FINAL 2011 PECONIC RIVER MONITORING REPORT

Prepared for:

Brookhaven Site Office

Building 464, 53 Bell Avenue

Upton, New York 11973

July 31, 2012

Prepared by:

Brookhaven Science Associates, LLC

Brookhaven National Laboratory

Upton, New York 11973

Under Contract with the United States Department of Energy

Contract No. DE-AC02-98CH10

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EXECUTIVE SUMMARY

2011 PECONIC RIVER MONITORING REPORT

This section summarizes the major findings relating to the 2011 Peconic River sediment, surface water, and fish monitoring. Section 2 through Section 4 of the report discusses the details on which the summaries are based. Figure 1-1 shows the location of the Peconic River relative to Brookhaven National Laboratory (BNL, Laboratory), the Long Island Expressway and Flanders Bay, into which the river flows.

There was one new recommendation to modify the 2012 sediment monitoring and no new recommendations to modify the 2012 water column and fish monitoring based on the 2011 monitoring data. The sediment, surface water and fish sections each summarize the modifications to the 2012 monitoring that were discussed in the 2011 Five Year Review, which was approved by EPA, NYSDEC, NYSDOH and SCDHS[1]. These modifications are summarized in Table E-1 on page xiv.

Sediment:

Thirty three sediment stations were sampled in 2011. The 33 stations include 30 routine stations and three additional stations discussed below that will replace the routine stations in 2012, as per the 2011 Five Year Review and the 2010 Peconic River Monitoring Report. The 2011 mean, minimum and maximum mercury concentrations among all 33 sediment stations were 0.50 mg/kg, 0.008[2] mg/kg and 2.7 mg/kg, respectively.

The 2011 onsite (0.59 mg/kg) and offsite from the BNL border to Schultz Road (0.47 mg/kg) and the Manor Road area (0.1 mg/kg) mean mercury values were substantially less than the respective pre-cleanup mean values of 4.60 mg/kg, 1.79 mg/kg and 1.08 mg/kg, respectively. The 2011 values were also substantially less than the respective ROD-specified mean mercury values. The Peconic River ROD specifies that the mean onsite mercury concentration be less

[1] Frequently used acronyms: EPA – Environmental Protection Agency, NYSDEC – New York State Department of Environmental Conservation, NYSDOH – New York State Department of Health, SCDHS – Suffolk County Department of Health Services

[2] The text displays a maximum of three significant figures, wheras the tables and appendices display the true analytical values. The minimum mercury concentration was a non-detect at 0.00834 mg/kg reporting limit.

than 1.0 mg/kg and that the mean offsite mercury concentration be less than 0.75 mg/kg. The ROD also specifies a goal that all mercury concentrations in cleanup areas will be less than 2.0 mg/kg.

All 33 onsite and offsite mercury samples, except PR-SS-10 (2.5 mg/kg) and PR-SS-38 (2.7 mg/kg) were below the 2.0 mg/kg cleanup goal. Donahue's Pond, which is approximately 2.25 miles downstream of the Manor Road cleanup area had the minimum mercury concentration (non-detect at 0.008 mg/kg). Because of its distance downstream from the most downstream cleanup area, the Donahue's Pond value is not included in the offsite calculations. The 2011 PR-SS-10 and PR-SS-38 mercury concentrations are each within the respective concentration range reported in the 2011 Five Year Review, which recommended taking no additional action at PR-SS-10 or PR-SS-38. The 2011 PR-SS-10 and PR-SS-38 mercury values were also discussed with EPA, NYSDEC, NYSDOH and SCDHS in a June 30, 2011 teleconference and the BSA/DOE recommendation for no additional action at PR-SS-10 or PR-SS-38 was approved. The PR-WC-06, PR-SS-15 and the Sediment Trap area sediment removals were completed in January 2011. The sediment trap was also removed in January, 2011. These activities have been described in detail in the Final Peconic River Supplemental Sediment Removal Completion Report which has been approved by EPA, NYSDEC, NYSDOH and SCDHS.

The Table 2-1 data include the first year of mercury results for the three new routine sediment stations (PR-WC-06-D1-L50 (1.9 mg/kg), ST1-80-U20 (0.41 mg/kg) and PR-SS-15-U1-L65-O (0.049 mg/kg). These three stations were sampled at the locations of the most elevated mercury concentrations prior to the 2010/2011 cleanup in the PR-WC-06, sediment trap and PR-SS-15 areas, respectively. In 2012 these three stations will replace the other sediment stations, as described in the 2011 Five Year Review Report. Monitoring at these stations was implemented a year earlier (2011) than required by the 2011 Five Year Review.

PCBs and cesium-137 do not have ROD-required cleanup levels but were monitored as per the ROD because of their tendency to be deposited in the same areas as mercury. Thirty one of the 33 stations had no PCB detections greater than the Contract Required Detection Limit (Reporting Limit). At two stations, PR-SS-33 (62 ug/kg) and PR-SS-38 (160 ug/kg) only Aroclor 1254 was detected at concentrations greater than the reporting limit. The reporting limits for these two stations were 52 ug/kg and 59 ug/kg, respectively. For comparison, the pre-cleanup Aroclor-1254 concentrations ranged between non-detect and 1,500 ug/kg.

The 2011 average cesium-137 activity on laboratory property was 0.75 pCi/g, vs. a 5.7 pCi/g pre-cleanup value. The offsite areas from the BNL boundary to Schultz Road and within the Manor Road cleanup area had 2011 averages of 0.36 pCi/g and 0.24 pCi/g, respectively, vs. pre-cleanup averages of 5.4 and 2.88 pCi/g, respectively**.** Silver and copper were monitored but are not ROD-required analytes. The 2011 silver and copper averages were also substantially less than the pre-cleanup concentrations (Table 2-1).

