
0649	6.3	69	2300	7.0	78	2000	6.8	80
1325	7.8	91	2400	6.9	77	2100	6.8	79
1803	8.6	102	July 25, 1989			2200	6.7	78
June 25, 1981			0100	7.0	77	2300	6.7	77
0100	7.3	84	0200	6.9	76	2400	6.6	77
Sampling site:			0300	6.9	76	July 27, 1989		
Chicken Brook (Charles),			0400	7.0	77	0100	6.5	75
Site 1			0500	6.8	75	0200	6.5	74
June 23, 1981			0600	7.0	76	0300	6.4	74
0752	5.6	58	0700	7.0	77	0400	6.4	74
1450	5.4	61	0800	7.3	80	0500	6.5	74
1910	4.8	52	0900	7.6	83	0600	6.4	73
June 24, 1981			1000	7.6	85	0700	6.6	75
0425	6.3	63	1100	7.8	87	0800	6.6	76
0740	6.6	66	1200	7.9	89	Chicken Brook (Charles),		
1420	6.2	68	1300	7.9	90	Site 3		
1836	5.0	55	1400	7.7	88	June 23, 1981		
June 25, 1981			1500	7.6	88	0815	4.2	45
0158	4.9	52	1600	7.5	86	1515	5.2	61

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
1923	5.4	60	2300	2.0	23	1730	5.4	63
June 24, 1981			2400	2.0	23	June 25, 1981		
0440	3.7	39	July 26, 1989			0000	5.1	58
0755	4.2	43	0100	2.0	23	Sampling site:		
1450	6.8	80	0200	1.9	22	Dopping Brook (Charles),		
1846	5.9	67	0300	1.9	21	Site 1		
June 25, 1981			0400	1.9	22	June 23, 1981		
0210	2.8	31	0500	1.9	21	0725	3.1	31
July 24, 1989			0600	1.9	21	1425	3.3	36
1000	3.0	33	0700	1.9	21	1835	2.8	33
1100	3.0	33	0800	1.9	21	June 24, 1981		
1200	3.1	34	0900	2.0	22	0340	3.1	31
1300	3.1	35	1000	2.0	23	0715	3.8	36
1400	3.1	35	1100	2.0	23	1350	4.6	50
1500	3.1	35	1200	2.1	24	1820	2.6	29
1600	3.1	34	1300	2.1	24	June 25, 1981		
1700	3.0	33	1400	2.1	24	0135	2.4	26
1800	2.9	33	1500	2.1	24	July 17, 1989		
1900	2.8	32	1600	2.0	24	1100	4.5	44
2000	2.8	31	1700	2.0	23	1200	4.4	44
2100	2.7	30	1800	2.0	23	1300	4.3	43
2200	2.6	29	1900	1.9	22	1400	4.4	45
2300	2.6	29	2000	1.8	21	1500	4.4	45
2400	2.5	30	2100	1.8	20	1600	4.6	47
July 25, 1989			2200	1.7	20	1700	4.7	48
0100	2.4	27	2300	1.7	19	1800	4.6	47
0200	2.4	27	2400	1.6	19	1900	4.9	49
0300	2.4	26	July 27, 1989			2000	5.0	50
0400	2.3	26	0100	1.6	18	2100	5.0	50
0500	2.3	25	0200	1.5	18	2200	5.1	51
0600	2.3	25	0300	1.5	17	2300	5.2	51
0700	2.3	25	0400	1.5	17	2400	5.3	52
0800	2.3	25	0500	1.4	17	July 18, 1989		
0900	2.4	27	0600	1.4	17	0100	5.4	52
1000	2.5	28	0700	1.5	17	0200	5.4	53
1100	2.6	29	0800	1.6	17	0300	5.6	54
1200	2.7	30	0900	1.5	17	0400	5.7	55
1300	2.7	30	Chicken Brook (Charles),			0500	5.7	55
1400	2.7	30	Site 4			0600	5.9	56
1500	2.6	30	June 23, 1981			0700	5.9	57
1600	2.5	29	0552	5.0	53	0800	5.9	57
1700	2.4	28	1256	5.8	68	0900	6.0	58
1800	2.4	27	1755	5.2	60	1000	6.1	59
1900	2.3	26	June 24, 1981			1100	6.1	60
2000	2.2	26	0210	5.5	61	1200	6.1	61
2100	2.2	25	0555	6.0	63	1300	6.2	63
2200	2.1	24	1205	6.5	74	1400	6.3	64

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1500	6.4	66	0731	4.2	43	2400	5.2	56
