FINAL PRODUCT FY '94 Task 24
DEQ Citizen Monitoring

VIRGINIA CITIZEN MONITORING PROGRAM

January 1, 1995 to September 30, 1995

Final Report

This project was funded, in part, by the Department of Environmental Quality's Coastal Resources Management Program through Grant# NA47OZ0287-01 of the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, under the Coastal Zone Management Act of 1972, as amended.

The following report consists of:

1. Site location map showing all sites reporting during the grant period.

2. Basic data report for site 16, Gloucester Point on the York River. This report is for the grant period covering 1/3/95 through 9/22/95. It lists all values for water depth, dissolved oxygen, secchi depth, water temperature, air temperature, air temperature, and pH. Monthly averages are listed below each month and the report is concluded with a summary showing the average, maximum and minimum values for each parameter at the end. This report is representative of data collected at all sites.

3. Graph of dissolved oxygen and temperature for site 140, Aylett Landing on the Mattaponi River. This graph covers the period from January 3, 1995 when the temperatures were low and the dissolved oxygen levels were relatively high through the end of September when the temperatures were on the decrease and the dissolved oxygen was on the rise. This graph is representative of data collected at all sites.

4. Copy of the Spring 1995 issue of RiverTrends newsletter including a report on the nutrient data collected on the Piankatank and Rappahannock Rivers.

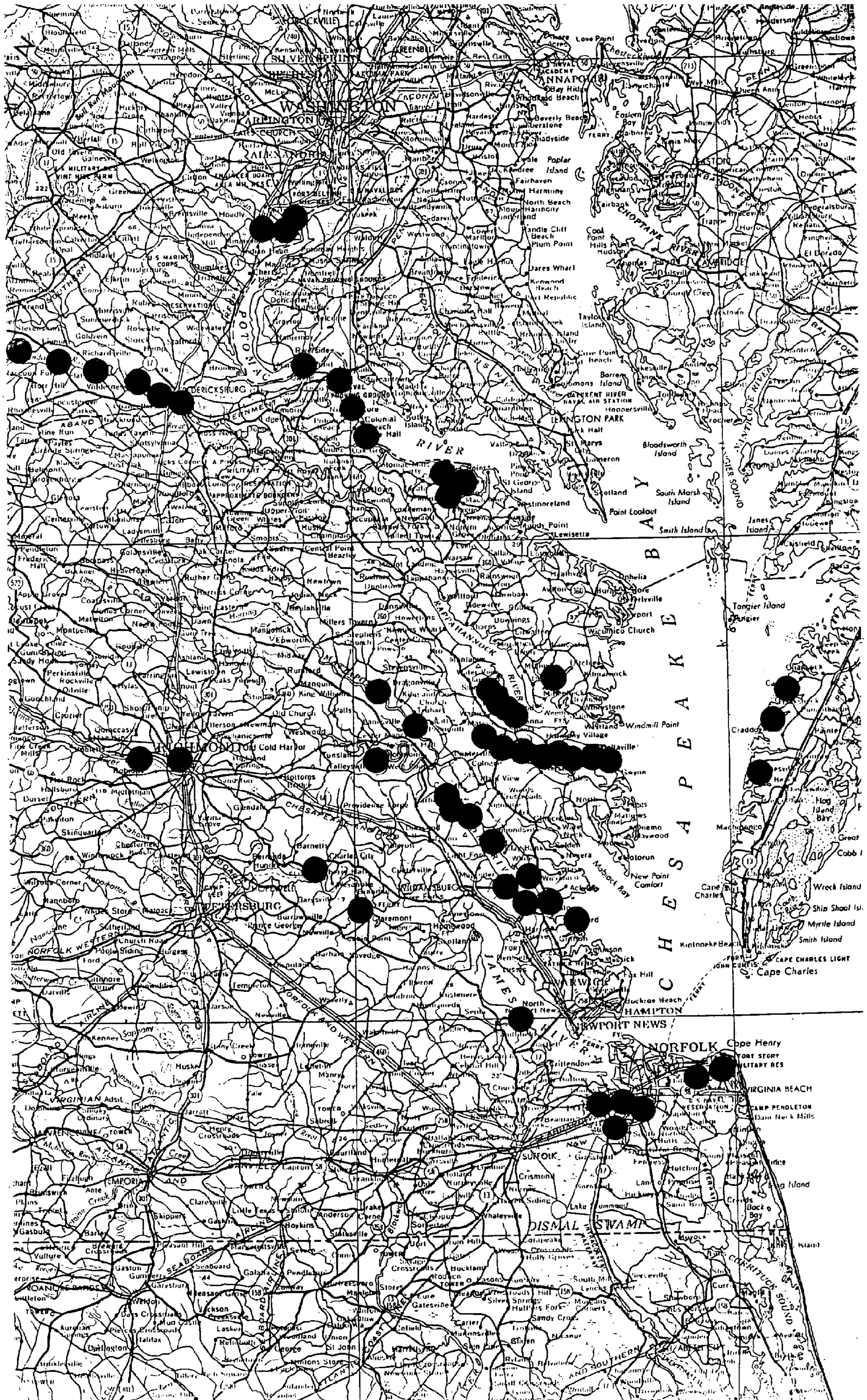
5. 1995 Quality Control schedules.

6. Notice of canoe trip and hike for volunteers.

7. Final invoice.

8. Data summary.*

* This grant period was the first in which data were transmitted electronically. Some difficulties were encountered and therefore some data from the Lynnhaven, Upper Rappahannock and Middle Potomac were not transmitted by the November 15 deadline. The remaining data will be collected and a summary will be sent as an amendment to this report.


WASHINGTON
ARLINGTON
ALEXANDRIA
SILVER SPRING
ROCKVILLE
GREENBELT
ANNAPOLIS
Love Point
Eastern Bay
Poplar Island
North Beach
Plum Point
Taylors Island
Bloodsworth Island
South Marsh Island
Smith Island
Point Lookout
Tangier Island
RIVER
POTOMAC
CHOPTANK RIVER
RAPPAHANNOCK RIVER
LEXINGTON PARK
Solomons Island
DERICKSBURG
RICHMOND
Old Cold Harbor
Charles City
PETERSBURG
WILLIAMSBURG
JAMES RIVER
Claremont
Windmill Point
Mobjack Bay
New Point Comfort
CHESAPEAKE BAY
Cape Charles
CAPE CHARLES LIGHT
Wreck Island
Ship Shoal Isl.
Myrtle Island
Smith Island
Machipongo
Cobb I
Hog Island Bay
NEWPORT NEWS
HAMPTON
Buckroe Beach
NORFOLK
Cape Henry
FORT STORY MILITARY RES
VIRGINIA BEACH
CAMP PENDLETON
Dam Neck Mills
SUFFOLK
DISMAL SWAMP
Lake Drummond
EMPORIA
Waverly
Franklin
Weldon
CURRITUCK SOUND
NORFOLK AND WESTERN
SEABOARD
ATLANTIC COAST LINE
VIRGINIAN
ROANOKE RAPIDS

11/14/95

Basic Data Report

This report indicates the amount and value of data at each site. The data are initially grouped according to site with the heading of "Site x". Whithin each site group the data is grouped according to month and the raw data displayed for each date. At the end of the month is the average values for the month. At the end of each site is a section with the heading of "Summary of site x". This section lists the number of observations, average, minimum, and maximum for each variable for the site. The end of the report contains a "Report Summary" which lists the number of observations and the minumum and maximum dates for the report. The collumn headings are as follows:

Codes

Day	= Day of observation
Time	= Time of observation
WD	= Water depth
DO	= Dissolved oxygen
SC	= Secchi depth
WT	= Water temperature
AT	= Air temperature
SL	= Salinity
AM	= Ammonia
PH	= pH
Color	= Water Color

Site: 16

Jan 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	3	935	2.2	9.5	1.7	7.0	0.0	24.2		8.0	Normal
	12	900	2.1	9.9	1.5	6.5	11.5	24.0		7.8	Normal
	19	1430	2.2	10.0	1.5	8.0	10.5	23.3		8.0	Normal
	26	1450	1.9	11.1	1.0	6.5	6.0	24.0		8.1	Normal
Avg.	15	1179	2.1	10.1	1.4	7.0	7.0	23.9		8.0	

Feb 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	2	1020	2.2	11.0	1.2	5.0	9.0	22.9		8.0	Normal
	11	1400	1.7	12.4	1.4	5.0	8.0	22.8		8.0	Normal
	17	1150	2.2	9.1	1.0	9.0	8.5	22.8		7.9	Normal
	23	1345	2.2	9.6	.8	6.5	16.5	22.6		8.4	Normal
Avg.	13	1229	2.1	10.5	1.1	6.4	10.5	22.8		8.1	

Mar 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	6	1445	2.4	10.2	1.4	7.0	13.0	23.5		8.0	Normal
	13	1345	1.5	10.1	.8	10.0	15.0	21.0		8.0	Normal
	20	1245	2.7	8.0	1.3	11.0	13.5	22.8		8.0	Normal
	28	1200	1.9	8.9	1.2	11.5	12.5	21.0		7.8	Normal
Avg.	16	1309	2.1	9.3	1.2	9.9	13.5	22.1		8.0	

Apr 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	10	1225	2.0	8.0	.8	11.5	10.0	22.8		8.2	Normal
	18	1500	2.0	7.3	.6	14.0	16.5	23.1		8.1	Normal
	25	1130	1.9	7.6	.7	15.5	16.0	22.7		8.1	Normal
Avg.	17	1285	2.0	7.6	.7	13.7	14.2	22.9		8.1	

May 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	7	1350	2.3	7.1	.8	18.5	22.5	22.9		8.0	Normal
	18	1140	2.2	6.7	.8	20.0	26.5	23.9		7.9	Normal
	22	1200	1.7	7.2	.8	20.0	29.0	23.3		8.0	Normal
	30	1105	2.2	7.2	.8	21.0	26.0	24.8		7.9	Normal
Avg.	19	1199	2.1	7.0	.8	19.9	26.0	23.7		8.0	

Jun 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	6	1400	2.3	6.9	.6	23.5	23.0	23.0		8.0	Normal
	12	1250	1.8	6.5	.6	24.0	26.5	23.5		8.0	Normal
	22	1245	1.9	8.4	.6	25.0	25.5	22.5		8.0	Normal
Avg.	13	1298	2.0	7.3	.6	24.2	25.0	23.0		8.0	

Jul 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color

3	1100	2.2	6.6	.7	25.5	26.0	23.9		8.0	Normal
12	845	2.3	5.3	.7	26.5	25.5	23.4		8.3	Normal
20	845	2.1	5.2	.9	27.0	32.0	22.4		8.0	Abnormal
28	1115	2.4	5.0	.8	27.0	30.5	24.5		7.9	Normal

Avg.	15	976	2.3	5.5	.8	26.5	28.5	23.5		8.1	

Aug 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	4	1100	1.7	6.2	1.1	28.0	28.5	24.9		8.0	Normal
	10	1330	1.9	5.5	.9	24.0	24.5	26.9		8.0	Normal
	19	820	2.4	5.6	.8	25.5	22.0	25.5		8.0	Normal
	25	1400	1.9	6.4	.6	26.5	25.5	29.4		8.0	Normal
Avg.	14	1163	2.0	5.9	.9	26.0	25.1	26.7		8.0	

Sep 95	Day	Time	WD	DO	SC	WT	AT	SL	AM	PH	Color
	5	1220	1.8	6.8	.8	26.0	30.0	26.0		8.0	Normal
	14	1200	2.1	5.4	1.1	25.5	31.0	26.0		7.8	Normal
	22	1130	2.1	6.8	.6	24.0	26.0	25.9		7.8	Normal
Avg.	13	1183	2.0	6.3	.8	25.2	29.0	26.0		7.9	

Summary for site: 16

	Time	WD	DO	SC	WT	AT	SL	AM	PH
Average	1197	2.1	7.8	.9	17.3	19.6	23.8		8.0
Minumum	820	1.5	5.0	.6	5.0	0.0	21.0		7.8
Maximum	1500	2.7	12.4	1.7	24.0	32.0	29.4		8.4

