



**Sheepsct Valley Conservation Association  
Water Quality Monitoring Program 2003  
By Stacy Cibula Gambrel, Program Coordinator**

**EXECUTIVE SUMMARY**

The 2003 Water Quality Monitoring season saw much more rain and cooler temperatures than in recent years. The drought that had plagued Maine for several years was officially over by the end of the summer.

Overall, water quality on the Sheepsct is slightly better this year than in 2002. 2003 recorded a slightly higher average dissolved oxygen level (7.8) versus (7.6) in 2002. E. coli bacteria, which we test at our 25 freshwater sites, recorded an average count of 97. In 2002, the average E. coli count was 130. The most pronounced improvement was found in our Enterococci bacteria results. Typically, our saltwater sampling sites from the Head Tide dam to the Dock Road bridge in Alna recorded extremely high Enterococci levels. This year, the average Enterococci count was 75, compared with 559 in 2002. This average is still much higher than the violation threshold of 8, but it is nonetheless an improvement. The average for Fecal coliform, which is also tested at saltwater stations, was found to be slightly higher this year: up to 129 from 106 in 2002.

**Sites of Concern**

The Trout Brook site (TRBK002-F) in the lower Sheepsct River in Alna recorded many instantaneous dissolved oxygen violations (below 7.0 mg/L) this season. On several occasions during hot, dry weather, this site saw dissolved oxygen readings in the 2.0 to 3.0 range, sinking as low as 1.8 on July 15. Its average dissolved oxygen count was 4.7. D.O. levels in this range are extremely harmful and, in many cases, lethal to fish and other aquatic creatures.

The Choate Brook site (CHBK001-F) of the West Branch recorded lower water quality this season. 8 of 11 dissolved oxygen samples were violations (below 7.0 mg/L) and several instantaneous E. coli results were in the 500 to 600 range. (greater than 427 is a violation.)

**Exceptional Site**

The Weaver Brook site (WEBK001-F) in Whitefield recorded a very high average dissolved oxygen level (9.6) and a low average temperature (12.6). This brook is spring-fed and often remains cold even in the middle of the summer. Additionally, this site did not have any dissolved oxygen or E. coli violations in 2003. Weaver Brook was also recently upgraded from a Class B water to a Class A (the highest standard of water quality in the state). This upgrade was due in large part to SVCA data that illustrated the brook's excellent water quality.

**Water Quality Management Plan**

An exciting aspect of this year's program was our involvement in the drafting of a comprehensive water quality management plan for the Sheepsct Watershed. A recent grant awarded to the Downeast salmon group Project SHARE funded this pilot project on the

Sheepscot. The purpose of this project is to bring together the numerous groups who collect water quality data on the Sheepscot River and devise the best method for sharing data, analyzing results and resolving pollution problems. The plan will be completed by the summer of 2004. Fundraising efforts and other plans for next year's program are already underway. We are eager to begin another interesting, fun and hopefully rainy water quality season.

### **Key Personnel in the SVCA's Water Quality Monitoring Program**

The SVCA's water quality monitoring program is a largely a volunteer-led effort. Board members Anneliese and Alex Pugh serve as co-chairs of the program. Alex and Anneliese, with direction from Program Coordinator Stacy Gambrel, plan program logistics, recruit volunteers and direct QAPP protocols. Alex, a groundwater specialist with the DEP, and Anneliese, a biologist, bring their scientific expertise to the program. Other advisors to the program include:

Paul Mitnik, Maine Department of Environmental Protection  
Mark Whiting, Maine Department of Environmental Protection  
Dave Courtemanche, Maine Department of Environmental Protection  
Melissa Halsted, Kennebec Soil and Water Conservation District

## **Sheepscot River Water Quality Data 1994-2003**

The following data has been summarized but not yet thoroughly analyzed. It should be considered as preliminary results until further analysis has been completed. Active sampling sites are listed in **BOLD**. The number of sampling dates for a particular year for each site is listed in parentheses. All violations of State of Maine Water Quality Standards for the Sheepscot Drainage in the data collected are in **BOLD**. The water quality classifications of the Sheepscot are as follows:

### **The Sheepscot Main Stem from Route 17 to Sheepscot Village and the West Branch are Class AA:**

There are no specified standards for AA waters. Class AA is the highest classification and sections of river that have this designation are "...outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance." For comparison purposes the Class B Standards have been used on data collected in this section of the river in this report.