1600	6.4	67	1430	6.1	71	July 19, 1989		
1700	6.4	67	1856	4.6	52	0100	5.1	55
1800	5.5	57	June 24, 1981			0200	5.0	54
1900	5.3	55	0345	7.6	76	0300	5.0	53
2000	5.3	55	0721	5.2	50	0400	4.9	52
2100	5.3	54	1400	8.6	96	0500	4.8	51
2200	5.3	54	1824	5.4	63	0600	4.8	51
2300	5.2	53	June 25, 1981			0700	4.8	52
2400	5.2	53	0145	4.0	43	0800	5.0	53
July 19, 1989			July 17, 1989			0900	5.2	56
0100	5.2	53	1300	6.1	64	1000	5.5	59
0200	5.1	52	1400	5.7	59	1100	5.8	63
0300	5.1	52	1500	6.1	63	1200	6.0	67
0400	5.2	53	1600	6.0	63	1300	6.2	69
0500	5.2	53	1700	6.0	62	1400	6.2	71
0600	5.2	53	1800	6.0	62	1500	6.1	70
0700	5.3	53	1900	6.0	62	1600	5.9	68
0800	5.4	54	2000	5.9	61	1700	5.7	66
0900	5.5	55	2100	5.9	61	1800	5.5	63
1000	5.5	55	2200	5.8	60	1900	5.1	58
1100	5.6	57	2300	5.8	59	2000	4.7	54
1200	5.8	59	2400	5.7	58	2100	4.5	50
1300	5.8	61	July 18, 1989			2200	4.3	48
1400	6.0	63	0100	5.8	58	2300	4.2	47
1500	6.2	67	0200	5.8	58	2400	4.1	46
1600	5.7	61	0300	5.9	59	July 20, 1989		
1700	5.5	59	0400	5.7	58	0100	4.0	45
1800	5.3	57	0500	5.8	58	0200	3.9	43
1900	5.1	55	0600	5.8	58	0300	4.0	43
2000	5.0	53	0700	5.9	58	0400	3.9	43
2100	4.9	51	0800	6.0	60	0500	3.9	43
2200	4.8	51	0900	6.2	62	0600	4.0	44
2300	4.7	49	1000	6.2	63	0700	4.2	45
2400	4.7	49	1100	6.4	65	0800	4.4	47
July 20, 1989			1200	6.7	69	0900	4.6	50
0100	4.7	49	1300	7.1	75	Sampling site:		
0200	4.7	48	1400	7.2	77	Mine Brook (Charles),		
0300	4.7	48	1500	7.1	78	Site 1		
0400	4.6	47	1600	7.0	77	July 10, 1989		
0500	4.7	48	1700	6.7	74	0900	7.1	75
0600	4.8	48	1800	6.4	72	1000	6.9	73
0700	4.8	48	1900	6.1	68	1100	6.9	72
0800	4.8	48	2000	5.8	64	1200	6.8	72
Dopping Brook (Charles),			2100	5.5	61	1300	6.8	72
Site 2			2200	5.4	59	1400	6.8	72
June 23, 1981			2300	5.3	57	1500	6.5	70

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1600	6.1	66	1300	7.7	83	2240	7.4	85
1700	6.4	70	1400	7.7	84	Sept 06, 1973		
1800	6.7	74	1500	7.7	84	0516	7.6	87
1900	6.8	74	1600	7.7	85	1056	7.9	92
2000	6.8	75	1700	7.7	85	1645	7.5	87
2100	6.8	75	1800	7.6	84	2255	7.3	84
2200	6.8	75	1900	7.7	86	June 6, 1978		
2300	6.8	74	2000	7.7	86	0435	8.2	82
2400	6.8	74	2100	7.7	86	1033	7.2	75
July 11, 1989			2200	7.7	85	1634	7.6	80
0100	6.8	74	2300	7.7	85	2240	8.0	81
0200	6.9	74	2400	7.7	85	June 7, 1978		
0300	6.9	74	July 13, 1989			0433	8.1	83
0400	6.9	74	0100	7.7	84	1034	8.0	85
0500	6.9	73	0200	7.8	84	1622	8.9	103
0600	6.9	74	0300	7.9	84	2240	7.4	82
0700	7.0	74	0400	7.9	84	June 8, 1978		
0800	7.0	74	0500	8.0	84	0436	7.8	82
0900	7.0	74	0600	8.0	84	1025	7.9	84
1000	7.0	74	0700	8.1	84	1627	8.0	90
1100	7.1	75	0800	8.1	85	2230	7.6	83
1200	7.2	76	Mine Brook (Charles),			July 25, 1978		
1300	7.1	77	Site 2			0227	7.9	90
1400	7.1	78	June 26, 1973			0640	7.4	80
1500	7.2	79	0610	7.6	85	1030	8.1	94