There is one sediment monitoring recommendation based on the 2011 sediment data and one sediment monitoring modification based on the approved 2011 Five Year Review:

2011 Monitoring Report Recommendation: No additional action will be taken at PR-SS-10 or PR-SS-38. All 33 onsite and offsite mercury samples, except PR-SS-10 (2.5 mg/kg) and PR-SS-38 (2.7 mg/kg) were below the 2.0 mg/kg cleanup goal. The 2011 PR-SS-10 and PR-SS-38 mercury concentration are each within the respective ranges of concentration reported in the approved 2011 Five Year Review which recommended taking no additional PR-SS-10 or PR-SS-38 action. In a June 30, 2011 telephone conference, BSA/DOE discussed the 2011 PR-SS-10 and PR-SS-38 mercury values with EPA, NYSDEC, NYSDOH and SCDHS, who again agreed with the BSA/DOE recommendation for no additional action at these areas.

Approved 2011 Five-Year Review Sediment Monitoring Modifications: Sediment monitoring for 2012 to 2014 was evaluated in the 2011 Five-Year Review, and is summarized below:

- In 2012 the number of sampling stations will be reduced from 30 to three stations (PR-WC-06, Sediment Trap and PR-SS-15).

In 2012 the annual Peconic River sediment monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

Surface Water:

BNL has collected routine water column samples from approximately 20 water column stations, depending on water level, since 2003. The routine samples have been analyzed for total mercury, methylmercury and TSS (Total Suspended Solids). Since 2006 BNL has also analyzed samples for water quality parameters, e.g. chlorophyll-a, nitrogen compounds, TOC (Total Organic Carbon) The 2011 mean, minimum and maximum total mercury concentrations were 18.50 ng/L, 1.5 ng/L (PR-WCS-07, August), and 68 ng/L (PR-WC-06, June), respectively. Although the 2011 mean total mercury concentration is lower in 2011 than in any individual year since completion of the 2004/2005 cleanup (Figure 3-8), overlap of the error bars indicates that it is not statistically different. When the 2011 data are compared with the pooled 2006-2010 data set, the error bars do not overlap, indicating that the means are statistically different (Figure 3-9).

The 2011 mean, minimum and maximum methylmercury concentrations were 0.91 ng/L, non-detect (STP effluent outfall, June and August), and 5.9 ng/L (PR-WC-12D7, June), respectively. The 2011 mean methylmercury value is statistically less than each year except 2009 (Figure 3-10) and is also less than the pooled 2006-2010 mean methylmercury data set (Figure 3-11).

Two important contributors to the reduced total mercury concentrations are the supplemental remediation of mercury-contaminated sediment in the PR-WC-06, sediment trap and PR-SS-15 areas during the winter of 2010/2011, and 2009 operational upgrades at the STP. The June and August total mercury values at STP-EFF-UVG were the lowest values (47 ng/L and 53 ng/L, respectively) since 2007 (81.2 ng/L to 130 ng/L) when STP effluent samples were first collected concurrently with the routine Peconic River samples. The reduced STP total mercury concentrations are associated with BNL's 2009 STP sand filter bed media replacement and sewage sludge disposal, and the BNL pollution prevention program which has minimized the non-essential use of mercury.

The PR-WC-10 area had a single location in 2006 with sediment mercury concentrations as elevated as 7.1 mg/kg. Substantial supplemental sampling of the PR-WC-10 area failed to confirm the 7.1 mg/kg mercury sample value. PR-WC-10 is located in a section of the river that cannot be accessed without causing substantial negative wetland and terrestrial impacts. Recommendation 4 in the 2009 Peconic River monitoring report BNL proposed monitoring surface water concentrations of total mercury, methylmercury and TSS to evaluate the potential for downstream transport of mercury from the area. Four water column monitoring stations in the

PR-SS-10 area have been sampled for total mercury, methylmercury and TSS four times annually since 2010 to evaluate potential downstream transport of mercury from these locations. Two of the stations are located upstream and two are downstream of the PR-SS-10 elevated sediment mercury locations. The 2011 data, like the 2010 data, did not confirm substantial downstream mercury transport from the PR-SS-10 area.

There are no new recommendations based on the 2011 Peconic River surface water monitoring data. The 2011 Five Year Review modifications to the 2012 and future surface water monitoring will be as follows:

Approved 2011 Five-Year Review Water Column Monitoring Modifications: Per the 2011 Five Year Review, the following water column modifications will be implemented in 2012:

- BSA/DOE will monitor the water-column for total mercury, methylmercury and TSS two times per year at the 15 routine stations between PR-WC-15 (upstream of STP-EFF-UVG) and PR-WC-02.
- BSA/DOE will discontinue water-column monitoring at stations between and including PR-WC-01 and PR-WCS-07 in 2012, with the exception of PR-WCS-04 (west of the Cranberry Bogs) and PR-WCS-06 (Donahue's Pond). PR-WCS-04 is near the downstream extent of the Manor Road cleanup area and will be monitored through 2012 as part of the routine water column monitoring program. The need for continued monitoring at this location will then be evaluated. PR-WCS-06 is outside the cleanup area and will continue to be sampled as part of the routine environmental surveillance program.
- BSA/DOE will discontinue monitoring the Peconic River for water quality parameters (chlorophyll-a, N, P, TOC, and TSS) in 2012.