### **The Mainstem of the Sheepscot River from its headwaters in Montville to the Route 17 bridge in Whitefield and all tributaries are Class B. The standards for Class B are as follows:**

Dissolved Oxygen:	7.0 mg/l	
E Coli:	64 geometric mean	427 instantaneous

### **Estuarine waters of the Sheepscot are Class SA. The standards for SA waters are as follows:**

Dissolved Oxygen	7.0 mg/l	
Enterococci:	8 geometric mean	54 instantaneous

There are no standards for fecal coliform bacteria.

## Estuary and Tributaries

### CPBK-F

Culvert Pond Brook. 100 yards below Culvert Pond, river right. Class A (upgraded in 2003)

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1998	23.7 (12)	0	2 (12)	
1999	<b>238.01 (12)</b>	4	2 (12)	
2000	26.6 (12)	0	0 (12)	
2001	37.3	1	4 (12)	
2002	37.2	1	2 (12)	16.5
2003	22.0 (10)	0	1 (11)	17.3

### DY001-E

Dyer River. At mouth, below bridge in Sheepscoot Village. By boat. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994				9 (9)	
1995	18.4			4 (8)	
1996	48.3	36.0	4 (11)	8 (11)	
1997	9.9	3.5	0 (10)	5 (12)	
1998	22.3	20.6	4 (11)	4 (11)	
1999	20.6	19.2	2 (12)	4 (12)	
2000	42.0	115.5	8 (10)	0 (10)	
2001	14.9	27.4	3 (11)	3 (12)	
2002	19.0	25.4	4 (11)	1 (11)	16.1
2003	34.2	32.6	5 (11)	6 (11)	16.7

### DY002-E

Dyer River, Newcastle. Behind Hoffman's House on North Newcastle Road. Class SA.

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
2002	31.5	38.9	5 (12)	7 (11)	16.0

### S001-E

Sheepsct River. Downriver from Sheepsct Village Bridge. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994				8 (8)	
1995	18.1			5 (9)	
1996	29.4	14.8	1 (11)	6 (12)	
1997	8.3	4.6	0 (11)	1 (11)	
1998	12.9	7.7	2 (8)	2 (12)	
1999	17.3	10.1	1 (12)	1 (12)	
2000	27.5	37.3	3 (10)	0 (10)	
2001	13.5	17.4	0 (11)	5 (11)	
2002	23.9	38.3	3 (11)	1 (11)	16.0
2003	19.7	11.2	0 (11)	3 (11)	17.3

### S002-E

Sheepsct River. Wood Easement. By Boat. SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	25.4			
1995	17.7			
1996	30.0	12.3	2 (12)	
1997	6.7	3.3	0 (11)	

### S003-E

Sheepsct River. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	44.5 (9)			
1995	31.9 (12)	32.3 (11)	6 (11)	
1996	51.2 (11)	32.3 (11)	6 (11)	

### S004-E

Sheepsct River. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	59.6 (10)			
1995	49.7 (11)			
1996	41.1 (10)	41.6 (8)	3 (8)	

### S005-E

Sheepscoot River. Under Puddledock Bridge. River right. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	60.4 (10)			0 (10)	
1995	44.0 (11)			0 (10)	
1996	32.4 (10)	<b>44.4 (10)</b>	<b>4 (10)</b>	0 (10)	
1997	42.0 (11)	<b>79.6 (11)</b>	<b>7 (11)</b>	0 (9)	
1998	32.4 (10)	<b>44.4 (10)</b>	<b>4 (10)</b>	0 (2)	
1999	161.0 (12)	<b>223.0 (12)</b>	<b>10 (12)</b>	<b>10 (12)</b>	
2000	118.7 (7)	<b>511.1 (7)</b>	<b>5 (7)</b>	0 (12)	
2001	126.1 (12)	<b>200.8 (11)</b>	<b>10 (11)</b>	<b>3 (11)</b>	
2002	53.7	<b>116.5 (11)</b>	<b>8 (11)</b>	<b>5 (11)</b>	16.9
2003	44.3 (11)	16.1 (11)	0 (11)	<b>1 (11)</b>	17.2