1600	7.2	79	1105	8.3	94	1428	8.8	105
1700	7.2	80	1705	7.9	91	1827	8.4	99
1800	7.2	81	2303	8.0	92	2251	8.9	100
1900	7.2	82	June 27, 1973			July 26, 1978		
2000	7.2	81	0521	8.1	91	0220	8.3	92
2100	7.2	81	1030	8.8	98	0636	8.9	92
2200	7.3	81	1700	8.1	91	1045	9.0	101
2300	7.3	81	2255	7.7	87	1421	8.5	101
2400	7.3	80	June 28, 1973			1840	8.1	93
July 12, 1989			0535	7.7	85	2235	8.9	99
0100	7.3	80	1107	8.2	92	July 27, 1978		
0200	7.4	80	1657	7.7	92	0233	8.1	90
0300	7.4	79	2255	7.2	85	0630	8.0	88
0400	7.4	79	Sept 04, 1973			1030	8.3	95
0500	7.5	78	0500	7.4	89	1426	8.8	102
0600	7.5	79	1053	7.8	99	1824	8.0	94
0700	7.6	79	1700	7.1	88	2238	8.3	96
0800	7.6	79	2300	7.0	85	July 28, 1978		
0900	7.7	80	Sept 05, 1973			0225	8.0	91
1000	7.7	81	0508	7.4	87	July 10, 1989		
1100	7.7	81	1047	7.9	92	1300	5.2	58
1200	7.7	82	1700	7.6	89	1400	6.4	71

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
1500	6.2	71	1200	6.8	74	0603	0.7	8
1600	5.8	65	1300	7.2	81	1102	0.8	10
1700	5.4	61	1400	7.6	85	1730	0.8	10
1800	5.0	57	1500	7.8	90	2255	0.6	7
1900	4.7	54	1600	7.8	90	Sept 06, 1973		
2000	4.6	52	1700	7.8	89	0536	0.7	8
2100	4.4	50	1800	7.6	87	1112	0.9	11
2200	4.3	49	1900	7.2	83	1705	1.3	15
2300	4.2	48	2000	6.7	77	2315	1.9	22
2400	4.2	47	2100	6.3	71	June 6, 1978		
July 11, 1989			2200	5.9	67	0500	1.5	15
0100	4.1	46	2300	5.5	61	1056	2.7	28
0200	4.1	46	2400	5.2	59	1653	3.6	37
0300	4.2	46	July 13, 1989			2300	1.3	13
0400	4.2	47	0100	4.9	55	June 7, 1978		
0500	4.2	47	0200	4.7	53	0457	1.1	11
0600	4.4	48	0300	4.6	50	1055	2.1	22
0700	4.6	51	0400	4.4	49	1637	3.0	34
0800	4.6	50	0500	4.3	47	2300	1.3	14
0900	5.2	56	0600	4.4	47	June 8, 1978		
1000	5.7	62	0700	4.6	50	0500	0.9	10
1100	6.1	67	0800	5.0	54	1045	1.3	14
1200	6.5	72	0900	5.6	60	1645	1.6	18
1300	6.9	78	1000	6.0	65	2248	0.7	8
1400	7.2	82	Mine Brook (Charles),			July 25, 1978		
1500	7.4	85	Site 3			0252	0.0	0
1600	7.6	88	June 26, 1973			0700	0.0	0
1700	7.4	86	0630	0.4	5	1050	0.8	9
1800	7.3	85	1125	0.8	9	1445	2.3	28
1900	6.6	77	1728	0.7	8	1849	0.7	8
2000	6.2	72	2325	0.6	7	2330	1.0	11
2100	5.7	66	June 27, 1973			July 26, 1978		
2200	5.3	61	0555	0.6	7	0237	0.7	8
2300	5.0	57	1045	1.2	14	0653	0.4	4
2400	4.7	53	1730	0.6	7	1110	2.5	29
July 12, 1989			2315	0.5	6	1435	1.9	23
0100	4.5	51	June 28, 1973			1906	0.9	11
0200	4.4	49	0553	0.6	7	2255	0.7	8
0300	4.2	47	1130	0.9	10	July 27, 1978		
0400	4.2	46	1715	1.2	14	0253	0.7	8
0500	4.2	45	2315	0.8	9	0650	1.8	20
0600	4.2	46	Sept 04, 1973			1055	1.5	17
0700	4.5	48	0525	1.0	12	1445	2.1	25
0800	4.9	53	1109	1.5	19	1843	1.1	13
0900	5.5	59	1715	1.3	16	2300	1.0	12
1000	6.0	64	2320	0.6	7	July 28, 1978		
1100	6.4	70	Sept 05, 1973			0248	0.7	8