In 2012 the annual Peconic River water column monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

Fish:

In 2011 264 fish were caught and prepared for analysis as fillets (Table 4-3). Fifty eight of the fish were analyzed as single-fish samples. The remaining 206 fish were analyzed as

composite samples consisting of two or more individual fish to meet the analytical laboratory's sample size requirements. The resulting fish samples were then allocated to analysis for mercury, PCBs, and/or cesium-137.

The 2011 mean (or average) mercury concentration for all fish was 0.307 mg/kg, which is substantially lower than the 1997/2001 pre-cleanup mean (0.58 mg/ kg[3]) and approximately the same as the EPA mercury water quality criterion (0.3 mg/kg). The 2011 minimum and maximum fish mercury concentrations were 0.0513 mg/kg (Donahue's Pond, age 6 and age 9 brown bullheads) and 1.52 mg/kg (Area C, age 10 largemouth bass), respectively. Figure 4-11 summarizes the 2011 fish mercury results relative to the 2006-2011 fish mercury data set and three reference values. The reference values are the 1997 and 2001 pre-cleanup mean fish mercury concentration (0.58 mg/kg), the EPA maximum average fish mercury concentration (0.47 mg/kg) that can safely be consumed for an individual eating 2 fish meals per month and the EPA mercury water quality criterion (0.3 mg/kg) that is based on fish consumption. The 2006-2011 Figure 4-11 mean mercury concentrations clearly decrease with increasing distance downstream, as do the 2011 fish mean mercury concentrations plotted in Figure 4-2[4]. There are no significant trends in the mean annual mercury concentrations for any specific fish collection area.

Ninety eight PCB analyses (14 samples times 7 aroclors per sample) were performed on the 2011 fish. All samples were less than the reporting limit for five of the seven aroclors (Aroclor-1016, Aroclor-1021, Aroclor-1232, Aroclor-1242, and Aroclor-1248). The 2011 mean concentration[5] for Aroclor-1254 (10.13 ug/kg) is approximately one hundredth of the 1996/1997[6] mean pre-cleanup value (1,205.21 ug/kg). The minimum and maximum values for Aroclor-1254 were 4.6 ug/kg (a J-qualified estimated value less than the 9.96 ug/kg reporting limit) and 22.2 ug/kg, respectively. Only four of the 98 analyses (Appendix H) had values greater than the reporting limit (mean reporting limit was 9.91 ug/kg). Three of the four detections above the reporting limit were for brown bullheads with Aroclor-1254 concentrations of 14.3 ug/kg, 18.4

[3] Details on the pre-cleanup fish mercury concentrations are discussed in the Final 2009 Peconic River Monitoring Report, page 33.
[4] The distances of the midpoint of each fish collection area downstream of the BNL STP are: Area A (0.3miles), Area C (0.8 miles), Area D (1.6 miles), Schultz Road (2.9 miles), Manor Road (4.4 miles), and Donahue's Pond (7.0 miles).
[5] The calculated mean included all reported values. Non-detects had the values of the respective detection limits.
[6] The 1996 and 1997 data are based on four 1996 samples and 67 1997 samples reported in Appendices F3 and F4, respectively, of Volume V of the Final Operable Unit V Remedial Investigation Report, May 27, 1998.

ug/kg and 22.2 ug/kg. The fourth brown bullhead had an Aroclor-1260 concentration of 10.4 ug/kg.

Eighty seven fish samples were analyzed for cesium-137 in 2011. The 2011 mean cesium-137 activity (0.17 pCi/g) was well below the 1996/1997 pre-cleanup mean activity (1.37 pCi/g). The minimum and maximum cesium-137 activities were 0.0522 pCi/g (Donahue's Pond brown bullhead, age 5) and 0.51 pCi/g (Area A pumpkinseed age 3.2), respectively. Onsite fish (Areas A, C, D) had a 0.21 pCi/g average and offsite fish (Schultz Road, Manor Road, and Donahue's Pond) had a 0.12 pCi/g average. Figure 4-10 shows the distribution of the 2011 cesium-137 analytical results, sorted by species, area, and age.

There are no new fish monitoring recommendations based on the 2011 fish data. As discussed in the approved 2011 Five Year Review and the Final 2010 Peconic River Monitoring Report, future fish monitoring will be modified in the following ways:

- Frequency will be modified from one round annually to one round every other spring. Between 2012 and 2016, fish will be collected in the spring of 2013 and 2015. Harvesting fish biennially will allow the fish population to grow in both number and individual size.
- Monitoring of fish from the Manor Road area will be discontinued after the 2011 collection, due to the typically low fish catch in that area. Every two years of fish monitoring would occur in Area A[7], (downstream of the STP), Area D, Schultz Road, and Donahue's Pond, when water depths are favorable. Supplemental sampling in Area C will be discontinued unless the yield is low in the two adjacent areas (Area A and Area D).
- Scale and otolith age interpretation will continue through 2015.

[7] BSA/DOE expects to initiate discharge of treated STP effluent to the water table rather than to the Peconic River in 2014. This may cause water levels in Area A (and possibly Area D) to be too low to for fish migration except during the spring. Fish collection locations may require revision following the groundwater discharge of the STP effluent.

In 2012 the annual Peconic River fish monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

Sediment Trap and PR-WC-06, Sediment Trap and PR-SS-15 Sediment Removal and Wetland Restoration:

During January 2011 the Peconic River Sediment Trap, located adjacent to Z path and upstream of stream gauging station HQ, was removed as required by the Peconic River ROD. Between November 2010 and January 2011 supplemental sediment was also removed from the PR-WC-06, Sediment Trap, and PR-SS-15. The waste was transported to a Subtitle D landfill (Allied Waste Niagara Falls Landfill in Niagara Falls, NY) in late February and early March 2011. These actions were recommended in Recommendation 5 of the 2009 Peconic River Monitoring Report[8] and have been described in detail in the Final Peconic River Supplemental Sediment Removal Completion Report.