Number of observations: 33
Minimum date: 1/03/95
Maximum date: 9/22/95

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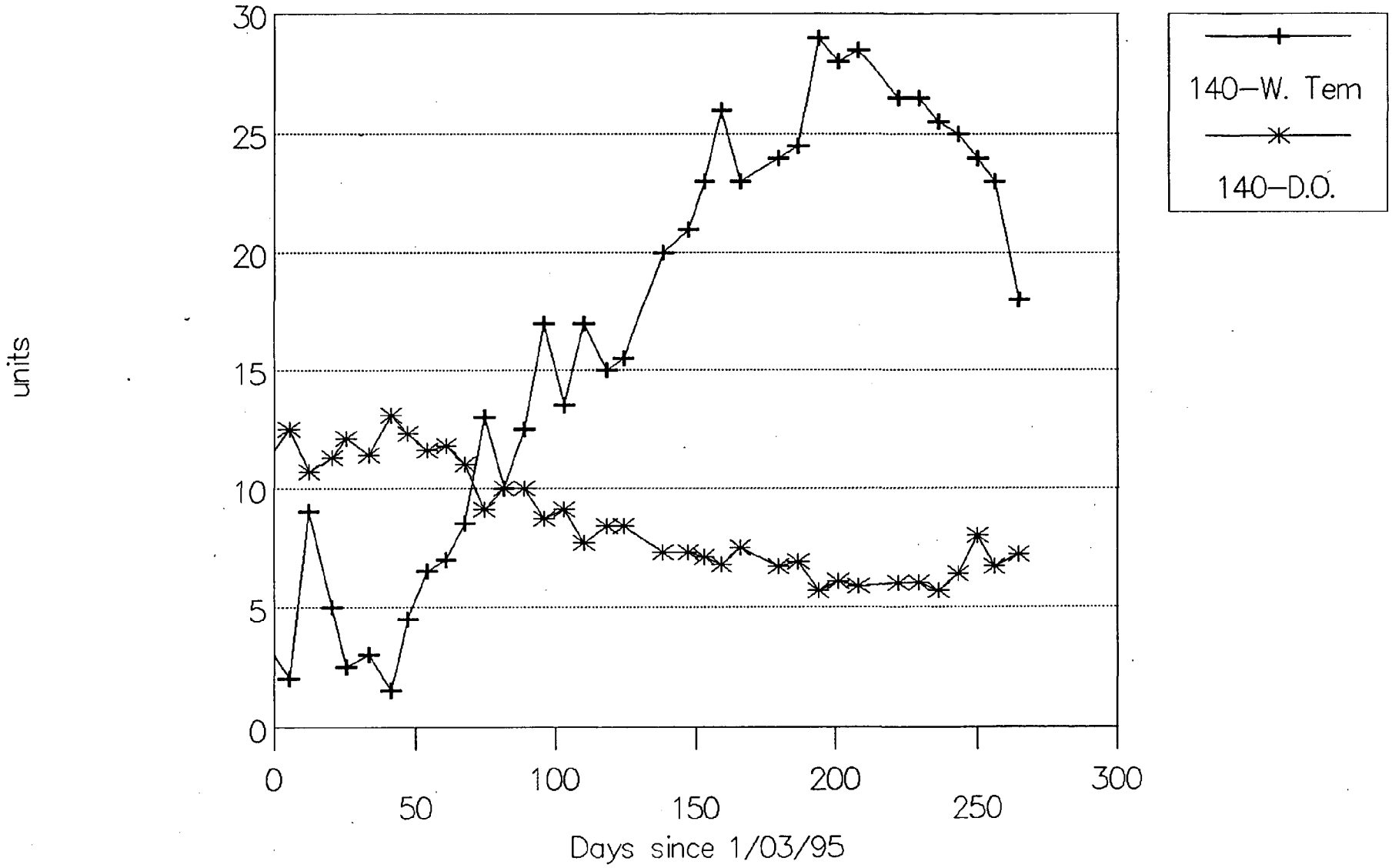
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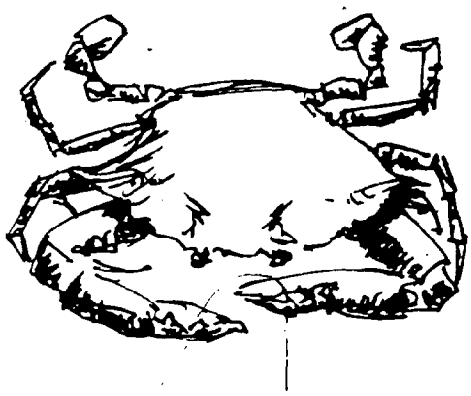
RiverTrends

Spring 1995 Issue

ALLIANCE FOR THE CHESAPEAKE BAY
CHESAPEAKE BAY CITIZEN MONITORING PROGRAM

Special thanks goes to Peter Bergstrom and Brand Neiman for their contributions to this issue of RiverTrends.



AROUND THE BAY...

Zebra Mussel Update—From Bay Journal

Officials have found 15 more zebra mussels in southwestern Pennsylvania waterways. These waterways are still outside the Chesapeake watershed. Zebra mussels are believed to be spreading south from Lake Erie and the other Great Lakes, where they have flourished in recent years. One of the rapidly reproducing, thumbnail-sized shellfish was first detected in the region September 15. Employees of the Army Corps of Engineers found two mussels at the Natron Heights locks on the Allegheny River and 13 mussels at the Emsworth locks on the Ohio River. The black-and-white zebra mussels attach themselves to hard surfaces such as water pipes and the bottoms of boats. They can live out of water for more than a week. The mussels are problematic because they block water intakes in public water systems or power plants and suffocate larger shellfish by latching onto them. Five stations in the Chesapeake Bay Citizen Monitoring Program are prepared to identify the mollusks should they enter the Chesapeake Bay watershed.

FROM PENNSYLVANIA...

Conestoga Monitoring Project Reaches Tenth Year

Five of the original seven volunteers who began sampling the water of the Conestoga River in 1986 are still collecting samples today. These dedicated volunteers are part of a core group of volunteers in the Chesapeake Bay Citizen Monitoring Program who have shown what kind of commitment citizens of the Chesapeake Bay watershed can make.

These Pennsylvania volunteers have a unique goal. They are attempting to track the concentration of nitrate to determine if a trend can be seen. To do so they collect data on water and air temperature, dissolved oxygen, nitrate and nitrite, and turbidity. To date they have determined that although nitrate values appear to be somewhat higher in the winter, there is not a consistent seasonal pattern in the nitrate data for all stations or all years. Volunteer data were compared to data collected by Lancaster County Schools along with the Conestoga Valley Association. While the data showed no change in nitrate mean concentration for the fall sampling period they did show an apparent increase in the spring. They also found a slight yet consistent relationship between rainfall and nitrate concentration.

While further actions are taken to reduce the effects of agricultural runoff in Pennsylvania, it will be

important to continue monitoring to determine their effectiveness over the long term. Monitors on the Conestoga are just another example of how volunteers can be a critical part of the restoration of the tributaries to the Chesapeake Bay.

FROM MARYLAND...

Magothy River Volunteer Water Quality Monitoring and Submerged Aquatic Vegetation (SAV) Regrowth, 1992-1994

by Peter Bergstrom and Dan Zivi
Magothy River Association

Introduction and Goals

The Magothy River Association (MRA) is dedicated to the preservation and improvement of the environmental quality and wildlife of the Magothy River and its watershed. To help achieve this goal, volunteer water quality monitoring was started by MRA members and staff and students of Anne Arundel Community College in 1982. Magothy River volunteer monitoring was expanded in 1987 when the Anne Arundel County Planning and Code Enforcement office began sponsoring volunteer water quality monitoring. The scope of the monitoring was expanded again in 1992, with the support of the Chesapeake Bay Trust, when we started monthly one-day sampling cruises of fifteen sites, including most of the mainstem of the river.

One of the main goals of the monthly cruises started in 1992 is to identify areas where water quality is adequate to support Submerged Aquatic Vegetation (SAV) growth. These areas will be considered for SAV plantings if they do not currently have SAV. The Alliance for the Chesapeake Bay has recently started similar volunteer monitoring programs focusing on SAV habitat requirements in several other Bay tributaries, with a grant from the Chesapeake Bay Program (see next issue of RiverTrends). They will fund laboratory analyses at four of our monitoring sites in 1995.

The advantages of monitoring by boat rather than from piers are that the river instead of the creeks, and near SAV beds, which may not be in creeks or close to piers. Water quality data from the mainstem of the river are more useful to environmental managers, especially those involved in the Tributary Strategies.

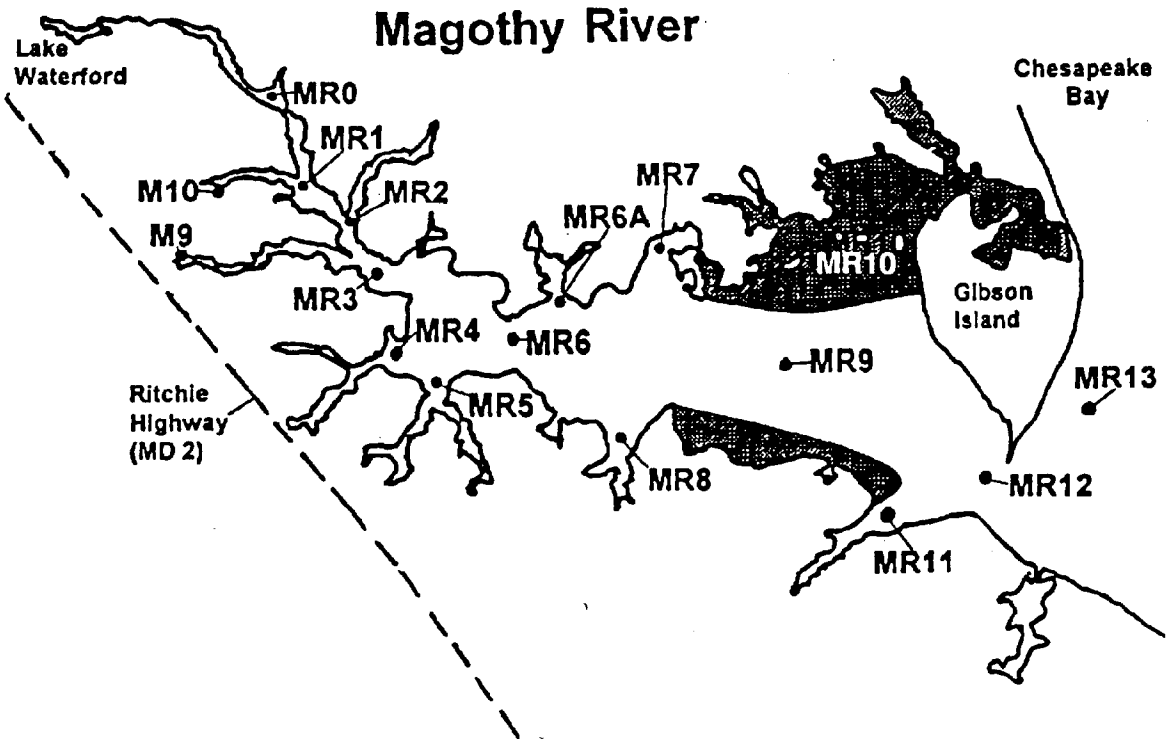


Figure 1. Map of Magothy River sampling sites. Shaded area is the approximate area where Submerged Aquatic Vegetation (SAV) beds have been expanding in last few years.

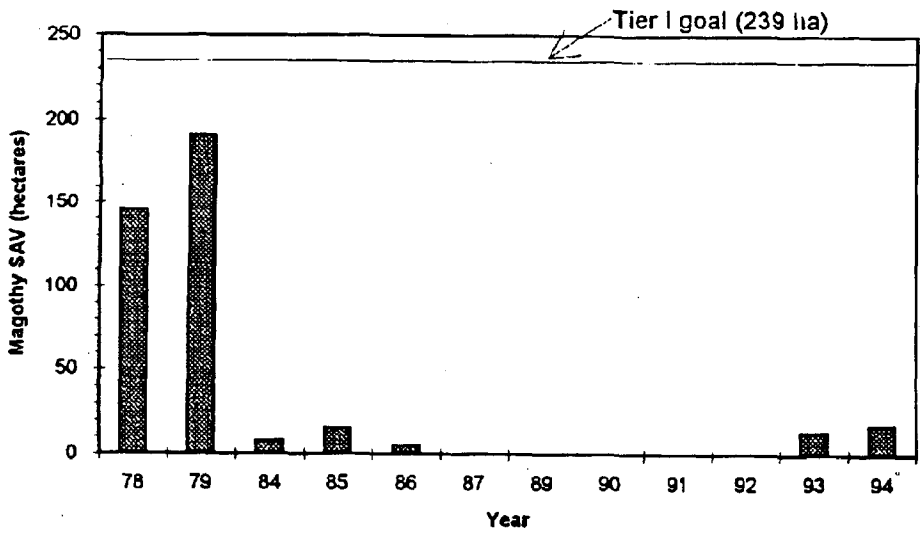


Figure 2. Submerged Aquatic Vegetation (SAV) area mapped in the Magothy River by year. SAV was mapped by aerial photography once a , and none was recorded between 1989 and 1992 (1987 had 0.3 hectare). The Tier I goal (239 hectares) is an interim restoration goal for the Magothy.