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation	Date and time	Dissolved oxygen (mg/L)	Percentage of saturation
AREA 4--Continued								
July 10, 1989			0700	0.5	6	June 19, 1975		
1100	1.5	16	0800	0.9	10	0155	4.8	47
1200	1.5	17	0900	1.4	15	0549	6.6	65
1300	2.5	28	1000	2.0	22	1000	6.6	66
1400	3.9	44	1100	2.6	29	1357	6.9	80
1500	3.4	38	1200	3.4	37	1755	6.4	70
1600	2.1	23	1300	4.0	45	2158	5.9	62
1700	1.3	15	1400	4.5	51	June 20, 1975		
1800	1.1	12	1500	4.8	55	0157	5.7	55
1900	1.0	11	1600	4.5	53	Aug 5, 1975		
2000	0.8	9	1700	4.1	48	0145	4.4	47
2100	0.6	7	1800	3.4	39	0608	4.7	49
2200	0.5	5	1900	2.6	30	1003	5.1	56
2300	0.4	4	2000	1.6	18	1355	8.1	93
2400	0.3	4	2100	0.8	10	1805	8.0	92
July 11, 1989			2200	0.5	6	2205	5.7	64
0100	0.3	3	2300	0.4	5	Aug 6, 1975		
0200	0.2	2	2400	0.4	5	0157	4.5	50
0300	0.1	2	July 13, 1989			0558	4.4	46
0400	0.1	1	0100	0.4	5	1012	5.9	64
0500	0.0	0	0200	0.4	5	1402	8.3	91
0600	0.0	0	0300	0.5	5	1815	6.7	73
0700	0.1	1	0400	0.5	5	2220	4.9	52
0800	0.4	4	0500	0.5	5	Aug 7, 1975		
0900	1.0	11	0600	0.5	5	0200	5.4	58
1000	1.6	18	0700	0.5	6	0605	7.5	79
1100	2.3	26	0800	1.0	10	1007	7.7	83
1200	3.1	35	0900	1.6	17	1401	7.2	74
1300	3.5	40	1000	2.4	26	1810	6.4	67
1400	4.0	46	1100	2.8	31	2208	6.1	63
1500	4.0	48	Sampling site:			Aug 8, 1975		
1600	3.9	47	Robinson Brook (Taunton),			0150	6.4	66
1700	3.6	42	Site 1			June 20, 1988		
1800	2.9	35	June 17, 1975			1200	9.4	94
1900	1.8	21	0205	7.4	72	1300	9.5	97
2000	0.9	10	0555	6.9	66	1400	9.3	96
2100	0.4	5	1011	7.4	79	1500	9.1	95
2200	0.2	2	1356	7.4	78	1600	8.8	92
2300	0.2	2	1800	7.3	78	1700	8.3	87
2400	0.3	4	2215	7.2	72	1800	7.8	81
July 12, 1989			June 18, 1975			1900	7.3	76
0100	0.2	2	0156	6.9	68	2000	6.8	71
0200	0.2	2	0556	6.7	66	2100	6.4	66
0300	0.2	2	1000	6.7	67	2200	6.2	64
0400	0.2	2	1400	5.9	64	2300	5.9	60
0500	0.2	3	1800	7.1	77	2400	5.8	58
0600	0.3	3	2204	6.0	63	June 21, 1988		

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
0100	5.8	58	1404	6.6	74	2100	6.4	66
0200	5.8	58	1800	7.1	77	2200	6.4	66
0300	5.8	57	2204	6.0	63	2300	6.4	66
0400	5.8	57	June 19, 1975			2400	6.4	65
0500	5.8	57	0155	4.8	47	June 21, 1988		
0600	5.9	58	0549	6.6	65	0100	6.3	64
0700	6.0	59	1000	6.6	66	0200	6.3	64
0800	6.4	63	1357	6.9	80	0300	6.2	63
0900	6.9	68	1755	6.4	70	0400	6.2	62
1000	7.4	74	2158	5.9	62	0500	6.2	62
1100	7.8	79	June 20, 1975			0600	6.2	62
1200	8.1	83	0157	5.7	55	0700	6.2	62
1300	8.1	84	Aug 5, 1975			0800	6.2	62
1400	8.1	84	0140	4.0	44	0900	6.2	62
1500	7.9	83	0600	4.0	42	1000	6.3	63
1600	7.4	78	0958	5.2	58	1100	6.3	64
1700	7.0	74	1351	6.4	72	1200	6.4	65
1800	6.5	68	1800	4.2	48	1300	6.4	66
1900	6.2	65	2155	2.7	31	1400	6.4	67
2000	5.9	62	Aug 6, 1975			1500	6.3	67
2100	5.6	58	0151	2.8	32	1600	6.2	66
2200	5.5	57	0557	3.2	35	1700	6.1	65