Following the completion of the sediment removal the river depths receded to workable depths and the wetland plant communities were restored between July 18 and July 21, 2011. All plants used in the restoration were harvested from adjacent, previously remediated (2004-2005), sections of the Peconic River and transplanted into the low-marsh sections of the PR-WC-06, Sediment Trap and PR-SS-15 areas that had been remediated between November 2010 and January 2011. The details of the transplant activities are included in the Final Wetland Restoration Summary that is included as Appendix G in the Final Peconic River Supplemental Sediment Removal Completion Report.

[8] **2009 Recommendation 5**: BNL/DOE recommends that the sediment trap be removed in coordination with the accelerated removal of sediment with elevated mercury concentrations. Both the sediment trap removal and the accelerated sediment removal are scheduled to be conducted in 2010.

Table E-1. Recommendation and Future Monitoring Modifications	
Sediment:	
1	**2011 Monitoring Report Recommendation**: • No additional action will be taken at PR-SS-10 or PR-SS-38. All 33 onsite and offsite mercury samples, except PR-SS-10 (2.5 mg/kg) and PR-SS-38 (2.7 mg/kg) were below the 2.0 mg/kg cleanup goal. The 2011 PR-SS-10 and PR-SS-38 mercury concentration are each within the respective ranges of concentration reported in the approved 2011 Five Year Review which recommended taking no additional action at PR-SS-10 or PR-SS-38. The 2011 PR-SS-10 and PR-SS-38 mercury values were also discussed with EPA, NYSDEC, NYSDOH and SCDHS in a June 30, 2011 teleconference and no further action was needed.
2	**Approved 2011 Five-Year Review Sediment Monitoring Modifications:** Sediment monitoring for 2012 to 2014 was evaluated in the 2011 Five-Year Review, and is summarized below: • In 2012 the number of sampling stations will be reduced from 30 to three stations (PR-WC-06-D1-L50, ST1-U80-L20 and PR-SS15-L65-O) located in the 2010/2011 cleanup areas (PR-WC-06, Sediment Trap and PR-SS-15).
Surface Water:	
3	**Approved 2011 Five-Year Review Water Column Monitoring Modifications:** • BSA/DOE will monitor the water-column for total mercury, methylmercury and TSS two times per year at the 15 routine stations between PR-WC-15 (upstream of STP-EFF-UVG) and PR-WC-02. • BSA/DOE will discontinue water-column monitoring at stations between and including PR-WC-01 and PR-WCS-07 in 2012, with the exception of PR-WCS-04 (west of the Cranberry Bogs) and PR-WCS-06 (Donahue's Pond). PR-WCS-04 is near the downstream extent of the Manor Road cleanup area and will be monitored through 2012 as part of the routine water column monitoring program. The need for continued monitoring at this location will then be evaluated. PR-WCS-06 is outside the cleanup area and will continue to be sampled as part of the routine environmental surveillance program. • BSA/DOE will discontinue monitoring the Peconic River for water quality parameters (chlorophyll-a, N, P, TOC, and TSS) in 2012.
Fish:	
4	**Approved 2011 Five-Year Review Fish Monitoring Modification:** ▪ Fish monitoring frequency will be modified from one round annually to one round every other spring. Thus, between 2012 and 2016 fish will be collected in the spring of 2013 and 2015. Harvesting fish biennially will allow the fish population to grow in both number and individual size. ▪ Monitoring of fish from the Manor Road area will be discontinued after the 2011 collection, due to the typically low fish catch in that area. Every two years fish monitoring will occur in Area A[9] (downstream of the STP), Area D, Schultz Road, and Donahue's Pond, when water depths are favorable. Supplemental sampling in Area C will be discontinued unless the catch is low in the two adjacent collection areas (Areas A and D). ▪ Fish age determination via scale and otolith interpretation will continue through 2015.
5	**Sediment, Surface Water and Fish Data**
	Beginning in 2012 the Peconic River Monitoring data will be included in the annual *Site Environmental Report*. A separate annual *Peconic River Monitoring Report* will be discontinued.

[9] Note that BSA/DOE expect to initiate discharge of treated STP effluent to the water table rather than to the Peconic River, in 2014. This may cause water levels in Area A (and possibly also Area D) to be too low for fish migration except during the spring. Fish collection locations may require revision following groundwater discharge of the STP effluent.

SECTION 1 – INTRODUCTION

1.1 Introduction

Brookhaven National Laboratory (BNL) is a multi-disciplinary research facility located in Suffolk County, New York. Wastewaters at BNL are directed to the Sewage Treatment Plant (STP), and are treated and discharged in accordance with State Pollutant Discharge Elimination System (SPDES) limits into the western branch of the Peconic River. Historical discharges from the STP have resulted in elevated concentrations of heavy metals, polychlorinated biphenyls (PCBs) and radionuclides in the Peconic River sediments. The Final Operable Unit V Record of Decision (ROD) for Area of Concern 30 (Peconic River) specifies the cleanup limits and long-term monitoring requirements. Remediation of river sediments occurred in 2004 and 2005, and consisted of two phases of sediment excavation and removal, and post-excavation sampling. The sections of the river that were remediated are shown in Figures 1-1, 1-2 and 1-3. The following three bullets excerpted from page iii of the ROD summarize the Peconic River cleanup goals which provide the basis for the annual monitoring program discussed in this report[10].