Sites monitored and methods

The Magothy River is located on the western shore of the Chesapeake Bay, just south of the Patapsco River and Baltimore, and just north of the Bay Bridge, the Severn River, and Annapolis. It is a small tributary, about 7 miles long, and most of its tidal portion is classified as the mesohaline salinity regime (5 to 18 parts per thousand salinity). The locations of the sites monitored, all in the tidal portion, are shown in *Figure 1*. The shaded area in Figure 1 shows general areas of SAV regrowth in the last few years. We analyzed the usual volunteer water quality parameters in the field (water temperature, salinity, pH, Secchi depth, and dissolved oxygen, from surface and bottom samples except for Secchi depth), and we filtered surface water samples for later laboratory analysis for nutrients, chlorophyll a, and total suspended solids at Chesapeake Biological Laboratory in Solomons, Maryland.

Results and conclusions

Aerial surveys of SAV in Chesapeake Bay, conducted by Virginia Institute of Marine Science (VIMS) since 1978, showed that the Magothy River had a sharp decline in SAV between 1979 and 1984, followed by a modest resurgence in 1993 and 1994 *(Figure 2)*.

Average water quality varied along the length of the river in a linear gradient for most parameters. For example, surface water temperature, salinity, and pH showed a fairly linear gradient as warmer, lower pH, and fresher water from the river mixed with cooler, higher pH, and saltier water from the Bay.

However, average water quality varied in a non-linear fashion along the length of the river for two parameters, nitrogen and Secchi depth. The middle reaches of the river had the best water quality for these two SAV habitat requirements; this area also had expanding SAV beds during 1992-1994. This

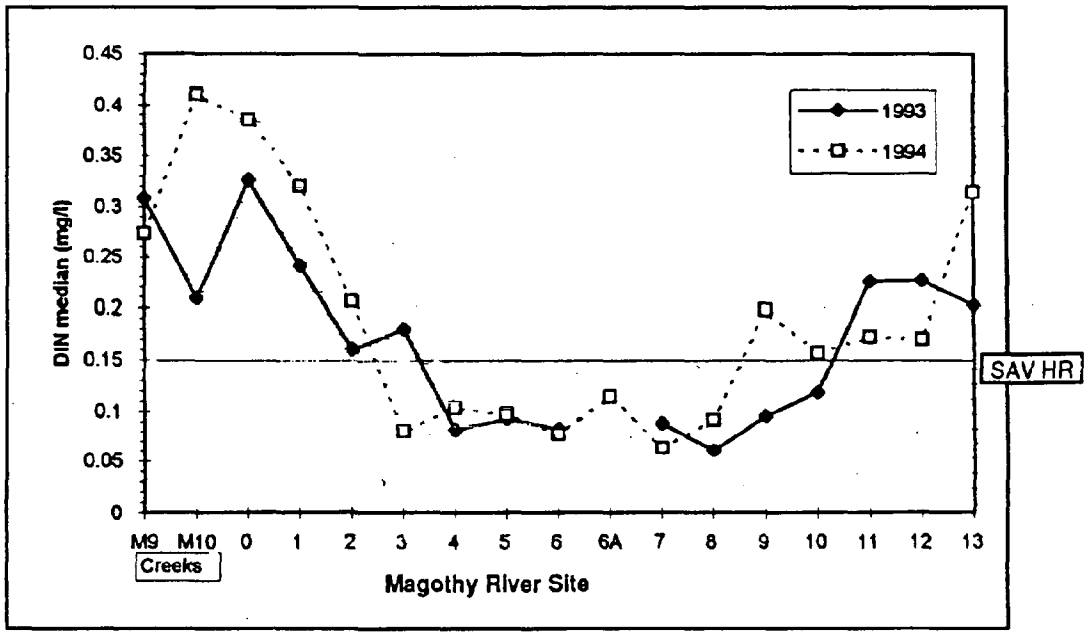


Figure 3. Median surface Dissolved Inorganic Nitrogen (milligrams per liter as N, April- or May-October) by site and year. The SAV Habitat Requirement (HR) in mesohaline regions, 0.15 mg/l, is shown.

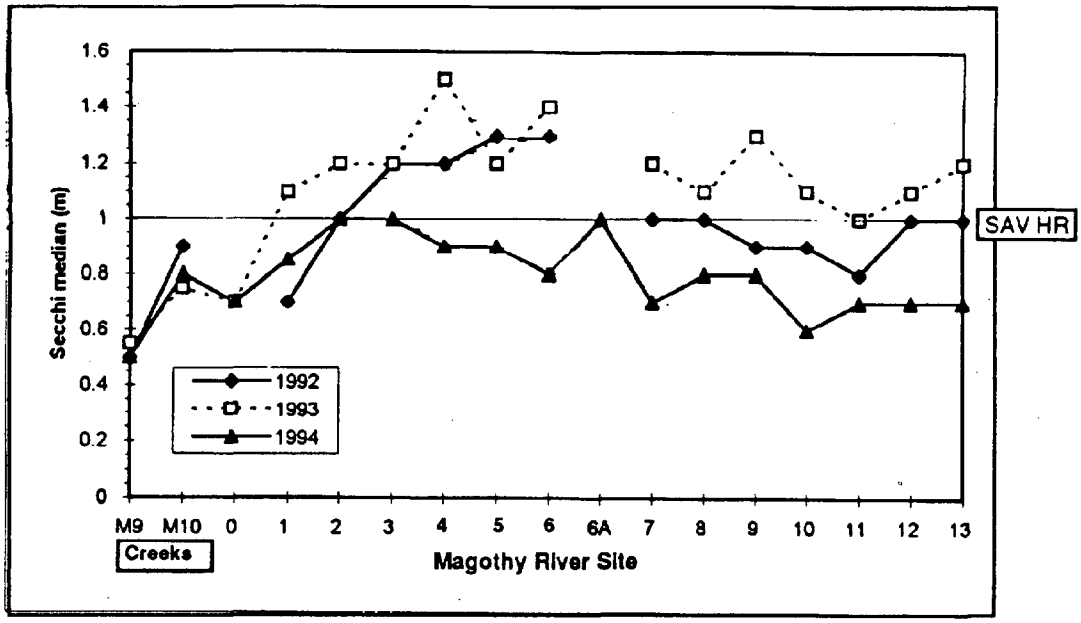


Figure 4. Median Secchi depth (meters, April- or May-October) by site and year. The SAV Habitat Requirement (HR) in mesohaline regions, 1.0 meters, is shown.

spatial pattern was most evident for dissolved inorganic nitrogen (DIN), calculated from the sum of the ammonia, nitrite, and nitrate concentrations. Too much DIN inhibits SAV growth, by stimulating algae growth and reducing water clarity. The DIN medians in the Magothy for 1993 and 1994 were below the habitat requirement for SAV (better water quality) in the middle reaches, but were above it at both upriver and downriver sites *(Figure 3)*. The sites closest to SAV beds achieved the DIN medians in one or both years (sites 7, 8, 10, and 11 in Figure 3). Average Secchi depths also tended to show better water quality (higher Secchi depths) in the middle reaches, and these four sites also achieved the SAV habitat requirement for Secchi depth in 1993 *(Figure 4)*. This suggests that high nitrogen levels and low Secchi depths may be limiting the regrowth of SAV in the Magothy River. Average phosphorus levels (orthophosphate) were low enough to permit SAV growth at almost all sites.

Weather conditions also affected water quality. Although both 1993 and 1994 had higher than normal spring rainfall, the high rainfall continued longer in 1994, and may have contributed to reduced Secchi depths and water clarity in 1994 *(Figure 4)*. Chlorophyll *a* medians were also higher in 1994 than in 1993. The increase in SAV area continued in 1994 in spite of the lower water clarity, however *(Figure 2)*.

We plan to use these results to identify areas for SAV restoration. Several areas of the Magothy upriver from the area of SAV regrowth have water quality that should support SAV growth, and may be suitable sites for planting SAV. These include the mouths of Cypress Creek, Mill/Dividing Creek, and Blackhole Creek. We plan to observe other SAV planting efforts in Anne Arundel County rivers and identify the most successful planting techniques to use.

Acknowledgments

Over 20 people assisted us in the field over three years, and we could not have done the monitoring without their help. Christian Kurrle was particularly helpful; he helped design the monitoring network with George Gibson in 1990, and took us in his boat for most of our 1992 cruises. The Chesapeake Bay Trust provided financial support in 1992, 1993, and 1994, and monitoring equipment was provided by Anne Arundel County Planning and Code Enforcement and the Alliance for the Chesapeake Bay.

FROM VIRGINIA...

MPRA Announces First Annual Riverfest

The Mattaponi and Pamunkey Rivers Association will hold its first annual Riverfest on the Mattaponi River on Saturday, June 10, 1995. The all day event will be held at Whitehall Camp on Route 634 just west of Walkerton, Virginia.

Scheduled land-based activities include something for the entire family: tethered hot air balloon rides, pony rides, carriage rides, a horseshoe tournament, round-robin volleyball, supervised swimming in the river, a canoe and kayak paddling clinic for beginning and novice paddlers, and much more. Many events and activities are free; those that are ticket-based are inexpensive and loads of fun! Riverfest will begin at 11:00 a.m. and wrap-up at 8:00 p.m.

Water-based activities on the river include two canoe races (solo and tandem class) from Aylett to Whitehall Camp. (The Mattaponi Challenge Cup race will begin at 10:30 a.m. at Aylett.) River boat excursions on the Mattaponi will be provided on the hour for participants who want to learn more about the Mattaponi River. Food and beverages will be available throughout the lunch and dinner hours.

MPRA members will receive "2 for 1" Riverfest tickets, good for all events. Riverfest event winners will be recognized and receive awards, including a Mattaponi River "fly-out" on the hot air balloon at sunset for canoe race winners. A bonfire and celebratory music on the riverbank will wrap up the day beginning at 7:00 p.m. No matter where you are in the watershed, please come out and support the MPRA and enjoy the beauty of the Mattaponi and Pamunkey Rivers.

New Monitoring Project on the Mattaponi and Pamunkey Rivers

In 1995 the Chesapeake Bay Citizen Monitoring Program will be exploring new territory. Volunteers will be recruited to do chemical and physical analysis as well as biological monitoring of water quality in the non-tidal upper reaches of the beautiful Mattaponi and Pamunkey rivers. Volunteers will be recruited with the help of the MPRA and other groups in the area. The Alliance for the Chesapeake Bay will be working with the Hanover Caroline Soil and Water Conservation District and others to coordinate this unique monitoring project.

Chemical analysis will include a pH test and a dissolved oxygen test. Physical analysis will include air and water temperature and water color. Weather conditions and other observations will be recorded as well.

Monitoring of macroinvertebrates, acquatic insects that are visible with the naked eye but that have no backbone, will be run under similar guidelines as the Save Our Streams program managed by the Izaak Walton League of America. Identification of acquatic insects can give the monitors an indication of the health of the river over long periods of time. The volunteers will be collecting such insects as stoneflies, caddisflies, crayfish, clams and worms with the help of a fine gauge seine net. Some of these macroinvertebrates are pollution tolerant while some, like the stonefly, are not and cannot live in water that is polluted or has low oxygen levels. The insects will be identified down to the Family level. Combining the two types of monitoring will help to track the health of the rivers over the seasonal changes and throughout the years.

FOCUS...

by Hoyt Wheeland

Piankatank River Watershed Project

The Piankatank River Watershed Project was established in May, 1994 with funding from the Environmental Protection Agency (EPA) under Section 319 of the Clean Water Act, and in-kind support from the Department of Conservation and Recreation and the Tidewater Resource Conservation and Development Council. The mission for the two-year project is to increase the public's awareness about runoff and groundwater pollution in the Piankatank River Watershed, and work with local citizens to find solutions that result in water quality benefits. The project's main emphasis is conducting workshops that show landowners and residents in the watershed how to minimize pollution from runoff and groundwater contamination. So far, workshops have been given for: 1) homeowners on environmentally-safe landscaping and lawn care — use of native plants, and wise use of fertilizers, pesticides and water; 2) contractors and developers on the best ways to control erosion of sediments from construction sites; 3) boaters and marina operators on the use of pumpout facilities, environmentally-safe boat maintenance, and controlling boat litter. Upcoming workshops include one for forest landowners on how to managetheir forest property to minimize runoff of pesticides and sediments, and another one for homeowners on proper use of fertilizers and pesticides. The project receives considerable cooperation from State and local agencies in conducting these workshops.

In addition to these workshops, the project is working with local schools to educate students about the causes and effects of runoff pollution, and how to combat it.

The Piankatank Project also cooperates with the Alliance for the Chesapeake Bay in its Volunteer Water Quality Monitoring Program. There now are nine volunteer monitors on the Piankatank collecting data on temperature, salinity, pH, dissolved oxygen and other factors.

The project also cooperates with Save the Ol' Piankatank, a group dedicated to keeping the Piankatank clean, in the annual Clean River Day. During this event, volunteers clean debris from the banks of the river. Last year, about 1/2 of a large dumpster of trash consisting of bottles, cans, toilets and tires was collected.