### S006-E

Sheepscoot River Below mouth of Trout Brook. River Right. Class SA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTEROCOCCI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	84.9 (10)				
1995	59 (11)				
1996	79.2 (12)	<b>69.8 (12)</b>	<b>7 (12)</b>		
1997	39.0 (11)	<b>99.3 (11)</b>	<b>7 (11)</b>		
1998	43.4 (11)	<b>114.8 (9)</b>	<b>5 (9)</b>		
1999	268.6 (11)	<b>155.2 (11)</b>	<b>7 (11)</b>		
2001	126.1 (10)	<b>217.5 (9)</b>	<b>8 (10)</b>	1 (11)	
2002	48.0 (12)	<b>176.1 (12)</b>	<b>9 (12)</b>	1 (12)	16.2
2003	36.2 (11)	<b>23.4 (11)</b>	<b>2 (11)</b>	0 (11)	14.5

### TRBK001-F

Trout Brook. At culvert on David Swetland's Road. Class B.

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1997	<b>99.6 (11)</b>	<b>2</b>	<b>9 (12)</b>
1998	<b>95.6 (12)</b>	<b>1</b>	<b>2 (12)</b>
2000	40 (1)	0	<b>1 (11)</b>

### TRBK002-F

Trout Brook. Downstream from West Alna Road bridge. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	<b>77.3 (12)</b>	<b>2</b>	<b>8 (12)</b>	
2000	<b>95.2 (12)</b>	<b>2</b>	<b>2 (12)</b>	
2001	<b>72.8 (11)</b>	<b>0</b>	<b>8 (12)</b>	
2002	42.1	<b>1</b>	<b>6 (11)</b>	15.6
2003	33.5 (11)	0 (11)	<b>7 (11)</b>	15.4

## Sheepscot Main Stem and Tributaries

### CABK-F

Carleton Brook, Whitefield. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1997	<b>64.2 (12)</b>	<b>1</b>	<b>8 (12)</b>
1998	<b>64.2 (12)</b>	0	<b>10 (12)</b>

### CHABK001-F

Chamberlain Brook, King's Mills. Below route 194 Bridge. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1997	<b>85.3 (8)</b>	<b>2</b>		
1998	<b>157.5 (12)</b>	<b>3</b>	<b>11 (12)</b>	
1999	<b>165 (12)</b>	<b>5</b>	<b>10 (12)</b>	
2000	<b>113.2 (9)</b>	<b>1</b>	<b>6 (8)</b>	
2001	<b>84.6 (12)</b>	<b>1</b>	<b>11(12)</b>	
2002	49.1 (12)	<b>1</b>	<b>9 (12)</b>	16.5
2003	40.2 (9)	<b>1 (9)</b>	<b>6 (9)</b>	17.0

### CHABK002-F

Chamberlain Brook, King's Mills. Below culvert at dirt road crossing. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1998	<b>281.2 (11)</b>	<b>5</b>	<b>10 (12)</b>
2000	<b>65.5 (9)</b>	<b>1</b>	<b>2 (8)</b>

### CHABK003-F

Chamberlain Brook (south fork), King's Mills. Downstream of the northern Route 194 crossing and above confluence with mainstem of Chamberlain Brook. Class B

YEAR	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	53.4 (12)	1	10 (12)	
2001	781.8 (6)	4 (6)	2 (5)	
2002	139.2 (12)	4 (12)	8 (12)	14.8