2300	5.5	56	1010	4.9	54	1800	6.0	64
2400	5.5	56	1358	4.6	50	1900	5.9	63
June 22, 1988			1810	3.4	37	2000	5.7	60
0100	5.6	56	2214	3.6	38	2100	5.5	58
0200	5.6	56	Aug 7, 1975			2200	5.3	55
0300	5.7	57	0153	3.6	38	2300	5.3	55
0400	5.8	57	0600	6.9	73	2400	5.4	56
0500	5.9	58	1003	7.0	73	June 22, 1988		
0600	6.0	59	1358	6.3	66	0100	5.4	55
0700	6.1	59	1805	5.8	60	0200	5.5	56
0800	6.4	62	2204	5.3	54	0300	5.6	56
0900	6.9	68	Aug 8, 1975			0400	5.7	57
Robinson Brook (Taunton), Site 2			0145	4.8	52	0500	5.8	58
June 17, 1975			June 20, 1988			0600	5.8	58
0155	6.1	60	1000	7.5	73	0700	6.0	59
0550	6.1	61	1100	7.6	75	0800	6.0	60
1005	7.2	72	1200	7.6	76	0900	6.2	62
1347	6.2	64	1300	7.6	78	Robinson Brook (Taunton), Site 3		
1755	6.5	69	1400	7.5	77	June 17, 1975		
2207	6.2	64	1500	7.4	77	0236	7.9	81
June 18, 1975			1600	7.2	76	0615	8.6	90
0152	6.1	61	1700	7.0	74	1039	8.0	85
0552	6.6	66	1800	6.8	72	1433	8.2	86
0957	6.5	65	1900	6.7	71	1830	--	
			2000	6.5	68			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
2245	7.6	81	2000	6.8	78	1910	2.7	26
June 18, 1975			2100	6.8	77	2145	4.1	43
0225	7.3	76	2200	6.8	76	June 11, 1975		
0620	7.5	83	2300	6.8	76	0200	5.6	58
1026	7.3	78	2400	6.9	76	0433	6.5	67
1428	6.8	79	June 21, 1988			0920	7.3	73
1825	6.4	71	0100	7.0	77	1208	7.2	78
2231	6.2	71	0300	7.0	76	1715	2.1	21
June 19, 1975			0400	7.1	77	2010	4.0	42
0225	6.2	66	0500	7.1	77	June 12, 1975		
0617	6.6	73	0600	7.1	77	0054	5.4	55
1032	7.0	75	0700	7.2	78	0550	3.4	35
1425	6.8	82	0800	7.2	78	0853	6.7	69
1820	6.1	70	0900	7.3	79	1245	2.8	29
2229	6.0	71	1000	7.4	81	1735	6.1	63
June 20, 1975			1100	7.4	82	2105	3.4	34
0224	5.5	59	1200	7.4	83	June 13, 1975		
Aug 5, 1975			1300	7.2	83	0110	6.2	63
0215	6.8	78	1400	7.0	83	0425	4.7	48
0635	7.1	77	1500	6.8	82	July 22, 1975		
1040	7.6	89	1600	6.6	81	0505	4.7	56
1425	7.5	90	1700	6.5	79	0825	3.2	36
1835	6.7	82	1800	6.5	78	1256	6.7	85
2236	6.6	77	1900	6.5	78	1705	8.0	101
Aug 6, 1975			2000	6.5	77	2054	5.8	74
0225	6.9	81	2100	6.5	76	July 23, 1975		
0620	6.8	75	2200	6.6	76	0230	4.8	56
1036	8.1	94	2300	6.6	75	0433	4.3	52
1425	6.8	77	2400	6.7	75	0823	0.4	4
1843	7.2	81	June 22, 1988			1237	7.7	96
2243	7.2	79	0100	6.8	76	1641	8.0	101
Aug 7, 1975			0200	6.9	76	2046	3.5	43
0233	7.5	81	0300	7.0	77	July 24, 1975		
0631	7.6	81	0400	7.0	76	0048	3.6	42
1035	7.3	79	0500	7.1	77	0420	4.1	48
1429	7.5	78	0600	7.2	76	0815	2.0	23
1838	7.3	78	0700	7.2	76	1250	8.1	103
2237	7.2	74	0800	7.3	77	1645	7.6	96
Aug 8, 1975			0900	7.4	78	2033	6.6	84
0216	7.6	79	1000	7.4	79	July 25, 1975		
June 20, 1988			Sampling site: Town River (Taunton), Site 1			0055	5.0	61
1400	7.5	86	June 10, 1975			0415	4.0	48
1500	7.2	84	0615	5.9	56	Sept 11, 1989		