If you would like more information about the Piankatank River Watershed Project, please contact the Watershed Coordinator at 804-443-6752.

Virginia Citizen Monitoring Program—Summary of Recent Nutrient Data

by Brand L. Niemann
U.S. Environmental Protection Agency
Washington, D.C. 20460

Chesapeake Bay Citizen Monitoring Program—Background

The Alliance for the Chesapeake Bay, Inc. (ACB) began a pilot water quality testing project using volunteers in July 1985 as one of the activities funded under its Chesapeake Bay Program public participation grant from the U.S. Environmental Protection Agency. This initial project was carried out in the tidal portions of the James River in Virginia and the Patuxent River in Maryland. Volunteers were recruited and trained to test water quality in the Conestoga River in Pennsylvania in October. 1986. The Chesapeake Bay Citizen Monitoring Program (CBCMP) currently has volunteers monitoring in 14 watersheds in the Chesapeake Bay drainage basin.

The Chesapeake Bay Program Monitoring Subcommittee asked the ACB to establish an ad hoc committee to analyze and report on the desirability and feasibility of citizen monitoring efforts and to provide specific recommendations. Reports on the Chesapeake Bay Citizen Monitoring Program and analysis of data collected on the James and Patuxent Rivers, July 1985 to October 1989, was published in 1989 (Ellett, et al. 1989) and on the Conestoga River, October 1986 to June 1990, was published in 1992 (Dunn and Campbell, 1992). A description of the monitoring objectives, analytical methods and their accuracy, and data listings are contained in these earlier reports to the U.S. Environmental Protection Agency's Chesapeake Bay Program.

In April of 1993 volunteers were asked to add nutrient sampling to their monitoring routine. Sites were chosen in areas where there was submerged aquatic vegetation (SAV). Initially, the volunteers used 60 co syringes to filter samples into cups that were frozen and delivered to the Virginia state laboratory.

Below you will see basic displays and statistics for the more recent Chesapeake Bay Citizen Monitoring Program in the tidal portions of the Virginia tributaries. The methodology is described in the next section followed by the summary results. The displays and basic statistics are available in two LOTUS 1-2-3 worksheets (.WK3 format) and a run-time Folio VIEWS infobase that only requires Windows 3.1 software from the author as an effort to promote public access.

Virginia Citizen Monitoring Program—Methodology

The Dissolved Inorganic Nitrogen (DIN) was calculated using the formula:

$$DIN = \text{Ammonia } (NH_4) + \text{Nitrite } (NO_2) + \text{Nitrate } (NO_3)$$

The Submerged Aquatic Vegetation (SAV) goals are as follows:

$$DIN = 0.15 \text{ mg/l}$$

$$PO_4 = 0.02 \text{ mg/l}$$

based on the April - October median concentrations. The median concentrations were calculated using the standard statistical definition:

The central value of the distribution when the data are ranked in order of magnitude: for an odd number of observations, the median is the data point which has an equal number of observations both above and below it, while for an even number of observations, it is the average of the two central observations.

Virginia Citizen Monitoring Program—Results

Virginia James River
Nutrient Data: April - October 1993

Median Concentrations (mg/l)

Site	DIN	Phosphorous	
35	0.17	0.03	
126	0.10	0.01	
128	0.10	0.01	
130	0.09	0.01	SHORT RECORD
131	0.09	0.01	SHORT RECORD
133	0.17	0.01	SHORT RECORD
134	0.35	0.02	SHORT RECORD
136	0.14	0.02	

Key to Sites:
Site 35: James River Park (James)
Site 126: Jean's Pier (Piankatank)
Site 128: Marsh Point (Piankatank)
Site 130: East River (Piankatank)
Site 131: Inactive
Site 133: Jackson Creek (Piankatank)
Site 134: Moore's Creek (Piankatank)
Site 136: Thorofare Creek (York)

Alliance for the Chesapeake Bay
P.O. Box 1981
Richmond, VA 23216

☞ WINTER 1995 QUALITY CONTROL SCHEDULE ☜

DATE	TIME	LOCATION & PHONE # FOR INFORMATION
Feb 2	6:00 p.m.	Rappahannock Outdoor Center FOR (703-373-3448) Stanley, Turk, Erich, Mastropaolo, Mills, Newman, Geisler, Willis, Joiner, Pleasants, Stephens, Ellis, Porter, Vella
Feb 7	5:30 p.m.	Wormley Creek Marina (804-898-5060) Levy, Rogers, Elksnin, Nordstrom, McKinley, Harper, Jones, Chess, Alcorn, Hess
Feb 9	5:30 p.m.	Westmoreland State Park (804-493-8821) Jacobs, Stanton, Davis, Zawatsky, Cox, Shelkeys, Regelbrugge, Frances, Murray, Wold, Cooper, George, Dodd, Mack, Tugman
Feb 16	5:30 p.m.	Eastern Shore Community College (804-787-5930) Johnston, Devletian, Collins, Croxson, Picardi, Truitt, Putnam, Dooley, Wilkins, Price, Nuckols, Williams, Stuver, Wood, Goldstein
Feb 22	6:00 p.m.	Mason Neck State Park (703-550-0960) Barnette, Sutherland, Petrie, Lawrence, Bethke, Burke, Kelly, Foster, Armstrong, Poertner, Thiel
Feb 28	6:00 p.m.	Seashore State Park (804-481-2131) Marx, McCarthy, Kuchinski, Krop, Jessen, Dowd, Salta, Mulligan, Bates, Warren, Armstrong, Koelsch, Waldrop, Panneton
Mar 2	5:30 p.m.	Walkerton Firehouse (804-775-0951) Stephens, Bush, Austin, Robichaud, Eppes, Hawn, Lindenmeyer, Rouse
Mar 7	3:00 p.m. QC 4:30 p.m. TRAINING	Urbanna Fire House (804-775-0951) Edwards, Kavanagh, Hartung, Leinbach, Hunt, Russell, Rothery, Evans, Winfield, Edmonds, Uzel, Miller, Eades
Mar 15	5:30 p.m.	Chippokes Plantation State Park (804-294-3625) Evins, Jones, Steen, Smiths, Harris, Taylor, Fisher
Mar 21	5:00 p.m.	York River State Park (804-566-3036) Turner, Reid, Burruss, Breeding, Johnson, Biddell
Mar 23	5:00 p.m.	James River Park Nature Center ((804-780-5311) Seli, White, Feaser, Harold
Mar 28	6:00 p.m.	Thousand Trails Campground (804-693-6924) Sealey, Whitbeck, Kain, Wohlleben, Heider, Tyrrell, Barry, Cave, Stickney, Morrisson, Bliemel, Dixon, Walkers, Bowie, Wheeland, Hall, Laguardia

!!! BRING YOUR KIT !!!

A significant amount of time and planning goes into the QC session. Please plan to attend one!!!

☞ FALL 1995 QUALITY CONTROL SCHEDULE ☜

DATE	TIME	LOCATION & PHONE # FOR INFORMATION
Sept. 19	5:30 p.m.	Westover Plantation (804-829-2882) Evins, Harris, Taylor, Fisher, Seli, White, Feaser, Harold
Sept. 26	3:00 p.m.	Urbanna Fire House (804-775-0951) Edwards, Kavanagh, Hartung, Leinbach, Hunt, Russell, Rothery, Evans, Winfield, Edmonds, Uzel, Miller, Eades
Oct. 3	5:30 p.m.	Wormley Creek Marina (804-898-5060) Levy, Rogers, Elksnin, Nordstrom, McKinley, Harper, Jones, Chess, Alcorn, Hess
Oct. 10	6:00 p.m.	Rappahannock Outdoor Center FOR (703-373-3448) Stanley, Turk, Erich, Mastropaolo, Mills, Newman, Geisler, Willis, Joiner, Pleasants, Stephens, Ellis, Anderson, Meers, Vella
Oct. 12	5:30 p.m.	Caledon Natural Area (703-663-3861) Jacobs, Stanton, Davis, Zawatsky, Cox, Shelkeys, Regelbrugge, Frances, Murray, Wold, Cooper, George, Dodd, Mack, Tugman
Oct. 17	5:30 p.m.	Walkerton Firehouse (804-775-0951) Stephens, Austin, Robichaud, Eppes, Rouse
Oct. 19	5:00 p.m.	York River State Park (804-566-3036) Turner, Reid, Burruss, Breeding, Johnson
Oct. 24	6:00 p.m.	Thousand Trails Campground (804-693-6924) Sealey, Whitbeck, Kain, Wohlleben, Heider, Tyrrell, Barry, Cave, Stickney, Morrisson, Bliemel, Dixon, Walkers, Bowie, Layer, Hall, Laguardia, Watkins
Oct. 26	6:00 p.m.	Leesylvania State Park (703-670-0372) Barnette, Sutherland, Petrie, Lawrence, Bethke, Burke, Kelly, Foster, Armstrong, Poertner, Thiel
Oct. 30	6:00 p.m.	Seashore State Park (804-481-2131) Marx, McCarthy, Krop, Dowd, Bates, Armstrong, Koelsch, Waldrop, Panneton, Willenbrink, Stewart, Hook, Razzaq, Little, Walsh, Spencer, Delly, Speckhart, Bourquard, Berliner, Polk, Vogel, Neefe, Revelle
Nov. 9	5:30 p.m.	Eastern Shore Community College (804-787-5930) Johnston, Devletian, Collins, Dooley, Wilkins, Nuckols, Stuver, Wood, Goldstein, Payne, Davis

!!! BRING YOUR KIT !!!

A significant amount of time and planning goes into the QC session. Please plan to attend one!!!

Chesapeake Bay
National Estuarine
Research Reserve
in Virginia

Department of
Conservation
and Recreation

State Parks
VIRGINIA

ALLIANCE for the CHESAPEAKE BAY

TASKINAS CREEK CANOE TRIP AND YORK RIVER BOAT TOUR

The Department of Conservation and Recreation, York River State Park, the Virginia Institute of Marine Science and the Alliance for the Chesapeake Bay thank you for signing up for the Taskinas Creek canoe trip and York River boat tour! We're looking forward to a great day.

October 21, 1995

10:00 a.m. to 3:00 p.m.

CANOE TRIP UP TASKINAS CREEK
In order to work with the tides we will go on the canoe trip in the morning. Graduate students from the Virginia Institute of Marine Science will guide us on an interpretive tour through the meanders of Taskinas Creek as it winds through some of the most beautiful saltwater and freshwater marshes of the area. The creek is part of the National Estuarine research Reserve System in Virginia and is home to blue herons, bald eagles, marsh sparrows, rails and otters. we will learn about the wildlife that inhabits the creek, the geology and the history of the area.

BOAT TOUR OF YORK RIVER
In the afternoon we will cruise along the river in small boats stopping along the way to discuss some of the research projects going on in the area including fish identification, marsh plants and osprey nest platforms. We may see a fossil dig site and migrating neotropical birds.

DIRECTIONS:
Meet at the York River State Park Visitor Center before 10:00 a.m.. From Rt. 64 take Exit 231 B (toward Croaker). Follow Rt. 607 for one mile and turn right on to Rt. 606 (Riverview Drive). Go about 2-3 miles and turn left into the park entrance. Follow to the visitor center. (York River State Park is about fifteen miles West of Williamsburg.)

REMEMBER:
Bring binoculars, sunscreen, bug spray, foul weather gear, water, and lunch.