### FB001-F

Finn Brook, at the mouth above route 126, Whitefield. Class B

YEAR	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	123.2 (11)	3	0 (5)	
2000	36.9 (9)	1	0 (12)	
2001	82.3 (12)	0	3 (12)	
2002	101.5	3	0 (12)	14.3
2003	87.5 (11)	1 (11)	3 (11)	13.7

### S007-E

Sheepscot River. Downriver from Head Tide Road Bridge; behind SVCA Office; river left. Class AA

YEAR	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTERO DAYS IN VIOLATION</i>	<i>E Coli Geomean</i>	<i>E Coli Days in Violation</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	80.1 (8)					1 (10)	
1995	32.3 (12)					2 (12)	
1996	21.5 (12)	88.7 (12)	7 (12)			0 (12)	
1997	26.0 (12)	138.8 (12)	9 (12)			0 (12)	
1998	58.2 (12)	337.1 (11)	9 (12)			1 (12)	
1999	111 (11)	359 (11)	8 (11)	59 (6)	0	0 (7)	
2000	113.8 (9)	564 (9)	8 (9)			0 (12)	
2001	406.2 (2)	82.5 (2)	1 (2)	86.2 (10)	1	1 (12)	
2002	68.2 (11)	241.6 (11)	9 (11)	--	--	0 (12)	13.8
2003	201.4 (11)	19.1 (11)	1 (11)	--	--	0 (11)	17.0

**S008-F**

Sheepscot River. Above Head Tide Dam. River right. Class AA

<i>YEAR</i>	<i>FECAL COLIFORM GEO MEAN</i>	<i>ENTEROCOCCI GEO MEAN</i>	<i>ENTERO DAYS IN VIOLATION</i>	<i>E Coli Geomean</i>	<i>E Coli Days in Violation</i>	<i>D.O. DAYS IN VIOLATION</i>
1994				31.2 (6)	0	<b>1 (9)</b>
1995				22.2 (12)	0	<b>1 (12)</b>
1996	27.1 (11)					0 (12)
1997				24.4 (11)		0 (11)
1998				<b>41.8 (12)</b>		0 (12)
1999	24 (6)	<b>226 (6)</b>	<b>4 (6)</b>	<b>35 (11)</b>	0	0 (4)
2000				<b>41.5 (7)</b>	0	0 (12)

**S008.5-F**

Sheepscot River. Below outlet of Spring Brook, Alna. Class AA

<i>YEAR</i>	<i>E.COLI GEOMEAN</i>	<i>E.COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
2001	37.8	0	0	
2002	23.9	0	0 (12)	15.8
2003	27.4 (10)	0 (10)	0 (10)	16.1

**S009-F**

Sheepscot River. Above Long Rapids. Stenneck's property. River right Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	<b>66 (9)</b>	0	<b>4 (9)</b>	
1995	29 (12)	0	<b>3 (12)</b>	
1996	32.6 (10)	0	0 (9)	
1997	32.6 (11)	0	0 (2)	
1998	<b>80.7 (11)</b>	<b>1</b>	<b>2 (6)</b>	
1999	55 (12)	0	<b>2 (11)</b>	
2000	57.6 (9)	<b>1</b>		
2001	<b>66.0</b>	<b>1</b>	<b>1 (11)</b>	
2002	33.7	0	<b>1 (9)</b>	16.6
2003	30.2 (10)	0 (10)	0 (10)	19.1

### S010-F

Sheepsct River. King's Mills, below bridge. River Left. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	41 (10)	0	0 (10)	
1995	21.8 (12)	0	0 (11)	
1996	34.1 (11)	0	<b>1 (11)</b>	
1997	25.5 (12)	0	0 (12)	
1998	58.7 (10)	<b>1</b>	0 (10)	
1999	<b>79.5 (11)</b>	0	<b>1 (11)</b>	
2000	28.1 (9)	0	0 (8)	
2001	35.4 (12)	0	0 (11)	
2002	25.2 (9)	0	2 (11)	21.9
2003	31.3 (11)	0 (11)	<b>1 (11)</b>	18.9