- The on-Laboratory cleanup areas are shown in Figure 1-2. On Laboratory property, this alternative would focus on sediment in designated depositional areas. For the sections of the river on Laboratory property, the average mercury concentration after remediation will be less than 1 ppm[11], with a goal that all mercury concentrations in the remediated areas are less than 2 ppm following the cleanup. The 1 ppm limit is expected to protect human health and the environment under current conditions.

- The outside Laboratory cleanup areas are shown in Figures 1-2 and 1-3. This remedy would focus on a more stringent cleanup target concentration outside BNL property. This alternative would also allow the greatest flexibility in the uses of the area as County parkland or any potential future development. Sediment would be removed from the ponded areas where methylation leading to bioaccumulation is most likely to occur, as well as other areas containing higher concentrations of contamination between the Laboratory property line and

[10] The cleanup goals are limited to the average and maximum mercury concentrations specified for on and outside BNL property. The ROD does not include cleanup goals for the water column or fish.

[11] The ROD states the cleanup requirements in terms of ppm (parts per million). This report states all concentrations in terms of the units of contaminant per unit of environmental matrix in which the contaminant is found, for example milligrams per kilogram (mg/kg). For mercury in sediment the concentration is expressed as mg of mercury per kg of sediment. The terms mg/kg and ppm are equivalent, hence one mg/kg equals one ppm.

Connecticut Avenue. The average mercury concentration within the sediment outside Laboratory property will be less than 0.75 ppm, with a goal that all mercury concentrations in the remediated areas are less than 2 ppm following the cleanup.

- A monitoring program has been implemented to demonstrate the effectiveness of the cleanup. This includes near-term monitoring to establish the basis for the long-term monitoring program. As part of this program, the Department of Energy (DOE) will continue to evaluate all available data to determine if additional remediation is required to ensure the protection of human health and the environment. This program includes methylmercury water column sampling, sediment sampling, and fish sampling, and covers areas of interest both on and off BNL property.

In May 2004, BNL initiated a two-phased remediation effort to address contaminated sediments in the Peconic River. Phase 1, conducted between May and September 2004, removed approximately 13,000 cubic yards of river sediments from BNL property. Following the on-site cleanup, 788 post-excavation sediment monitoring points (located both within and outside the remediation areas) were sampled to evaluate the effectiveness of the Phase 1 activities. The Phase 1 activities resulted in a 96% reduction in average mercury concentration in river sediments on BNL property, from about 4.6 milligrams per kilogram (mg/kg) to 0.2 mg/kg (Envirocon, 2005). Phase 2, conducted between September 2004 and May 2005, removed approximately 8,200 cubic yards of river sediments situated outside of BNL property in Suffolk County parklands. Following the off-site cleanup, 1,442 and 149 post-excavation confirmation sediment sampling points were sampled (within and outside the cleanup areas) to evaluate the effectiveness of the Phase 2 activities in the section of the river from the BNL property line to Schultz Road, and within the Manor Road cleanup area, respectively. The Phase 2 activities resulted in a 95% reduction in average mercury concentration in river sediments downstream of the BNL property line, from 1.8 mg/kg to 0.09 mg/kg (excluding the Manor Road area). In the Manor Road area, an 83% reduction in mercury sediment concentrations was realized (from 1.08 mg/kg to 0.19 mg/kg) (Envirocon, 2005).

The long-term effectiveness of the cleanup is monitored once annually for mercury, PCBs and cesium-137 in Peconic River sediment, and mercury and radionuclides in fish tissue. Peconic River post-cleanup monitoring began in 2006. Consequently, 2011 was the sixth year of

post-remediation sediment, surface water and fish monitoring. Fish collected on the laboratory property are additionally analyzed for PCBs. Fish are collected from sections of the river located on BNL property when samples can be collected without negatively impacting the overall fish population. Surface water monitoring for total mercury and methylmercury is performed twice annually (June and July or August, depending on river-water depths at the water column monitoring stations). Details of the sampling plan are described in the Operable Unit I Soils and Operable Unit V Long-Term Monitoring and Maintenance Plan (LTMM Plan) (BNL 2006). The 2011 Peconic River sampling was conducted in accordance with the long-term sampling requirements stated in the Peconic River Record of Decision. This document summarizes the results of the 2011 Peconic River monitoring. Sampling locations are shown on Figures 1-4, 1-5 and 1-6.

Supplemental sediment removal for three small areas (PR-WC-06, PR-SS-15 and the sediment trap areas) was completed in January 2011 and is described in the Final Peconic River Supplemental Sediment Removal Completion Report.

Peconic River post-cleanup monitoring began in 2006. Consequently, 2011 was the first year of post-2010/2011 supplemental remediation monitoring and the sixth year of post-2004/2005 remediation sediment, surface water and fish monitoring.

Of the analytes for which the ROD requires monitoring (mercury, methylmercury, PCBs, cesium-137), there are only cleanup goals for mercury in sediment. Analytes without ROD-required cleanup goals (methylmercury, PCBs, and cesium-137) are compared to their respective pre-cleanup concentrations to demonstrate the concentration trends of these contaminants since the cleanup. Additional chemical parameters that are part of the water quality monitoring are provided in the appendices. These parameters are only discussed in the text when they are relevant as supporting data for the goals of the monitoring program. Examples in the 2011 report include, but are not limited to: 1) chlorophyll-a and total organic carbon (TOC) concentrations that may indicate biologically active sections of the river and may influence the rate of conversion of total mercury to methylmercury and/or contribute to elevated Total Suspended Solids (TSS) measurements; 2) TSS measurements that may indicate potential inclusion of suspended sediment in the water column and a potential contribution to the mercury concentration of specific surface water samples; and, 3) dissolved oxygen (DO) that may influence the distribution and abundance of fish in various sections of the river.