DATA SUMMARY

January 1, 1995 through September 31, 1995

River	Site	Beginning Date	Ending Date
Elizabeth	72	1/11/95	9/27/95
	73	1/18/95	9/27/95
	75	1/11/95	9/27/95
	76	1/11/95	9/27/95
James	30	1/12/95	9/28/95
	32	1/1/95	9/22/95
	35	1/6/95	9/29/95
	39	1/7/95	9/30/95
	53	1/1/95	9/24/95
York	10	3/6/95	3/20/95
	11	1/2/95	8/6/95
	12	1/2/95	9/26/95
	13	1/1/95	3/23/95
	136	1/4/95	9/27/95
	15	1/4/95	8/1/95
	16	1/3/95	9/22/95
	17	4/13/95	9/21/95
	19	1/14/95	9/23/95
	50	1/1/95	9/24/95
Mattaponi	140	1/3/95	9/25/95
	147	3/5/95	8/30/95
	149	1/2/95	7/7/95
Piankatank	128	1/6/95	9/30/95
	129	1/4/95	9/19/95
	249	7/13/95	8/28/95
	250	1/2/95	7/23/95
	251	1/7/95	9/30/95
	252	1/1/95	8/13/95
	52	1/3/95	9/27/95

Rappahannock	120	1/3/95	6/2/95
	121	2/10/95	6/27/95
	123	1/1/95	9/16/95
	123A	1/1/95	7/4/95
	146	1/10/95	6/21/95
	154	1/2/95	6/27/95
	156	1/8/95	3/19/95
	6	1/8/95	6/24/95
	61	1/2/95	9/25/95
	63	1/2/95	9/25/95
	64	1/3/95	7/13/95
	65	1/2/95	9/26/95
	66	1/23/95	9/26/96
	7	1/1/95	6/30/95
	8	1/4/95	7/5/95
Potomac	001	2/18/95	8/15/95
	751	4/9/95	7/2/95
	865	4/5/95	9/27/95
	965	4/2/95	9/30/95
	765	4/4/95	9/25/95
	775	1/6/95	9/29/95
	751	4/14/95	7/28/95
	766	4/23/95	9/24/95
Eastern Shore	150	1/9/95	9/18/95
	151	1/4/95	9/27/95
	85	1/1/95	9/24/95
	87	1/3/95	1/31/95
	91	1/2/95	7/3/95

River	Site Number	Date
Elizabeth	72	1/11/95
Elizabeth	72	1/11/95
Elizabeth	72	1/18/95
Elizabeth	72	1/23/95
Elizabeth	72	2/01/95
Elizabeth	72	2/06/95
Elizabeth	72	2/13/95
Elizabeth	72	2/24/95
Elizabeth	72	3/01/95
Elizabeth	72	3/08/95
Elizabeth	72	3/15/95
Elizabeth	72	3/22/95
Elizabeth	72	3/29/95
Elizabeth	72	4/07/95
Elizabeth	72	4/12/95
Elizabeth	72	4/27/95
Elizabeth	72	5/03/95
Elizabeth	72	5/10/95
Elizabeth	72	5/24/95
Elizabeth	72	5/30/95
Elizabeth	72	6/07/95
Elizabeth	72	6/14/95
Elizabeth	72	6/22/95
Elizabeth	72	6/26/95
Elizabeth	72	8/10/95
Elizabeth	72	8/23/95
Elizabeth	72	8/28/95
Elizabeth	72	9/08/95
Elizabeth	72	9/14/95
Elizabeth	72	9/21/95
Elizabeth	72	9/27/95
Elizabeth	73	1/18/95
Elizabeth	73	1/23/95
Elizabeth	73	2/01/95
Elizabeth	73	2/06/95
Elizabeth	73	2/13/95
Elizabeth	73	2/24/95
Elizabeth	73	3/01/95
Elizabeth	73	3/08/95
Elizabeth	73	3/15/95
Elizabeth	73	3/22/95
Elizabeth	73	3/29/95
Elizabeth	73	4/07/95
Elizabeth	73	4/12/95
Elizabeth	73	4/27/95
Elizabeth	73	5/03/95
Elizabeth	73	5/11/95
Elizabeth	73	5/24/95
Elizabeth	73	5/24/95
Elizabeth	73	5/31/95
	73	6/7/95

River	Site Number	Date
Elizabeth	73	6/14/95
Elizabeth	73	6/22/95
Elizabeth	73	6/26/95
Elizabeth	73	8/10/95
Elizabeth	73	8/23/95
Elizabeth	73	8/28/95
Elizabeth	73	9/08/95
Elizabeth	73	9/14/95
Elizabeth	73	9/21/95
Elizabeth	73	9/27/95
Elizabeth	74	2/24/95
Elizabeth	75	1/11/95
Elizabeth	75	1/18/95
Elizabeth	75	1/23/95
Elizabeth	75	2/01/95
Elizabeth	75	2/06/95
Elizabeth	75	2/13/95
Elizabeth	75	3/01/95
Elizabeth	75	3/08/95
Elizabeth	75	3/15/95
Elizabeth	75	3/25/95
Elizabeth	75	3/29/95
Elizabeth	75	4/07/95
Elizabeth	75	4/12/95
Elizabeth	75	4/27/95
Elizabeth	75	5/03/95
Elizabeth	75	5/11/95
Elizabeth	75	5/31/95
Elizabeth	75	6/07/95
Elizabeth	75	6/14/95
Elizabeth	75	6/22/95
Elizabeth	75	6/26/95
Elizabeth	75	7/08/95
Elizabeth	75	8/10/95
Elizabeth	75	8/23/95
Elizabeth	75	8/28/95
Elizabeth	75	9/14/95
Elizabeth	75	9/21/95
Elizabeth	75	9/27/95
Elizabeth	76	1/11/95
Elizabeth	76	1/18/95
Elizabeth	76	1/23/95
Elizabeth	76	2/01/95
Elizabeth	76	2/06/95
Elizabeth	76	2/13/95
Elizabeth	76	2/24/95
Elizabeth	76	3/01/95
Elizabeth	76	3/08/95
Elizabeth	76	3/15/95
Elizabeth	76	3/22/95
Elizabeth	76	3/29/95
	76	4/7/95

River	Site Number	Date
Elizabeth	76	4/12/95
Elizabeth	76	4/27/95
Elizabeth	76	5/03/95
Elizabeth	76	5/11/95
Elizabeth	76	5/24/95
Elizabeth	76	5/31/95
Elizabeth	76	6/07/95
Elizabeth	76	6/14/95
Elizabeth	76	6/22/95
Elizabeth	76	6/26/95
Elizabeth	76	8/10/95
Elizabeth	76	8/23/95
Elizabeth	76	8/28/95
Elizabeth	76	9/08/95
Elizabeth	76	9/14/95
Elizabeth	76	9/21/95
Elizabeth	76	9/27/95
Elizabeth	72	7/21/95
Elizabeth	73	7/21/95
Elizabeth	75	7/21/95
Elizabeth	76	7/21/95

River	Site Number	Date
James	30	1/12/95
James	30	1/18/95
James	30	1/24/95
James	30	2/01/95
James	30	2/07/95
James	30	2/13/95
James	30	2/23/95
James	30	3/03/95
James	30	3/07/95
James	30	3/10/95
James	30	3/14/95
James	30	3/23/95
James	30	3/29/95
James	30	4/21/95
James	30	4/28/95
James	30	5/06/95
James	30	5/08/95
James	30	5/15/95
James	30	5/25/95
James	30	6/07/95
James	30	6/16/95
James	30	6/24/95
James	30	6/26/95
James	30	7/06/95
James	30	7/10/95
James	30	7/17/95
James	30	7/24/95
James	30	8/07/95
James	30	8/19/95
James	30	8/24/95
James	30	9/01/95
James	30	9/07/95
James	30	9/28/95
James	32	1/01/95
James	32	1/08/95
James	32	1/16/95
James	32	2/05/95
James	32	2/12/95
James	32	2/19/95
James	32	2/26/95
James	32	3/05/95
James	32	3/12/95
James	32	3/19/95
James	32	3/26/95
James	32	4/02/95
James	32	4/09/95
James	32	4/16/95
James	32	4/23/95
	32	4/30/95

River	Site Number	Date
James	32	5/07/95
James	32	5/14/95
James	32	5/21/95
James	32	5/28/95
James	32	6/04/95
James	32	6/18/95
James	32	6/25/95
James	32	7/02/95
James	32	7/09/95
James	32	7/16/95
James	32	7/23/95
James	32	7/30/95
James	32	8/06/95
James	32	8/13/95
James	32	8/20/95
James	32	8/27/95
James	32	9/03/95
James	32	9/10/95
James	32	9/17/95
James	32	9/22/95
James	35	4/14/95
James	35	6/02/95
James	35	6/17/95
James	35	1/06/95
James	35	1/13/95
James	35	1/20/95
James	35	1/27/95
James	35	2/03/95
James	35	2/10/95
James	35	2/17/95
James	35	2/24/95
James	35	3/03/95
James	35	3/10/95
James	35	3/17/95
James	35	3/24/95
James	35	3/31/95
James	35	4/07/95
James	35	4/21/95
James	35	4/28/95
James	35	5/05/95
James	35	5/12/95
James	35	5/19/95
James	35	5/24/95
James	35	6/09/95
James	35	6/23/95
James	35	6/30/95
James	35	7/06/95
James	35	7/14/95
James	35	7/21/95
	35	7/27/95

River	Site Number	Date
James	35	8/04/95
James	35	8/11/95
James	35	8/18/95
James	35	8/25/95
James	35	9/01/95
James	35	9/15/95
James	35	9/22/95
James	35	9/29/95
James	39	1/07/95
James	39	1/15/95
James	39	1/22/95
James	39	1/28/95
James	39	2/04/95
James	39	2/11/95
James	39	2/18/95
James	39	2/26/95
James	39	3/05/95
James	39	3/11/95
James	39	3/19/95
James	39	3/25/95
James	39	4/02/95
James	39	4/08/95
James	39	4/17/95
James	39	4/23/95
James	39	4/30/95
James	39	5/06/95
James	39	5/14/95
James	39	5/21/95
James	39	5/28/95
James	39	6/03/95
James	39	6/11/95
James	39	6/17/95
James	39	6/24/95
James	39	7/02/95
James	39	7/04/95
James	39	7/16/95
James	39	7/23/95
James	39	7/30/95
James	39	8/06/95
James	39	8/12/95
James	39	8/19/95
James	39	8/26/95
James	39	9/02/95
James	39	9/09/95
James	39	9/17/95
James	39	9/23/95
James	39	9/30/95
James	53	1/01/95
James	53	1/08/95
	53	1/15/95

River	Site Number	Date
James	53	1/22/95
James	53	2/05/95
James	53	2/19/95
James	53	2/26/95
James	53	3/05/95
James	53	3/12/95
James	53	3/19/95
James	53	3/26/95
James	53	4/09/95
James	53	4/16/95
James	53	4/23/95
James	53	4/30/95
James	53	5/21/95
James	53	5/29/95
James	53	6/04/95
James	53	6/11/95
James	53	6/18/95
James	53	6/26/95
James	53	7/21/95
James	53	7/30/95
James	53	8/06/95
James	53	8/27/95
James	53	9/17/95
James	53	9/24/95

River	Site Number	Date
York	10	3/06/95
York	10	3/12/95
York	10	3/20/95
York	11	6/28/95
York	11	7/03/95
York	11	7/23/95
York	11	7/30/95
York	11	8/06/95
York	11	1/23/95
York	11	2/06/95
York	11	2/20/95
York	11	2/27/95
York	11	3/13/95
York	11	3/20/95
York	11	3/27/95
York	11	4/03/95
York	11	4/10/95
York	11	4/17/95
York	11	5/01/95
York	12	1/02/95
York	12	1/03/95
York	12	1/10/95
York	12	1/17/95
York	12	1/24/95
York	12	1/31/95
York	12	2/07/95
York	12	2/14/95
York	12	2/21/95
York	12	2/27/95
York	12	3/07/95
York	12	3/14/95
York	12	3/21/95
York	12	3/28/95
York	12	4/04/95
York	12	4/11/95
York	12	4/18/95
York	12	4/24/95
York	12	5/08/95
York	12	5/17/95
York	12	5/23/95
York	12	5/29/95
York	12	6/06/95
York	12	6/13/95
York	12	6/20/95
York	12	6/27/95
York	12	7/04/95
York	12	7/11/95
York	12	7/18/95
York	12	7/25/95
	12	8/1/95

River	Site Number	Date
York	12	8/08/95
York	12	8/15/95
York	12	8/22/95
York	12	8/29/95
York	12	9/05/95
York	12	9/12/95
York	12	9/19/95
York	12	9/26/95
York	13	1/01/95
York	13	1/09/95
York	13	1/16/95
York	13	1/22/95
York	13	1/31/95
York	13	2/14/95
York	13	2/21/95
York	13	3/01/95
York	13	3/07/95
York	13	3/15/95
York	13	3/23/95
York	136	1/04/95
York	136	1/11/95
York	136	1/18/95
York	136	1/25/95
York	136	2/01/95
York	136	2/09/95
York	136	2/15/95
York	136	2/22/95
York	136	3/01/95
York	136	3/09/95
York	136	3/15/95
York	136	3/22/95
York	136	3/29/95
York	136	4/05/95
York	136	4/12/95
York	136	4/19/95
York	136	4/26/95
York	136	5/10/95
York	136	5/19/95
York	136	5/24/95
York	136	5/31/95
York	136	6/07/95
York	136	6/14/95
York	136	6/21/95
York	136	6/28/95
York	136	7/05/95
York	136	7/12/95
York	136	7/19/95
York	136	7/26/95
York	136	8/02/95
York	136	8/09/95
York	136	8/17/95
	136	8/23/95