### S011-F

Sheepsct River. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	29.6 (9)	0	<b>10 (10)</b>
1995	16.9 (11)	0	0 (12)
1996	<b>34.8 (12)</b>	0	<b>1 (12)</b>

### S012-F

Sheepsct River. King's Mills, below bridge. River Left. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	28.9 (9)	0	0 (9)
1995	18.9 (11)	0	<b>1 (11)</b>
1996	22.0 (12)	0	0 (11)

### S013-F

Sheepsct River. North Whitefield. Below Route 126. River right. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	28.5 (9)	0	<b>3 (9)</b>	
1995	33.5 (11)	<b>1</b>	0 (12)	
1996	49.5 (5)	<b>1</b>		
1997	41.9 (10)	<b>1</b>	<b>2 (8)</b>	
1998	29.5 (8)	0	<b>3 (8)</b>	
1999	<b>85.1 (11)</b>	<b>1</b>	0 (5)	
2000	54.5 (12)	<b>1</b>		
2001	33.0 (11)	0	<b>4 (11)</b>	
2002	44.0 (11)	0	2 (12)	17.8
2003	34.5 (11)	0	<b>2 (11)</b>	18.4

### S013.5-F

Sheepscoot River. Downriver from Cooper's Mills Dam; river left. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	33.2 (11)	1	0 (5)	
2000	13.3 (12)	0	1 (12)	
2001	25.7 (11)	<b>1</b>	<b>2 (10)</b>	
2002	19.5 (10)	0	<b>5 (12)</b>	18.0
2003	15.0 (11)	<b>1 (11)</b>	0 (11)	18.5

### S014-F

Sheepscoot River. Somerville. Below Somerville Road Bridge. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1995	38.2 (12)	0	<b>2 (12)</b>	
1996	43.6 (12)	0	<b>3 (12)</b>	
1997	36.4 (12)	0	<b>2 (12)</b>	
1998	48.3 (11)	0	<b>2 (9)</b>	
1999	51.4 (12)	<b>2</b>	<b>2 (12)</b>	
2000	24.9 (12)	0	0 (12)	
2001	19.5 (12)	0	0 (12)	
2002	14.7 (12)	0	<b>1 (12)</b>	16.1
2003	39.5 (11)	<b>1 (11)</b>	<b>2 (11)</b>	17.1

### S014.5-F

Sheepscoot River in Palermo. Downriver of Hatchery Discharge, upriver of Gore Road Bridge. River left. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	6.6 (10)	0	0 (12)	
2000	14.2 (11)	0	0 (11)	
2001	13.1 (6)	0	0 (7)	
2002	10.8 (9)	0	0 (9)	12.9

### S015-F

Sheepscoot River in Liberty. Upriver of Sand Hill Road Bridge. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1997	43.5 (12)	0	0 (12)	
1998	45.2 (12)	<b>1</b>	<b>2 (9)</b>	
1999	25.7 (10)	0	<b>2 (9)</b>	
2000	<b>152.7 (12)</b>	<b>4 (12)</b>	<b>1 (12)</b>	
2001	<b>295.6 (10)</b>	<b>4 (10)</b>	<b>7 (10)</b>	
2002	51.2 (12)	0	<b>3 (12)</b>	15.6
2003	<b>123.7 (11)</b>	0	<b>4 (11)</b>	15.4

### WEBK001-F

Weaver Brook, downstream of Route 218 bridge on Pennock's property. Class A (upgraded in 2003)

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1998	30.8 (12)	1	9 (12)	
1999	25.2 (9)	1	2 (12)	
2000	26.7 (9)	1	0 (8)	
2001	31.6 (5)	0	3 (11)	
2002	17.2 (12)	0	2 (12)	12.7
2003	6.0 (9)	0 (9)	0 (9)	12.6