Data are reported in the appendices as received from the analytical laboratory. The laboratory reports the analytical values of non-detects with a “U” qualifier for metals and PCBs

as the values of the reporting limits. These values are used in calculations. Low concentration PCBs may be reported with a value less than the reporting limit and with a "J" qualifier indicating an estimated value. These estimated values are used unchanged in calculations, and are reported with the J qualifier and the reporting limit. Radionuclides that are non-detects also have a "U" qualifier, and the reported analytical values may be negative or positive, but less than the respective reporting limit. In these cases the values of the respective reporting limit is used in calculations. This conservative practice has the potential to calculate slightly elevated radionuclide activities relative to use of the laboratory reported values, but has the merit of treating non-detects of radionuclides the same as metals and PCBs.

1.2 Report Organization

Sediment monitoring results are discussed in Section 2, water column monitoring results are discussed in Section 3, and fish monitoring results are discussed in Section 4. At the end of each section, recommendations are provided for that environmental medium (e.g. sediment, surface water, and fish).

The complete set of analytical data collected during the 2011 Peconic River Monitoring is provided in the Appendices.

SECTION 2 - 2011 SEDIMENT MONITORING RESULTS

2.1 Introduction

The Peconic River ROD requires that the long-term effectiveness of the cleanup be monitored once annually for mercury, PCBs and cesium-137 in sediment. The annual routine post-cleanup sediment sampling began in June 2006 and was repeated each year between 2007 and 2011 according to the procedures discussed in Section 3.0 of Appendix C of the LTMM Plan (BNL, 2006). The locations of the annual sediment and surface water stations, listed in order from upstream of the STP to downstream of Connecticut Avenue, are shown in Figures 1-4, 1-5, and 1-6. The station labels, e.g. PR-SS-38/0.36, indicate the station name (PR-SS-38) and the distance of the station in miles upstream (negative number) or downstream (positive number) from the STP (e.g., 0.36 miles downstream for PR-SS-38)[12].

Ten percent of the samples were also analyzed for silver and copper. Silver, copper, PCBs and cesium-137 do not have cleanup goals specified in the ROD, and therefore they are compared to pre-cleanup sediment concentrations to assess cleanup effectiveness. The 2011 sediment samples were collected to: evaluate potential changes in the annual concentrations of mercury in the sediment at the 30 routine and three additional stations. The 2011 Five Year Review proposed replacing the routine monitoring stations with three new routine sediment monitoring stations (ST1-80-U20 in the Sediment Trap Area, PR-WC-06-D1-L50 in the PR-WC-06 Area and PR-SS-15-D1-L65 in the PR-SS-15 Area) from sections of the river from which supplemental sediment was removed in December 2010 and January 2011. In 2012 these three stations will replace the other sediment stations, as described in the 2011 Five Year Review report and approved by EPA, NYSDEC, NYSDOH, and SCDHS.

The 2011 routine annual sediment sampling results are discussed in Section 2.2.

2.2 2011 Routine Sediment Monitoring Results

As part of the 2011 Peconic River annual long-term monitoring program, the 30 routine sediment monitoring stations shown on Figures 1-4, 1-5 and 1-6 were sampled, as well as three new routine stations discussed below. . Routine sediment monitoring stations are monitored on

[12] Manor Road and Donahue's Pond sediment sampling stations are identified with an "MR" or "DP" rather than with an "SS: The water column sampling stations are also identified on these maps, with "WC" replacing the "SS" to identify locations where surface water samples are collected (see Chapter 3). PR-WC-01 identifies the first water column sampling station upstream of Schultz Road, and PR-WCS-01 identifies the first water column sampling station downstream of Schultz Road.

an annual basis. Supplemental monitoring stations are sampled to gain additional information about a specific routine monitoring station sample result, or the extent of contamination in the area in which the routine monitoring station is located.

The 2011 routine sediment monitoring results for mercury, silver, copper, PCBs and cesium-137 are summarized in Table 2-1. BNL has routinely analyzed 10% of the samples for silver and copper. Also included in Table 2-1 are the pre-cleanup average mercury, silver and PCB concentrations and the 2011 average mercury concentrations for the routine onsite sediment monitoring stations, the routine offsite monitoring stations to Schultz Road and the routine offsite monitoring stations at Manor Road. All 30 routine sediment monitoring stations plus the three new monitoring stations are located downstream of the BNL STP and therefore have positive distances. For reference, Table 2-2 shows the 2006-2011mercury data for each of the routine sediment monitoring stations.

The Table 2-1 and 2-2 data include the first year of mercury results for the three new routine sediment stations (PR-WC-06-D1-L50 (1.9 mg/kg), ST1-80-U20 (0.41 mg/kg) and PR-SS-15-U1-L65-O (0.049 mg/kg) listed in Table 2-1. Monitoring these three new routine sediment stations was initiated a year earlier (2011) than required by the 2011 Five Year Review. These three stations were sampled at the most elevated pre-2010/2011 mercury cleanup locations in the PR-WC-06, sediment trap and PR-SS-15 areas, respectively. As recommended in the 2011 Five Year Review, in 2012 BNL/DOE will discontinue monitoring all of the routine sediment stations listed in Table 2-1 except the three new routine sediment monitoring stations (PR-WC-06-D1-L50, ST1-80-U20 and PR-SS-15-U1-L65-O) located in the sections of the river cleaned up during the winter of 2010/2011.