River	Site Number	Date
York	136	8/31/95
York	136	9/06/95
York	136	9/14/95
York	136	9/20/95
York	136	9/27/95
York	15	1/04/95
York	15	1/31/95
York	15	3/11/95
York	15	3/24/95
York	15	3/31/95
York	15	4/08/95
York	15	4/15/95
York	15	4/23/95
York	15	4/30/95
York	15	5/15/95
York	15	8/06/95
York	15	8/13/95
York	15	8/19/95
York	15	8/27/95
York	15	9/03/95
York	15	9/10/95
York	15	9/17/95
York	15	9/24/95
York	15	2/06/95
York	15	2/14/95
York	15	2/20/95
York	15	2/27/95
York	15	5/06/95
York	15	5/24/95
York	15	6/30/95
York	15	1/11/95
York	15	1/18/95
York	15	1/24/95
York	15	6/02/95
York	15	6/08/95
York	15	6/14/95
York	15	6/19/95
York	15	7/03/95
York	15	7/11/95
York	15	7/17/95
York	15	7/25/95
York	15	8/01/95
York	16	1/03/95
York	16	1/12/95
York	16	1/19/95
York	16	1/26/95
York	16	2/02/95
York	16	2/11/95
York	16	2/17/95
York	16	2/23/95
York	16	3/06/95
	16	3/13/95

River	Site Number	Date
York	16	3/20/95
York	16	3/28/95
York	16	4/10/95
York	16	4/18/95
York	16	4/25/95
York	16	5/07/95
York	16	5/18/95
York	16	5/22/95
York	16	5/30/95
York	16	6/06/95
York	16	6/12/95
York	16	6/22/95
York	16	7/03/95
York	16	7/12/95
York	16	7/20/95
York	16	7/28/95
York	16	8/04/95
York	16	8/10/95
York	16	8/19/95
York	16	8/25/95
York	16	9/05/95
York	16	9/14/95
York	16	9/22/95
York	17	4/13/95
York	17	4/20/95
York	17	4/27/95
York	17	5/04/95
York	17	5/11/95
York	17	5/18/95
York	17	5/25/95
York	17	6/01/95
York	17	6/10/95
York	17	6/19/95
York	17	6/29/95
York	17	7/06/95
York	17	7/13/95
York	17	7/20/95
York	17	7/27/95
York	17	8/03/95
York	17	8/10/95
York	17	8/17/95
York	17	8/31/95
York	17	9/14/95
York	17	9/21/95 ∠ 19 1/14/95
York	19	2/12/95
York	19	1/21/95
York	19	1/28/95
York	19	2/04/95
York	19	2/18/95
York	19	2/25/95
York	19	3/04/95
	19	3/11/95

River	Site Number	Date
York	19	4/08/95
York	19	4/15/95
York	19	4/22/95
York	19	4/29/95
York	19	5/07/95
York	19	5/13/95
York	19	5/27/95
York	19	6/04/95
York	19	6/10/95
York	19	6/17/95
York	19	7/01/95
York	19	7/09/95
York	19	7/15/95
York	19	7/22/95
York	19	7/31/95
York	19	8/05/95
York	19	8/12/95
York	19	8/20/95
York	19	8/26/95
York	19	9/02/95
York	19	9/09/95
York	19	9/17/95
York	19	9/23/95
York	50	1/01/95
York	50	1/08/95
York	50	1/15/95
York	50	1/22/95
York	50	1/29/95
York	50	2/05/95
York	50	2/12/95
York	50	2/19/95
York	50	2/26/95
York	50	3/05/95
York	50	3/12/95
York	50	3/19/95
York	50	3/26/95
York	50	4/02/95
York	50	4/09/95
York	50	4/16/95
York	50	4/23/95
York	50	4/30/95
York	50	5/07/95
York	50	5/14/95
York	50	5/21/95
York	50	5/28/95
York	50	6/04/95
York	50	6/11/95
York	50	6/19/95
York	50	6/25/95
York	50	7/02/95
York	50	7/09/95
	50	7/16/95

River	Site Number	Date
York	50	7/24/95
York	50	7/30/95
York	50	8/06/95
York	50	8/13/95
York	50	8/20/95
York	50	8/27/95
York	50	9/03/95
York	50	9/10/95
York	50	9/17/95
York	50	9/24/95

River	Site Number	Date
Mattaponi	140	1/03/95
Mattaponi	140	1/08/95
Mattaponi	140	1/15/95
Mattaponi	140	1/23/95
Mattaponi	140	1/28/95
Mattaponi	140	2/05/95
Mattaponi	140	2/13/95
Mattaponi	140	2/19/95
Mattaponi	140	2/26/95
Mattaponi	140	3/05/95
Mattaponi	140	3/12/95
Mattaponi	140	3/19/95
Mattaponi	140	3/26/95
Mattaponi	140	4/02/95
Mattaponi	140	4/09/95
Mattaponi	140	4/16/95
Mattaponi	140	4/23/95
Mattaponi	140	5/01/95
Mattaponi	140	5/07/95
Mattaponi	140	5/21/95
Mattaponi	140	5/30/95
Mattaponi	140	6/05/95
Mattaponi	140	6/11/95
Mattaponi	140	6/18/95
Mattaponi	140	7/02/95
Mattaponi	140	7/09/95
Mattaponi	140	7/16/95
Mattaponi	140	7/23/95
Mattaponi	140	7/30/95
Mattaponi	140	8/13/95
Mattaponi	140	8/20/95
Mattaponi	140	8/27/95
Mattaponi	140	9/03/95
Mattaponi	140	9/10/95
Mattaponi	140	9/16/95
Mattaponi	140	9/25/95
Mattaponi	147	3/05/95
Mattaponi	147	3/13/95
Mattaponi	147	3/20/95
Mattaponi	147	4/03/95
Mattaponi	147	4/10/95
Mattaponi	147	4/20/95
Mattaponi	147	4/29/95
Mattaponi	147	5/08/95
Mattaponi	147	5/15/95
Mattaponi	147	5/31/95
Mattaponi	147	6/08/95
Mattaponi	147	6/12/95
Mattaponi	147	6/19/95
Mattaponi	147	6/26/95
	147	7/3/95

River	Site Number	Date
Mattaponi	147	7/17/95
Mattaponi	147	7/24/95
Mattaponi	147	7/31/95
Mattaponi	147	8/11/95
Mattaponi	147	8/21/95
Mattaponi	147	8/30/95
Mattaponi	149	1/02/95
Mattaponi	149	1/08/95
Mattaponi	149	1/15/95
Mattaponi	149	1/22/95
Mattaponi	149	1/29/95
Mattaponi	149	2/05/95
Mattaponi	149	3/02/95
Mattaponi	149	4/02/95
Mattaponi	149	4/26/95
Mattaponi	149	6/07/95
Mattaponi	149	6/15/95
Mattaponi	149	7/03/95
Mattaponi	149	7/07/95

River	Site Number	Date
Piankatank	128	1/06/95
Piankatank	128	1/13/95
Piankatank	128	1/18/95
Piankatank	128	1/26/95
Piankatank	128	1/31/95
Piankatank	128	2/09/95
Piankatank	128	2/16/95
Piankatank	128	2/21/95
Piankatank	128	2/28/95
Piankatank	128	3/09/95
Piankatank	128	3/21/95
Piankatank	128	4/04/95
Piankatank	128	4/12/95
Piankatank	128	4/20/95
Piankatank	128	4/25/95
Piankatank	128	5/05/95
Piankatank	128	5/13/95
Piankatank	128	5/18/95
Piankatank	128	5/26/95
Piankatank	128	6/01/95
Piankatank	128	6/06/95
Piankatank	128	6/16/95
Piankatank	128	6/24/95
Piankatank	128	6/27/95
Piankatank	128	7/04/95
Piankatank	128	7/13/95
Piankatank	128	7/20/95
Piankatank	128	7/28/95
Piankatank	128	8/05/95
Piankatank	128	8/11/95
Piankatank	128	8/19/95
Piankatank	128	8/26/95
Piankatank	128	9/01/95
Piankatank	128	9/16/95
Piankatank	128	9/23/95
Piankatank	128	9/30/95
Piankatank	129	1/04/95
Piankatank	129	1/11/95
Piankatank	129	1/18/95
Piankatank	129	1/25/95
Piankatank	129	2/01/95
Piankatank	129	2/08/95
Piankatank	129	2/16/95
Piankatank	129	2/22/95
Piankatank	129	3/01/95
Piankatank	129	3/07/95
Piankatank	129	3/15/95
Piankatank	129	3/22/95
Piankatank	129	3/29/95
Piankatank	129	4/06/95
	129	4/12/96

River	Site Number	Date
Piankatank	129	4/19/95
Piankatank	129	4/26/95
Piankatank	129	5/04/95
Piankatank	129	5/10/95
Piankatank	129	5/17/95
Piankatank	129	5/24/95
Piankatank	129	5/31/95
Piankatank	129	6/07/95
Piankatank	129	6/14/95
Piankatank	129	6/21/95
Piankatank	129	6/28/95
Piankatank	129	7/05/95
Piankatank	129	7/12/95
Piankatank	129	7/19/95
Piankatank	129	7/26/95
Piankatank	129	8/02/95
Piankatank	129	8/09/95
Piankatank	129	8/15/95
Piankatank	129	8/23/95
Piankatank	129	8/30/95
Piankatank	129	9/06/95
Piankatank	129	9/13/95
Piankatank	129	9/27/95
Piankatank	129	9/19/95
Piankatank	249	7/13/95
Piankatank	249	7/23/95
Piankatank	249	7/30/95
Piankatank	249	8/08/95
Piankatank	249	8/16/95
Piankatank	249	8/28/95
Piankatank	250	1/02/95
Piankatank	250	1/08/95
Piankatank	250	1/14/95
Piankatank	250	1/21/95
Piankatank	250	2/05/95
Piankatank	250	2/12/95
Piankatank	250	2/19/95
Piankatank	250	3/12/95
Piankatank	250	3/19/95
Piankatank	250	4/15/95
Piankatank	250	5/07/95
Piankatank	250	5/20/95
Piankatank	250	5/29/95
Piankatank	250	6/04/95
Piankatank	250	6/25/95
Piankatank	250	7/04/95
Piankatank	250	7/09/95
Piankatank	250	7/23/95
Piankatank	251	1/07/95
Piankatank	251	1/15/95
Piankatank	251	1/21/95
	251	1/28/95

River	Site Number	Date
Piankatank	251	2/04/95
Piankatank	251	2/18/95
Piankatank	251	2/25/95
Piankatank	251	3/04/95
Piankatank	251	3/11/95
Piankatank	251	3/18/95
Piankatank	251	3/26/95
Piankatank	251	4/01/95
Piankatank	251	4/09/95
Piankatank	251	4/15/95
Piankatank	251	4/23/95
Piankatank	251	4/29/95
Piankatank	251	5/06/95
Piankatank	251	5/13/95
Piankatank	251	5/20/95
Piankatank	251	5/28/95
Piankatank	251	6/03/95
Piankatank	251	6/11/95
Piankatank	251	6/18/95
Piankatank	251	6/24/95
Piankatank	251	7/02/95
Piankatank	251	7/10/95
Piankatank	251	7/15/95
Piankatank	251	7/23/95
Piankatank	251	7/29/95
Piankatank	251	8/12/95
Piankatank	251	8/20/95
Piankatank	251	8/26/95
Piankatank	251	9/02/95
Piankatank	251	9/10/95
Piankatank	251	9/17/95
Piankatank	251	9/23/95
Piankatank	251	9/30/95
Piankatank	252	1/01/95
Piankatank	252	1/08/95
Piankatank	252	1/15/95
Piankatank	252	1/21/95
Piankatank	252	1/28/95
Piankatank	252	2/04/95
Piankatank	252	2/11/95
Piankatank	252	2/19/95
Piankatank	252	2/26/95
Piankatank	252	3/05/95
Piankatank	252	3/11/95
Piankatank	252	3/19/95
Piankatank	252	3/26/95
Piankatank	252	4/01/95
Piankatank	252	4/08/95
Piankatank	252	4/15/95
Piankatank	252	4/23/95
Piankatank	252	4/29/95
	252	5/5/95

River	Site Number	Date
Piankatank	252	5/13/95
Piankatank	252	5/21/95
Piankatank	252	5/27/95
Piankatank	252	6/03/95
Piankatank	252	6/11/95
Piankatank	252	8/19/95
Piankatank	252	8/26/95
Piankatank	252	9/01/95
Piankatank	252	9/10/95
Piankatank	252	9/17/95
Piankatank	252	9/24/95
Piankatank	252	9/30/95
Piankatank	252	6/17/95
Piankatank	252	6/25/95
Piankatank	252	7/02/95
Piankatank	252	7/09/95
Piankatank	252	7/16/95
Piankatank	252	7/22/95
Piankatank	252	7/30/95
Piankatank	252	8/05/95
Piankatank	252	8/13/95
Piankatank	52	1/03/95
Piankatank	52	1/12/95
Piankatank	52	1/19/95
Piankatank	52	1/26/95
Piankatank	52	2/02/95
Piankatank	52	2/09/95
Piankatank	52	2/15/95
Piankatank	52	2/22/95
Piankatank	52	3/01/95
Piankatank	52	3/10/95
Piankatank	52	3/15/95
Piankatank	52	3/22/95
Piankatank	52	3/29/95
Piankatank	52	4/06/95
Piankatank	52	4/12/95
Piankatank	52	4/19/95
Piankatank	52	4/27/95
Piankatank	52	5/03/95
Piankatank	52	5/10/95
Piankatank	52	5/14/95
Piankatank	52	5/24/95
Piankatank	52	5/31/95
Piankatank	52	6/04/95
Piankatank	52	6/07/95
Piankatank	52	6/14/95
Piankatank	52	6/21/95
Piankatank	52	6/28/95
Piankatank	52	7/05/95
Piankatank	52	7/12/95
Piankatank	52	7/19/95
	52	7/26/95