1600	7.0	83	0930	7.0	67	0900	5.4	61
1700	6.9	82	1310	7.8	79	1000	6.7	76
1800	6.8	80				1100	7.8	89
1900	6.8	79				1200	8.6	100

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1300	9.2	106	1000	7.6	87	0700	4.6	52
1400	9.5	111	1100	8.5	98	0800	4.8	54
1500	9.4	111	1200	9.8	114	Town River (Taunton), Site 2		
1600	8.8	103	1300	10.3	121	June 10, 1975		
1700	8.2	97	1400	10.0	114	0608	4.5	42
1800	7.2	85	1500	10.2	120	0922	5.2	50
1900	6.0	70	1600	9.6	113	1318	7.2	72
2000	5.2	61	1700	8.8	103	1905	6.1	64
2100	4.9	57	1800	8.0	93	2135	6.2	68
2200	4.7	55	1900	7.0	81	June 11, 1975		
2300	4.6	53	2000	6.1	71	0153	4.4	45
2400	4.4	51	2100	5.4	63	0432	5.3	53
Sept 12, 1989			2200	5.4	62	0910	5.1	51
0100	4.3	49	2300	5.2	60	1202	5.1	54
0200	4.2	48	2400	5.1	58	1710	5.3	57
0300	4.2	48	Sept 14, 1989			2005	6.5	72
0400	4.2	48	0100	4.6	53	June 12, 1975		
0500	4.2	48	0200	5.0	56	0048	5.4	56
0600	4.3	49	0300	4.9	55	0542	4.8	52
0700	4.5	51	0400	4.8	54	0816	5.2	52
0800	5.1	58	0500	4.9	54	1237	5.2	55
0900	6.1	69	0600	4.9	55	1730	5.0	52
1000	7.2	83	0700	5.0	56	2050	5.4	58
1100	8.0	92	0800	5.4	60	June 13, 1975		
1200	8.8	103	0900	6.2	69	0102	4.0	40
1300	9.7	113	1000	7.5	85	0420	4.9	51
1400	10.1	119	1100	7.8	88	July 22, 1975		
1500	10.0	118	1200	7.6	85	0500	4.8	59
1600	9.6	114	1300	9.0	102	0815	4.5	54
1700	8.9	103	1400	9.0	102	1250	5.3	68
1800	7.8	91	1500	10.2	118	1655	3.1	39
1900	6.6	77	1600	10.1	117	2048	5.4	70
2000	5.8	67	1700	9.3	107	July 23, 1975		
2100	5.4	62	1800	8.2	94	0219	4.2	50
2200	5.1	59	1900	7.0	81	0430	4.7	58
2300	5.0	58	2000	6.4	72	0820	4.6	54
2400	4.8	55	2100	6.2	71	1230	5.2	65
Sept 13, 1989			2200	6.1	69	1637	5.2	65
0100	4.6	53	2300	5.8	66	2040	5.4	70
0200	4.5	52	2400	5.5	62	July 24, 1975		
0300	4.5	51	Sept 15, 1989			0041	4.6	55
0400	4.5	51	0100	5.2	58	0415	4.8	58
0500	4.5	51	0200	5.0	57	0810	4.5	54
0600	4.5	51	0300	4.9	55	1245	5.5	70
0700	4.7	52	0400	4.6	52	1640	4.9	61
0800	5.3	59	0500	4.5	51	2027	5.6	71
0900	6.2	71	0600	4.5	51			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
July 25, 1975			0400	4.8	54	0100	6.0	68
0045	4.9	60	0500	4.7	53	0200	5.8	65
0410	5.1	62	0600	4.7	53	0300	5.4	61
Sept 11, 1989			0700	4.7	52	0400	5.1	58
1100	4.8	54	0800	4.6	52	0500	4.8	54
1200	5.1	59	0900	4.7	53	0600	4.5	51
1300	5.5	64	1000	4.8	54	0700	4.2	47
1400	5.8	68	1100	5.0	57	0800	4.1	46
1500	6.1	73	1200	5.4	61	0900	4.2	46
1600	6.4	77	1300	5.8	66	1000	3.9	44
1700	6.7	80	1400	6.1	70	Town River (Taunton), Site 3		
1800	6.8	82	1500	6.4	74	June 10, 1975		
1900	6.7	80	1600	6.6	77	0558	4.9	47
2000	6.6	78	1700	6.9	80	0914	5.1	49
2100	6.3	75	1800	7.0	81	1303	5.6	56
2200	6.0	71	1900	7.0	82	1855	4.5	45
2300	5.8	68	2000	6.8	79	2125	5.5	59
2400	5.5	65	2100	6.6	76	June 11, 1975		