## West Branch and Tributaries

### CHBK001-F

Choate Brook. Above Sampson Road bridge just north of Route 105, Windsor. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1997	42.1 (12)	0	7 (12)	
1998	131.6 (11)	0	2 (4)	
1999	108.9 (9)	1	4 (8)	
2000	63.3 (12)	1	7 (12)	
2001	104.2 (12)	1	11 (12)	
2002	91.0 (11)	2	8 (12)	15.0
2003	192.9 (11)	6 (11)	8 (11)	15.9

### DB001-F

Dearborn Brook, above Route 32 bridge, Windsor. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1999	168.3 (10)	2	10 (10)	
2000	69.7 (11)	1	8 (11)	
2001	104.2 (11)	0	10 (11)	
2002	89.0 (12)	2	8 (12)	15.9
2003	117.5 (11)	1 (11)	7 (11)	15.8

### DB002-F

Dearborn Brook, below Reed Road culvert, Windsor. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
2000	42.3 (11)	0	1 (11)	
2001	22.6 (7)	0		
2002	33.6	0	5 (10)	13.3
2003	37.9 (9)	2 (9)	0 (9)	15.4

### HEBK001-F

Hewitt Brook. Below Shuman Road, just above confluence with West Branch, Windsor. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1997	44.9 (8)	0	No data	
1998	<b>68.8 (12)</b>	<b>1</b>	0 (12)	
1999	<b>93.3 (12)</b>	<b>2</b>	<b>1 (12)</b>	
2000	<b>65.2 (12)</b>	<b>2</b>	0 (12)	
2001	33.5 (12)	<b>1</b>	<b>2 (12)</b>	
2002	25.5 (11)	0	<b>4 (12)</b>	15.8
2003	36.0 (7)	2	<b>5 (11)</b>	14.3

### MEBK001-F

Meadow Brook, below old railroad grade on Oliver Dairy Farm, Weeks Mills. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1997	<b>104.2 (12)</b>	<b>3</b>	<b>6 (12)</b>	
1998	<b>279.0 (9)</b>	<b>2</b>	<b>2 (2)</b>	
1999	<b>64.8 (12)</b>	<b>1</b>	<b>7 (10)</b>	
2000	<b>147.3 (12)</b>	<b>3</b>	0 (12)	
2001	<b>173.0 (11)</b>	<b>3</b>	<b>7 (10)</b>	
2002	<b>61.0 (12)</b>	<b>2</b>	<b>6 (11)</b>	15.5
2003	<b>63.4 (11)</b>	0	<b>7 (11)</b>	14.9

### MEBK001.5-F

Meadow Brook, above railroad grade and cattle access, Oliver Farm, Weeks Mills. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1999	55.5 (12)	0	<b>7 (10)</b>
2000	<b>94.9 (12)</b>	<b>1</b>	0 (12)

### MEBK001.75-F

Meadow Brook. Upstream of snowmobile crossing, China. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
2001	16.0 (12)	0	<b>1 (12)</b>	
2002	21.1 (12)	0	<b>1 (12)</b>	13.7
2003*	32.1 (6)	0 (6)	0 (6)	12.4

\* Missing data

### MEBK002-F

Meadow Brook, north of Toby Road, China. Class B

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1998	33.6 (12)	0	<b>12 (12)</b>

### WB001-F

West Branch Sheepscot River. Below Howe Road Bridge, Whitefield. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	19.9 (7)	0	0 (7)	
1995	17.7 (12)	0	<b>1 (12)</b>	
1996	36.2 (12)	0	<b>4 (12)</b>	
1997	23.0 (10)	0	0 (10)	
1998	50.3 (10)	<b>1</b>	0(10)	
1999	30.3 (12)	<b>1</b>	0 (12)	
2000	28.9 (12)	<b>1</b>	0 (12)	
2001	16.2 (10)	0	0 (10)	
2002	23.2 (12)	0	0 (12)	15.5
2003	17.6 (10)	0	0 (10)	16.4