River	Site Number	Date
Piankatank	52	8/02/95
Piankatank	52	8/09/95
Piankatank	52	8/16/95
Piankatank	52	8/23/95
Piankatank	52	8/30/95
Piankatank	52	9/06/95
Piankatank	52	9/13/95
Piankatank	52	9/21/95
Piankatank	52	9/27/95

River	Site Number	Date
Rappahannock	120	2/08/95
Rappahannock	120	2/16/95
Rappahannock	120	1/03/95
Rappahannock	120	1/10/95
Rappahannock	120	1/18/95
Rappahannock	120	1/26/95
Rappahannock	120	2/01/95
Rappahannock	120	2/23/95
Rappahannock	120	3/10/95
Rappahannock	120	3/16/95
Rappahannock	120	3/23/95
Rappahannock	120	3/29/95
Rappahannock	120	4/06/95
Rappahannock	120	4/13/95
Rappahannock	120	4/21/95
Rappahannock	120	4/28/95
Rappahannock	120	5/11/95
Rappahannock	120	5/19/95
Rappahannock	120	5/25/95
Rappahannock	120	6/02/95
Rappahannock	121	2/10/95
Rappahannock	121	2/15/95
Rappahannock	7	2/04/95
Rappahannock	7	2/11/95
Rappahannock	121	2/24/95
Rappahannock	121	3/03/95
Rappahannock	121	3/10/95
Rappahannock	121	3/17/95
Rappahannock	121	3/24/95
Rappahannock	121	3/31/95
Rappahannock	121	4/07/95
Rappahannock	121	4/14/95
Rappahannock	121	4/21/95
Rappahannock	121	5/05/95
Rappahannock	121	5/22/95
Rappahannock	121	5/29/95
Rappahannock	121	6/05/95
Rappahannock	121	6/12/95
Rappahannock	121	6/27/95
Rappahannock	123	1/01/95
Rappahannock	123	1/08/95
Rappahannock	123	1/15/95
Rappahannock	123	1/22/95
Rappahannock	123	2/05/95
Rappahannock	123	2/12/95
Rappahannock	123	2/19/95
Rappahannock	123	2/26/95
Rappahannock	123	3/06/95
Rappahannock	123	3/12/95
Rappahannock	123	3/19/95
	123	3/24/95

River	Site Number	Date
Rappahannock	123	4/02/95
Rappahannock	123	4/09/95
Rappahannock	123	4/23/95
Rappahannock	123	5/14/95
Rappahannock	123	5/20/95
Rappahannock	123	5/28/95
Rappahannock	123	6/04/95
Rappahannock	123	6/11/95
Rappahannock	123	6/18/95
Rappahannock	123	6/25/95
Rappahannock	123	7/04/95
Rappahannock	123	9/16/95
Rappahannock	123A	1/01/95
Rappahannock	123A	1/08/95
Rappahannock	123A	1/15/95
Rappahannock	123A	1/22/95
Rappahannock	123A	1/30/95
Rappahannock	123A	2/05/95
Rappahannock	123A	2/12/95
Rappahannock	123A	2/19/95
Rappahannock	123A	2/26/95
Rappahannock	123A	3/06/95
Rappahannock	123A	3/12/95
Rappahannock	123A	3/19/95
Rappahannock	123A	3/26/95
Rappahannock	123A	4/02/95
Rappahannock	123A	4/09/95
Rappahannock	123A	4/16/95
Rappahannock	123A	4/23/95
Rappahannock	123A	5/07/95
Rappahannock	123A	5/14/95
Rappahannock	123A	5/20/95
Rappahannock	123A	5/28/95
Rappahannock	123A	6/04/95
Rappahannock	123A	6/11/95
Rappahannock	123A	6/18/95
Rappahannock	123A	6/25/95
Rappahannock	123A	7/04/95
Rappahannock	125A	3/19/95
Rappahannock	125A	3/26/95
Rappahannock	125A	4/02/95
Rappahannock	125A	4/09/95
Rappahannock	146	1/10/95
Rappahannock	146	1/18/95
Rappahannock	146	1/25/95
Rappahannock	146	2/03/95
Rappahannock	146	2/22/95
Rappahannock	146	3/01/95
Rappahannock	146	3/08/95
Rappahannock	146	3/17/95
Rappahannock	146	3/24/95
	146	3/30/95

River	Site Number	Date
Rappahannock	146	4/14/95
Rappahannock	146	4/21/95
Rappahannock	146	5/04/95
Rappahannock	146	5/11/95
Rappahannock	146	5/19/95
Rappahannock	146	6/02/95
Rappahannock	146	6/09/95
Rappahannock	146	6/21/95
Rappahannock	154	1/02/95
Rappahannock	154	1/10/95
Rappahannock	154	1/17/95
Rappahannock	154	1/23/95
Rappahannock	154	1/31/95
Rappahannock	154	2/07/95
Rappahannock	154	2/13/95
Rappahannock	154	2/20/95
Rappahannock	154	3/01/95
Rappahannock	154	3/05/95
Rappahannock	154	3/13/95
Rappahannock	154	3/20/95
Rappahannock	154	3/29/95
Rappahannock	154	4/05/95
Rappahannock	154	4/11/95
Rappahannock	154	4/18/95
Rappahannock	154	4/25/95
Rappahannock	154	5/02/95
Rappahannock	154	5/11/95
Rappahannock	154	5/17/95
Rappahannock	154	5/24/95
Rappahannock	154	5/31/95
Rappahannock	154	6/14/95
Rappahannock	154	6/20/95
Rappahannock	154	6/27/95
Rappahannock	156	1/08/95
Rappahannock	156	1/31/95
Rappahannock	156	2/27/95
Rappahannock	156	3/07/95
Rappahannock	156	3/19/95
Rappahannock	6	1/08/95
Rappahannock	6	1/14/95
Rappahannock	6	1/22/95
Rappahannock	6	1/29/95
Rappahannock	6	2/12/95
Rappahannock	6	2/18/95
Rappahannock	6	2/26/95
Rappahannock	6	3/04/95
Rappahannock	6	3/12/95
Rappahannock	6	3/18/95
Rappahannock	6	3/24/95
Rappahannock	6	4/02/95
Rappahannock	6	4/09/95
	6	4/15/95

River	Site Number	Date
Rappahannock	6	4/22/95
Rappahannock	6	4/30/95
Rappahannock	6	5/06/95
Rappahannock	6	5/13/95
Rappahannock	6	5/20/95
Rappahannock	6	5/27/95
Rappahannock	6	6/04/95
Rappahannock	6	6/10/95
Rappahannock	6	6/18/95
Rappahannock	6	6/24/95
Rappahannock	61	1/02/95
Rappahannock	61	1/09/95
Rappahannock	61	1/16/95
Rappahannock	61	1/22/95
Rappahannock	61	1/30/95
Rappahannock	61	2/06/95
Rappahannock	61	2/13/95
Rappahannock	61	2/20/95
Rappahannock	61	2/27/95
Rappahannock	61	3/06/95
Rappahannock	61	3/13/95
Rappahannock	61	3/20/95
Rappahannock	61	3/27/95
Rappahannock	61	4/03/95
Rappahannock	61	4/10/95
Rappahannock	61	4/17/95
Rappahannock	61	4/23/95
Rappahannock	61	5/01/95
Rappahannock	61	5/08/95
Rappahannock	61	5/15/95
Rappahannock	61	5/22/95
Rappahannock	61	5/29/95
Rappahannock	61	6/05/95
Rappahannock	61	6/12/95
Rappahannock	61	6/19/95
Rappahannock	61	6/26/95
Rappahannock	61	7/03/95
Rappahannock	61	7/10/95
Rappahannock	61	7/17/95
Rappahannock	61	7/23/95
Rappahannock	61	7/31/95
Rappahannock	61	8/07/95
Rappahannock	61	8/14/95
Rappahannock	61	8/21/95
Rappahannock	61	8/28/95
Rappahannock	61	9/04/95
Rappahannock	61	9/11/95
Rappahannock	61	9/18/95
Rappahannock	61	9/25/95
Rappahannock	63	1/02/95
Rappahannock	63	1/10/95
	63	1/16/95

River	Site Number	Date
Rappahannock	63	1/23/95
Rappahannock	63	1/31/95
Rappahannock	63	2/06/95
Rappahannock	63	2/13/95
Rappahannock	63	2/20/95
Rappahannock	63	2/26/95
Rappahannock	63	3/06/95
Rappahannock	63	3/13/95
Rappahannock	63	3/20/95
Rappahannock	63	3/28/95
Rappahannock	63	4/03/95
Rappahannock	63	4/10/95
Rappahannock	63	4/17/95
Rappahannock	63	4/23/95
Rappahannock	63	5/01/95
Rappahannock	63	5/08/95
Rappahannock	63	5/16/95
Rappahannock	63	5/22/95
Rappahannock	63	5/22/95
Rappahannock	63	6/06/95
Rappahannock	63	6/14/95
Rappahannock	63	6/19/95
Rappahannock	63	6/26/95
Rappahannock	63	7/03/95
Rappahannock	63	7/10/95
Rappahannock	63	7/17/95
Rappahannock	63	7/24/95
Rappahannock	63	7/31/95
Rappahannock	63	8/06/95
Rappahannock	63	8/14/95
Rappahannock	63	8/21/95
Rappahannock	63	8/28/95
Rappahannock	63	9/04/95
Rappahannock	63	9/11/95
Rappahannock	63	9/18/95
Rappahannock	63	9/25/95
Rappahannock	64	1/03/95
Rappahannock	64	1/11/95
Rappahannock	64	1/16/95
Rappahannock	64	1/26/95
Rappahannock	64	1/31/95
Rappahannock	64	2/09/95
Rappahannock	64	2/17/95
Rappahannock	64	2/22/95
Rappahannock	64	3/01/95
Rappahannock	64	3/08/95
Rappahannock	64	3/18/95
Rappahannock	64	3/20/95
Rappahannock	64	3/28/95
Rappahannock	64	4/05/95
Rappahannock	64	4/11/95
	44	4/19/95

River	Site Number	Date
Rappahannock	64	4/24/95
Rappahannock	64	5/01/95
Rappahannock	64	5/09/95
Rappahannock	64	5/15/95
Rappahannock	64	5/24/95
Rappahannock	64	5/30/95
Rappahannock	64	6/06/95
Rappahannock	64	6/16/95
Rappahannock	64	6/19/95
Rappahannock	64	6/26/95
Rappahannock	64	7/05/95
Rappahannock	64	7/10/95
Rappahannock	64	7/17/95
Rappahannock	64	7/24/95
Rappahannock	64	7/31/95
Rappahannock	65	1/02/95
Rappahannock	65	1/09/95
Rappahannock	65	1/16/95
Rappahannock	65	1/23/95
Rappahannock	65	1/30/95
Rappahannock	65	2/05/95
Rappahannock	65	2/13/95
Rappahannock	65	2/20/95
Rappahannock	65	2/26/95
Rappahannock	65	3/05/95
Rappahannock	65	3/13/95
Rappahannock	65	3/20/95
Rappahannock	65	3/27/95
Rappahannock	65	4/03/95
Rappahannock	65	4/10/95
Rappahannock	65	4/17/95
Rappahannock	65	4/23/95
Rappahannock	65	5/01/95
Rappahannock	65	5/08/95
Rappahannock	65	5/15/95
Rappahannock	65	5/22/95
Rappahannock	65	5/29/95
Rappahannock	65	6/04/95
Rappahannock	65	6/12/95
Rappahannock	65	6/19/95
Rappahannock	65	6/27/95
Rappahannock	65	7/03/95
Rappahannock	65	7/10/95
Rappahannock	65	7/18/95
Rappahannock	65	7/24/95
Rappahannock	65	7/31/95
Rappahannock	65	8/07/95
Rappahannock	65	8/14/95
Rappahannock	65	8/21/95
Rappahannock	65	8/28/95
Rappahannock	65	9/04/95
	65	9/11/95