Sept 12, 1989			2200	6.3	73	0143	5.0	51
0100	5.3	62	2300	6.1	70	0425	5.3	55
0200	4.9	58	2400	5.9	68	0905	6.1	61
0300	4.6	54	Sept 14, 1989			1158	4.9	54
0400	4.5	52	0100	5.8	66	1700	3.8	40
0500	4.4	51	0200	5.5	62	2000	5.7	62
0600	4.3	50	0300	5.3	59	June 12, 1975		
0700	4.3	49	0400	5.1	58	0043	4.6	48
0800	4.3	49	0500	5.0	56	0536	4.4	47
0900	4.4	50	0600	4.9	54	0838	5.0	52
1000	4.5	51	0700	4.9	55	1230	4.5	49
1100	4.6	53	0800	5.0	55	1715	4.1	42
1200	5.0	57	0900	5.1	56	2050	4.7	50
1300	5.3	61	1000	5.2	57	June 13, 1975		
1400	5.6	65	1100	5.2	58	0055	4.2	43
1500	5.9	69	1200	5.5	61	0413	4.6	48
1600	6.4	75	1300	5.7	63	July 22, 1975		
1700	6.7	79	1400	6.0	67	0450	2.3	28
1800	6.8	80	1500	6.1	68	0810	2.4	29
1900	6.8	79	1600	6.2	69	1239	4.3	57
2000	6.7	77	1700	6.7	76	1647	4.6	59
2100	6.5	75	1800	7.0	80	2037	3.9	50
2200	6.3	72	1900	7.0	80	July 23, 1975		
2300	6.0	69	2000	6.7	77	0210	2.4	29
2400	5.8	67	2100	6.5	74	0420	2.5	31
Sept 13, 1989			2200	6.4	73	0805	2.2	26
0100	5.6	64	2300	6.4	73	1225	4.2	55
0200	5.2	60	2400	6.5	74	1630	4.9	63
0300	5.0	56	Sept 15, 1989					

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
2033	4.2	54	2200	4.3	49	1900	4.7	54
July 24, 1975			2300	4.2	48	2000	4.6	53
0034	4.0	48	2400	4.2	48	2100	4.8	55
0410	2.6	32	Sept 13, 1989			2200	4.8	54
0805	2.0	24	0100	4.1	47	2300	4.7	53
1237	4.4	57	0200	4.1	47	2400	4.8	54
1630	4.2	54	0300	4.1	47	Sept 15, 1989		
2020	4.4	56	0400	4.1	47	0100	4.7	54
July 25, 1975			0500	4.1	47	0200	4.9	55
0036	1.9	23	0600	4.1	47	0300	4.9	56
0403	3.6	44	0700	4.1	46	0400	4.9	55
Sept 11, 1989			0800	4.1	48	0500	4.8	54
1200	5.3	62	0900	4.2	48	0600	4.8	54
1300	5.2	61	1000	4.4	50	0700	4.7	53
1400	5.1	60	1100	4.6	52	0800	4.7	53
1500	5.0	59	1200	4.8	55	0900	4.7	52
1600	4.9	58	1300	5.0	58	1000	4.6	52
1700	5.0	59	1400	5.1	60	1100	4.6	52
1800	4.8	56	1500	5.2	60	Town River (Taunton), Site 4		
1900	4.6	53	1600	5.1	59	June 10, 1975		
2000	4.4	52	1700	5.0	57	0553	7.6	73
2100	4.4	51	1800	4.8	56	0910	7.0	68
2200	4.3	50	1900	4.7	54	1258	7.7	77
2300	4.2	49	2000	4.5	52	1850	6.5	66
2400	4.2	49	2100	4.4	51	2115	6.7	71
Sept 12, 1989			2200	4.3	49	June 11, 1975		
0100	4.2	49	2300	4.2	48	0138	5.7	58
0200	4.3	50	2400	4.1	47	0420	7.0	72
0300	4.3	50	Sept 14, 1989			0900	7.0	71
0400	4.3	49	0100	4.1	47	1155	6.9	74
0500	4.2	49	0200	4.0	46	1650	5.8	62
0600	4.2	49	0300	4.0	45	1955	6.6	72
0700	4.2	49	0400	3.9	44	June 12, 1975		
0800	4.3	50	0500	3.9	44	0038	6.6	68
0900	4.5	51	0600	4.0	44	0533	6.3	67
1000	4.6	53	0700	4.0	45	0835	6.8	70
1100	4.8	55	0800	4.0	45	1227	6.3	66
1200	5.0	58	0900	4.2	47	1710	6.0	62
1300	5.1	60	1000	4.3	49	2045	--	--
1400	5.2	61	1100	4.4	50	June 13, 1975		
1500	5.1	61	1200	4.5	50	0052	6.1	62
1600	5.1	60	1300	4.6	52	0410	6.7	71