All of the 2011 Peconic River routine sediment monitoring values are substantially less than the pre-cleanup average values (Table 2-1). Overall, the 2011 mercury average for the 15 onsite routine sediment monitoring stations plus the two onsite new stations (PR-WC-06-D1-L50 and ST1-U80-L20) within the cleanup area was 0.59 mg/kg, relative to a cleanup goal of 1.0 mg/kg (Figure 1-4, Table 2-1). All mercury samples, except (PR-SS-38 at 2.7 mg/kg and PR-SS-10 at 2.5 mg/kg), were below the 2.0 mg/kg cleanup goal. The 2011 average mercury concentration for the 13 offsite routine sediment monitoring stations between PR-SS-15-L65-O at the BNL boundary and PR-SS-01 at Schultz Road was 0.47 mg/kg, relative to a cleanup goal of 0.75 mg/kg (Figures 1-4 and 1-5, Table 2-1). The 2011 average mercury concentration for the two stations at Manor Road was 0.1 mg/kg. The single routine sediment monitoring station at Donahue's Pond (PR-DP-01) had a 0.008 mg/kg sediment mercury concentration, but was

excluded from the averaging because it is located approximately two miles downstream of the most downstream cleanup area (Manor Road). Note that the Table 2-1 data also indicates very considerable percent reductions[13] (greater than 72%) in the 2011 average concentrations of each analyte relative to the pre-cleanup average[14] concentrations for the onsite, offsite to Schultz Road, and Manor Road areas.

As shown in Table 2-2, the average mercury concentration for all 2006 - 2011 routine sediment monitoring stations was 0.58 mg/kg onsite and 0.52 mg/kg for all of the offsite stations between the BNL boundary and Manor Road. During this period, each sample collected at Donahue's Pond, which is located approximately 2.25 miles downstream of the Manor Road cleanup area, had a five year average of approximately 0.12 mg/kg with no sample greater than 0.239 mg/kg.

Silver, copper, PCBs and cesium-137 are co-located with mercury in depositional areas. These co-located contaminants do not have ROD-required cleanup goals, and were therefore compared with their pre-cleanup averages (Table 2-1). The 2011 silver, copper, PCB and cesium-137 concentrations were substantially lower than the pre-cleanup averages and most of the 2011 PCB results were smaller than or close to the reporting limits. Refer to Appendices A, B and C for detailed metal, PCB, and radionuclide analytical results, respectively.

Two hundred twenty seven of 231 PCB analyses (7 aroclors at each of 33 stations) had no PCB detections greater than the reporting limit. Five of the seven aroclors (Aroclor-1016, Aroclor-1021, Aroclor-1232, Aroclor-1242, and Aroclor-1248) were not detected at any of the 33 sediment monitoring stations. Aroclor-1260 was detected at estimated concentrations lower than the reporting limit. Thirty one of 33 routine stations had no detections of PCBs larger than the reporting limit. Two of the 33 sediment monitoring stations had detections of Aroclor-1254 greater than the reporting limits (PR-SS-33: 62 ug/kg and 52 ug/kg, respectively; and, PR-SS-38: 160 ug/kg and 59 ug/kg, respectively). For comparison, the pre-cleanup Aroclor-1254 concentrations ranged between non-detect and 1,500 ug/kg, with a mean concentration of 133 ug/kg.

The 2011 average cesium-137 activity on laboratory property was 0.75 pCi/g, vs. a 5.7 pCi/g pre-cleanup average activity. The offsite areas from the BNL boundary to Schultz Road and within the Manor Road cleanup area had 2011 averages of 0.57 and 0.25 pCi/g, respectively,

[13] Percent reduction was calculated as (Pre-cleanup average – 2011 average)/Pre-cleanup average.

[14] The pre-cleanup averages were obtained from Tables 8, 10 and 12 of the Final Closeout Report, Peconic River Remediation, Phases 1 and 2, Brookhaven National Laboratory prepared for Brookhaven Science Associates by Envirocon, Inc. August 25, 2005.

vs. pre-cleanup averages of 5.4 and 2.88 pCi/g, respectively. Silver and copper were monitored but are not ROD-required analytes. The 2011 silver and copper averages were also substantially less than the pre-cleanup concentrations (Table 2-2).

2.3 Sediment Summary

Thirty three sediment stations were sampled in 2011. The 33 stations include 30 routine stations and three additional stations discussed below that will replace the routine stations in 2012, as per the 2011 Five Year Review and the 2010 Peconic River Monitoring Report. The 2011 mean, minimum and maximum mercury concentrations among all 33 sediment stations were 0.50 mg/kg, 0.008 mg/kg and 2.7 mg/kg, respectively.

The 2011 onsite (0.59 mg/kg) and offsite from the BNL border to Schultz Road (0.47 mg/kg) and the Manor Road area (0.1 mg/kg) mean mercury values were substantially less than the respective pre-cleanup values of 4.60 mg/kg, 1.79 mg/kg and 1.08 mg/kg means. The 2011 values were also substantially less than the respective ROD-specified mean mercury values. The Peconic River ROD specifies that the mean onsite mercury concentration be less than 1.0 mg/kg and that the mean mercury concentration be less than 0.75 mg/kg. The ROD also specifies a goal that all mercury concentrations in cleanup areas will be less than 2.0 mg/kg.