River	Site Number	Date
Rappahannock	65	9/18/95
Rappahannock	65	9/26/95
Rappahannock	66	1/23/95
Rappahannock	66	2/01/95
Rappahannock	66	1/10/95
Rappahannock	66	1/18/95
Rappahannock	66	2/13/95
Rappahannock	66	2/23/95
Rappahannock	66	3/02/95
Rappahannock	66	3/20/95
Rappahannock	66	3/30/95
Rappahannock	66	4/04/95
Rappahannock	66	4/11/95
Rappahannock	66	4/17/95
Rappahannock	66	4/24/95
Rappahannock	66	5/02/95
Rappahannock	66	5/09/95
Rappahannock	66	5/15/95
Rappahannock	66	5/23/95
Rappahannock	66	5/30/95
Rappahannock	66	6/07/95
Rappahannock	66	6/14/95
Rappahannock	66	6/21/95
Rappahannock	66	6/27/95
Rappahannock	66	7/05/95
Rappahannock	66	7/10/95
Rappahannock	66	7/17/95
Rappahannock	66	7/24/95
Rappahannock	66	8/01/95
Rappahannock	66	8/15/95
Rappahannock	66	8/22/95
Rappahannock	66	8/30/95
Rappahannock	66	9/06/95
Rappahannock	66	9/19/95
Rappahannock	66	9/26/95
Rappahannock	7	1/01/95
Rappahannock	7	1/06/95
Rappahannock	7	1/14/95
Rappahannock	7	1/21/95
Rappahannock	7	1/27/95
Rappahannock	7	2/17/95
Rappahannock	7	2/24/95
Rappahannock	7	3/04/95
Rappahannock	7	3/11/95
Rappahannock	7	3/18/95
Rappahannock	7	3/24/95
Rappahannock	7	4/01/95
Rappahannock	7	4/08/95
Rappahannock	7	4/15/95
Rappahannock	7	4/22/95
Rappahannock	7	4/28/95
	7	5/6/95

River	Site Number	Date
Rappahannock	7	5/12/95
Rappahannock	7	5/19/95
Rappahannock	7	5/26/95
Rappahannock	7	6/02/95
Rappahannock	7	6/09/95
Rappahannock	7	6/16/95
Rappahannock	7	6/22/95
Rappahannock	7	6/30/95
Rappahannock	8	1/04/95
Rappahannock	8	1/11/95
Rappahannock	8	1/18/95
Rappahannock	8	1/25/95
Rappahannock	8	2/01/95
Rappahannock	8	2/08/95
Rappahannock	8	2/15/95
Rappahannock	8	2/22/95
Rappahannock	8	3/01/95
Rappahannock	8	3/08/95
Rappahannock	8	3/15/95
Rappahannock	8	3/22/95
Rappahannock	8	3/29/95
Rappahannock	8	4/05/95
Rappahannock	8	4/12/95
Rappahannock	8	4/19/95
Rappahannock	8	4/26/95
Rappahannock	8	5/03/95
Rappahannock	8	5/10/95
Rappahannock	8	5/17/95
Rappahannock	8	5/23/95
Rappahannock	8	5/31/95
Rappahannock	8	6/07/95
Rappahannock	8	6/14/95
Rappahannock	8	6/21/95
Rappahannock	8	6/28/95
Rappahannock	8	7/05/95
Rappahannock	6	2/05/95

River	Site Number	Date
Potomac	001	2/18/95
Potomac	001	5/27/95
Potomac	001	6/03/95
Potomac	001	7/08/95
Potomac	001	7/15/95
Potomac	001	7/22/95
Potomac	001	7/29/95
Potomac	001	8/05/95
Potomac	001	8/20/95
Potomac	001	8/27/95
Potomac	001	9/02/95
Potomac	001	9/17/95
Potomac	001	9/24/95
Potomac	001	2/21/95
Potomac	001	6/19/95
Potomac	001	8/15/95
Potomac	751	4/09/95
Potomac	751	5/14/95
Potomac	751	6/11/95
Potomac	751	7/08/95
Potomac	751	6/04/95
Potomac	751	6/25/95
Potomac	751	7/02/95
Potomac	865	4/28/95
Potomac	865	4/05/95
Potomac	865	4/19/95
Potomac	865	5/03/95
Potomac	865	5/12/95
Potomac	865	5/31/95
Potomac	865	6/28/95
Potomac	865	7/12/95
Potomac	865	7/26/95
Potomac	865	8/09/95
Potomac	865	8/23/95
Potomac	865	9/06/95
Potomac	865	9/20/95
Potomac	865	4/13/95
Potomac	865	4/26/95
Potomac	865	5/10/95
Potomac	865	6/07/95
Potomac	865	7/20/95
Potomac	865	8/02/95
Potomac	865	8/16/95
Potomac	865	8/30/95
Potomac	865	9/13/95
Potomac	865	9/27/95
Potomac	965	4/02/95
Potomac	965	4/08/95
Potomac	965	4/15/95
Potomac	965	4/22/95
	965	4/29/95

River	Site Number	Date
Potomac	965	5/06/95
Potomac	965	5/13/95
Potomac	965	5/20/95
Potomac	965	5/27/95
Potomac	965	6/03/95
Potomac	965	6/10/95
Potomac	965	6/17/95
Potomac	965	6/24/95
Potomac	965	7/01/95
Potomac	965	7/08/95
Potomac	965	7/15/95
Potomac	965	7/23/95
Potomac	965	8/05/95
Potomac	965	8/12/95
Potomac	965	8/19/95
Potomac	965	8/26/95
Potomac	965	9/02/95
Potomac	965	9/09/95
Potomac	965	9/16/95
Potomac	965	9/23/95
Potomac	965	9/30/95
Potomac	765	5/02/95
Potomac	765	5/13/95
Potomac	765	5/16/95
Potomac	765	5/23/95
Potomac	765	5/30/95
Potomac	765	6/06/95
Potomac	765	6/14/95
Potomac	765	6/20/95
Potomac	765	7/11/95
Potomac	765	7/18/95
Potomac	765	7/25/95
Potomac	765	4/04/95
Potomac	765	4/11/95
Potomac	765	4/25/95
Potomac	765	8/08/95
Potomac	765	8/15/95
Potomac	765	8/22/95
Potomac	765	8/29/95
Potomac	765	9/05/95
Potomac	765	9/12/95
Potomac	765	9/19/95
Potomac	765	9/25/95
Potomac	775	6/02/95
Potomac	775	9/02/95
Potomac	775	9/16/95
Potomac	775	1/06/95
Potomac	775	5/06/95
Potomac	775	7/28/95
Potomac	775	4/21/95
Potomac	775	4/28/95
	775	5/12/95

River	Site Number	Date
Potomac	775	5/19/95
Potomac	775	5/26/95
Potomac	775	6/09/95
Potomac	775	6/16/95
Potomac	775	6/23/95
Potomac	775	7/08/95
Potomac	775	7/15/95
Potomac	775	7/21/95
Potomac	775	8/11/95
Potomac	775	8/18/95
Potomac	775	8/25/95
Potomac	775	9/08/95
Potomac	775	9/29/95
Potomac	751	4/14/95
Potomac	751	4/28/95
Potomac	751	5/05/95
Potomac	751	5/19/95
Potomac	751	7/14/95
Potomac	751	7/21/95
Potomac	751	7/28/95
Potomac	766	4/23/95
Potomac	766	4/30/95
Potomac	766	5/07/95
Potomac	766	5/14/95
Potomac	766	5/21/95
Potomac	766	5/28/95
Potomac	766	6/04/95
Potomac	766	6/18/95
Potomac	766	6/25/95
Potomac	766	7/02/95
Potomac	766	7/09/95
Potomac	766	7/16/95
Potomac	766	7/23/95
Potomac	766	7/30/95
Potomac	766	8/06/95
Potomac	766	8/10/95
Potomac	766	8/13/95
Potomac	766	8/20/95
Potomac	766	8/27/95
Potomac	766	9/03/95
Potomac	766	9/10/95
Potomac	766	9/24/95

River	Site Number	Date
Eastern Shore	150	1/09/95
Eastern Shore	150	1/16/95
Eastern Shore	150	1/23/95
Eastern Shore	150	1/30/95
Eastern Shore	150	2/13/95
Eastern Shore	150	2/20/95
Eastern Shore	150	2/27/95
Eastern Shore	150	3/06/95
Eastern Shore	150	3/20/95
Eastern Shore	150	3/27/95
Eastern Shore	150	4/10/95
Eastern Shore	150	4/17/95
Eastern Shore	150	4/23/95
Eastern Shore	150	5/08/95
Eastern Shore	150	5/17/95
Eastern Shore	150	5/29/95
Eastern Shore	150	6/05/95
Eastern Shore	150	6/12/95
Eastern Shore	150	6/19/95
Eastern Shore	150	6/26/95
Eastern Shore	150	7/09/95
Eastern Shore	150	7/17/95
Eastern Shore	150	7/30/95
Eastern Shore	150	8/07/95
Eastern Shore	150	8/14/95
Eastern Shore	150	8/21/95
Eastern Shore	150	9/11/95
Eastern Shore	150	9/25/95
Eastern Shore	150	1/01/95
Eastern Shore	150	2/05/95
Eastern Shore	150	3/12/95
Eastern Shore	150	4/02/95
Eastern Shore	150	5/01/95
Eastern Shore	150	5/22/95
Eastern Shore	150	7/03/95
Eastern Shore	150	7/24/95
Eastern Shore	150	8/28/95
Eastern Shore	150	9/03/95
Eastern Shore	150	9/18/95
Eastern Shore	151	1/04/95
Eastern Shore	151	1/11/95
Eastern Shore	151	1/18/95
Eastern Shore	151	1/25/95
Eastern Shore	151	2/02/95
Eastern Shore	151	2/15/95
Eastern Shore	151	2/22/95
Eastern Shore	151	3/01/95
Eastern Shore	151	3/08/95
Eastern Shore	151	3/15/95
Eastern Shore	151	3/23/95
	151	3/29/95

River	Site Number	Date
Eastern Shore	151	4/06/95
Eastern Shore	151	4/12/95
Eastern Shore	151	4/26/95
Eastern Shore	151	5/03/95
Eastern Shore	151	5/10/95
Eastern Shore	151	5/17/95
Eastern Shore	151	5/24/95
Eastern Shore	151	6/01/95
Eastern Shore	151	6/08/95
Eastern Shore	151	6/15/95
Eastern Shore	151	6/22/95
Eastern Shore	151	6/29/95
Eastern Shore	151	7/06/95
Eastern Shore	151	7/14/95
Eastern Shore	151	7/20/95
Eastern Shore	151	7/26/95
Eastern Shore	151	8/01/95
Eastern Shore	151	8/07/95
Eastern Shore	151	8/15/95
Eastern Shore	151	8/22/95
Eastern Shore	151	8/30/95
Eastern Shore	151	9/06/95
Eastern Shore	151	9/14/95
Eastern Shore	151	9/21/95
Eastern Shore	151	9/27/95
Eastern Shore	85	1/01/95
Eastern Shore	85	2/19/95
Eastern Shore	85	2/26/95
Eastern Shore	85	3/05/95
Eastern Shore	85	3/19/95
Eastern Shore	85	3/26/95
Eastern Shore	85	4/02/95
Eastern Shore	85	4/09/95
Eastern Shore	85	4/16/95
Eastern Shore	85	4/23/95
Eastern Shore	85	4/30/95
Eastern Shore	85	5/07/95
Eastern Shore	85	5/14/95
Eastern Shore	85	5/21/95
Eastern Shore	85	5/28/95
Eastern Shore	85	6/04/95
Eastern Shore	85	6/11/95
Eastern Shore	85	6/18/95
Eastern Shore	85	7/02/95
Eastern Shore	85	7/09/95
Eastern Shore	85	7/16/95
Eastern Shore	85	7/23/95
Eastern Shore	85	7/30/95
Eastern Shore	85	8/06/95
Eastern Shore	85	8/13/95
Eastern Shore	85	8/20/95
	85	8/27/95

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River	Site Number	Date
Eastern Shore	85	9/03/95
Eastern Shore	85	9/10/95
Eastern Shore	85	9/17/95
Eastern Shore	85	9/24/95
Eastern Shore	85	3/12/95
Eastern Shore	87	1/03/95
Eastern Shore	87	1/10/95
Eastern Shore	87	1/17/95
Eastern Shore	87	1/24/95
Eastern Shore	87	1/31/95
Eastern Shore	91	1/02/95
Eastern Shore	91	1/09/95
Eastern Shore	91	1/16/95
Eastern Shore	91	1/23/95
Eastern Shore	91	1/31/95
Eastern Shore	91	2/06/95
Eastern Shore	91	2/13/95
Eastern Shore	91	2/27/95
Eastern Shore	91	3/06/95
Eastern Shore	91	3/13/95
Eastern Shore	91	3/20/95
Eastern Shore	91	3/27/95
Eastern Shore	91	4/03/95
Eastern Shore	91	4/10/95
Eastern Shore	91	4/17/95
Eastern Shore	91	4/24/95
Eastern Shore	91	5/01/95
Eastern Shore	91	5/08/95
Eastern Shore	91	6/05/95
Eastern Shore	91	6/19/95
Eastern Shore	91	6/26/95
Eastern Shore	91	7/03/95