### WB001.5-F

West Branch Sheepscot River. Below Maxcy's Mill Road Bridge, Windsor. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1996	53.9 (12)	0	<b>6 (11)</b>	
1997	11.9 (12)	0	<b>12 (12)</b>	
1998	46.5 (10)	0	<b>5 (9)</b>	
1999	<b>73.3 (10)</b>	<b>2</b>	<b>3 (9)</b>	
2000	41.4 (10)	0	0 (10)	
2001	36.3 (10)	<b>1</b>	<b>3 (10)</b>	
2002	21.7 (11)	0	<b>5 (9)</b>	18.6
2003	53.8 (8)	0	<b>3 (8)</b>	17.6

### WB002-F

West Branch Sheepscot River. Above Route 105 Bridge, Whitefield. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1994	48.9 (8)	0	<b>8 (10)</b>	
1995	30.8 (11)	<b>1</b>	<b>5 (10)</b>	
1996	40.4 (12)	<b>1</b>	<b>5 (12)</b>	
1997	19.9 (12)	0	No data	
1998	40.3 (12)	<b>1</b>	<b>7 (12)</b>	
1999	49.9 (12)	<b>1</b>	<b>8 (12)</b>	
2000	<b>64.8 (12)</b>	0	<b>4 (12)</b>	
2001	51.7 (12)	<b>1</b>	<b>5 (12)</b>	
2002	33.0 (12)	0	<b>7 (12)</b>	17.2
2003	32.3 (11)	0	<b>7 (11)</b>	18.1

### WB003-F

West Branch Sheepscoot River. Below Choate Road Bridge, Whitefield. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>
1994	55.3 (10)	0	<b>9 (10)</b>
1995	42.8 (9)	0	<b>8 (12)</b>
1996	55.7 (12)	0	<b>5 (12)</b>

### WB004-F

West Branch Sheepscoot River. Below Weeks Mills Bridge, China. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1995	<b>120.3 (12)</b>	<b>1</b>	<b>2 (12)</b>	
1996	<b>79.0 (12)</b>	0	<b>1 (12)</b>	
1997	<b>107.9 (12)</b>	<b>2</b>	<b>1 (12)</b>	
1998	<b>129.8 (12)</b>	<b>2</b>	<b>1 (2)</b>	
1999	<b>87.3 (12)</b>	<b>1</b>	<b>3 (11)</b>	
2000	<b>161.3 (12)</b>	<b>3</b>	0 (11)	
2001	<b>284.4 (11)</b>	<b>3</b>	<b>3 (11)</b>	
2002	<b>140.3 (12)</b>	<b>3</b>	<b>1 (12)</b>	15.3
2003	<b>91.8 (11)</b>	<b>1 (11)</b>	<b>2 (11)</b>	15.5

### WB004.5-F

West Branch Sheepscoot River. Above old narrow gauge railroad crossing, China. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
2000	<b>99.2 (12)</b>	<b>3</b>	<b>2 (12)</b>	
2001	44.1 (11)	0	<b>2 (11)</b>	
2002	24.5 (12)	0	<b>6 (12)</b>	15.6
2003	<b>79.3 (11)</b>	0	<b>5 (11)</b>	16.1

### WB005-F

West Branch Sheepscoot River. Below Foot Bridge off of Water Street, Palermo. Class AA

<i>YEAR</i>	<i>E COLI GEOMEAN</i>	<i>E COLI DAYS IN VIOLATION</i>	<i>D.O. DAYS IN VIOLATION</i>	<i>AVERAGE WATER TEMP (°C)</i>
1995	23.4 (10)	0	<b>8 (12)</b>	
1996	7.7 (12)	0	<b>2 (12)</b>	
1997	21.5 (10)	0	<b>8 (12)</b>	
1998	<b>71.1 (11)</b>	<b>1</b>	<b>4 (11)</b>	
1999	55.6 (12)	<b>1</b>	<b>2 (12)</b>	
2000	51.7 (11)	<b>1</b>	<b>5 (11)</b>	
2001	<b>71.7 (12)</b>	0	<b>7 (12)</b>	
2002	32.0 (12)	0	<b>6 (12)</b>	17.3
2003	12.5 (11)	0	<b>4 (11)</b>	17.9