1700	5.0	59	1400	4.9	56	July 22, 1975		
1800	4.9	57	1500	5.0	57	0445	5.1	64
1900	4.7	55	1600	5.0	57	0805	4.8	58
2000	4.5	53	1700	4.9	56	1235	5.9	75
2100	4.4	51	1800	4.8	55			

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent age of saturation	Date and time	Dissolved oxygen (mg/L)	Percent-age of saturation
AREA 4--Continued								
1645	5.8	75	1635	5.1	63	1500	7.0	84
2033	5.7	74	2025	5.3	68	1600	6.6	78
July 23, 1975			July 23, 1975			1700	7.0	82
0205	4.3	51	0155	3.5	42	1800	7.1	84
0415	5.0	61	0410	4.6	58	1900	7.3	87
0800	4.7	55	0755	4.4	52	2000	7.6	90
1220	5.8	72	1205	5.3	68	2100	6.6	78
1627	6.2	79	1615	4.3	53	2200	7.1	85
2030	5.7	74	2020	5.0	64	2300	7.2	85
July 24, 1975			July 24, 1975			2400	7.1	84
0030	5.1	63	0021	4.5	54	Sept 13, 1989		
0400	5.0	61	0335	4.4	54	0100	7.0	82
0800	5.0	59	0748	3.2	38	0200	6.8	81
1233	5.8	73	1218	3.2	40	0300	6.6	78
1627	5.9	75	1618	3.1	38	0400	6.5	76
2016	5.5	70	2008	3.8	48	0500	6.4	75
0030	5.5	67	July 25, 1975			0600	6.3	74
0355	5.0	61	0022	3.6	44	0700	6.3	73
Town River (Taunton), Site 5			0350	4.1	49	0800	6.2	72
June 10, 1975			Sept 11, 1989			0900	6.2	72
0535	6.9	69	1300	6.8	77	1000	6.2	72
0900	6.3	62	1400	7.2	80	1100	6.4	75
1240	7.9	81	1500	7.0	79	1200	6.7	79
1817	12.3	128	1600	7.0	79	1300	7.4	87
2100	7.4	80	1700	7.0	80	1400	7.0	83
June 11, 1975			1800	7.7	88	1500	6.9	83
0130	6.3	66	1900	7.3	83	1600	7.9	95
0412	7.2	76	2000	7.2	82	1700	7.9	96
0845	7.4	78	2100	7.3	84	1800	7.6	94
1150	7.0	75	2200	7.3	84	1900	7.4	91
1645	5.8	61	2300	7.3	84	2000	7.1	84
1950	7.2	78	2400	7.4	85	2100	6.9	84
June 12, 1975			Sept 12, 1989			2200	6.7	80
0030	7.5	76	0100	7.3	84	2300	6.6	79
0525	7.3	77	0200	7.2	84	2400	6.4	77
0824	6.8	69	0300	7.1	84	Sept 14, 1989		
1220	6.7	71	0400	7.0	81	0100	6.4	77
1700	6.9	72	0500	7.0	83	0200	6.4	76
2040	7.0	75	0600	7.0	82	0300	6.2	73
June 13, 1975			0700	7.0	81	0400	6.0	70
0043	6.2	64	0800	6.8	79	0500	5.9	69
0402	6.8	73	0900	6.9	80	0600	5.9	69
July 22, 1975			1000	6.9	81	0700	5.8	68
0435	4.5	56	1100	6.8	79	0800	5.7	66
0800	4.5	54	1200	7.0	80	0900	5.8	68
1225	5.3	68	1300	6.2	71	1000	5.6	66
			1400	6.7	79	1100	5.7	67

Table 6.--Dissolved-oxygen data for wetland-stream sampling sites--Continued

Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent age of satur-ation	Date and time	Dis-solved oxygen (mg/L)	Percent-age of satur-ation
AREA 4--Continued								
1200	5.6	65	2100	5.3	62	0500	5.8	68
1300	5.7	66	2200	5.4	63	0600	5.4	63
1400	5.8	68	2300	4.8	55	0700	5.4	62
1500	5.2	60	2400	5.1	59	0800	5.4	63
1600	5.4	63	Sept 15, 1989			0900	5.3	61
1700	5.2	61	0100	5.4	63	1000	5.4	63
1800	4.8	56	0200	5.7	66	1100	5.2	60
1900	5.6	65	0300	5.6	64	1200	5.4	62
2000	5.9	69	0400	6.1	71			