All 33 onsite and offsite mercury samples, except PR-SS-10 (2.5 mg/kg) and PR-SS-38 (2.7 mg/kg) were below the 2.0 mg/kg cleanup goal. Donahue's Pond, which is approximately 2.25 miles downstream of the Manor Road cleanup area had the minimum mercury concentration (non-detect at 0.00834 mg/kg). Because of its distance downstream from the most downstream cleanup area, the Donahue's Pond value is not included in the offsite calculations. The 2011 PR-SS-10 and PR-SS-38 mercury concentrations are each within the respective concentration range reported in the approved 2011 Five Year Review, which recommended taking no additional action at PR-SS-10 or PR-SS-38. In a June 30, 2011 telephone conference, BSA/DOE discussed the 2011 PR-SS-10 and PR-SS-38 mercury values with EPA, NYSDEC, NYSDOH and SCDHS, who agreed with the BSA/DOE recommendation for no additional action at these areas.

The PR-WC-06, PR-SS-15 and the Sediment Trap area sediment removals were completed in January 2011. The sediment trap was also removed in January, 2011. These activities have been described in detail in the Final Peconic River Supplemental Sediment

Removal Completion Report which has been approved by EPA, NYSDEC, NYSDOH and SCDHS.

The Table 2-1 data include the first year of mercury results for the three new routine sediment stations (PR-WC-06-D1-L50 (1.9 mg/kg), ST1-80-U20 (0.41 mg/kg) and PR-SS-15-U1-L65-O (0.049 mg/kg). These three stations were sampled at the locations of the most elevated mercury concentrations prior to the 2010/2011 cleanup in the PR-WC-06, sediment trap and PR-SS-15 areas, respectively. In 2012 these three stations will replace the other sediment stations, as described in the 2011 Five Year Review Report, which has been approved by EPA, NYSDEC, NYSDOH and SCDHS. Monitoring at these stations was implemented a year earlier (2011) than required by the 2011 Five Year Review.

PCBs and cesium-137 do not have ROD-required cleanup levels but were monitored as per the ROD because of their tendency to be deposited in the same areas as mercury. Thirty one of the 33 stations had no PCB detections greater than the Contract Required Detection Limit (Reporting Limit[15]). At two stations PR-SS-33 (62 ug/kg) and, PR-SS-38 (160 ug/kg) only Aroclor 1254 was detected at concentrations greater than the reporting limit. The reporting limits for these two stations were 52 ug/kg and 59 ug/kg, respectively. The mean 2011 Aroclor-1254 concentrations was 48.6 ug/kg, with a mean Reporting Limit of 57.03 ug/kg. The mean is less than the Reporting Limit or CRDL (Contract Required Detection Limit) because the Aroclor-1254 data includes several estimated values that are less than the CRDL. These values are qualified with a "J" in Appendix B. For comparison, the pre-cleanup Aroclor-1254 concentrations ranged between non-detect and 1,500 ug/kg, with an average of 133 ug/kg.

The 2011 average cesium-137 activity on laboratory property was 0.75 pCi/g, vs. a 5.7 pCi/g pre-cleanup value. The offsite areas from the BNL boundary to Schultz Road and within the Manor Road cleanup area had 2011 averages of 0.36 pCi/g and 0.24 pCi/g, respectively, vs. pre-cleanup averages of 5.4 and 2.88 pCi/g, respectively**.** Silver and copper were monitored but are not ROD-required analytes. The 2011 silver and copper averages were also substantially less than the pre-cleanup concentrations (Table 2-1).

There is one sediment monitoring recommendation based on the 2011 sediment data and one sediment monitoring modification based on the approved 2011 Five Year Review:

2011 Monitoring Report Recommendation: No additional action will be taken at PR-SS-10 or PR-SS-38. All 33 onsite and offsite mercury samples, except PR-SS-10 (2.5 mg/kg) and PR-SS-38 (2.7 mg/kg) were below the 2.0 mg/kg cleanup goal. The 2011 PR-SS-10 and PR-SS-38 mercury concentration are each within the respective ranges of concentration reported in the approved 2011 Five Year Review which recommended taking no additional action at PR-SS-10 or PR-SS-38. In a June 30, 2011 telephone conference, BSA/DOE discussed the 2011 PR-SS-10 and PR-SS-38 mercury values with EPA, NYSDEC, NYSDOH and SCDHS, who agreed with the BSA/DOE recommendation for no additional action at these areas.

Approved 2011 Five-Year Review Sediment Monitoring Modifications: Sediment monitoring for 2012 to 2014 was evaluated in the 2011 Five-Year Review, and is summarized below:

- In 2012 the number of sampling stations will be reduced from 30 to three stations (PR-WC-06-D1-L50, ST1-U80-L20 and PR-SS15-L65-O) located in the winter 2010/2011 cleanup areas (PR-WC-06, Sediment Trap and PR-SS-15).

In 2012 the annual Peconic River sediment monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

SECTION 3 - 2011 WATER COLUMN MONITORING RESULTS

3.1 Introduction

The LTMM Plan indicates that twice each year, water column monitoring stations in the Peconic River will be sampled for total mercury, methylmercury and TSS. The reference sample from the Connetquot River was collected to provide information on total mercury and methylmercury levels in a nearby system that is not impacted by a known mercury source. There are a total of 24 water column stations, consisting of 22 Peconic River stations, plus the effluent from the BNL Sewage Treatment Plant (STP-EFF-UVG) and one reference station in the Connetquot River. The Connetquot River station serves as a basis for comparison to data collected from the Peconic River upstream of the STP, but because it is only a single sample location, the Connetquot River reference station should not be considered to be representative of "background".

3.2 Data Collection Summary

Peconic River water column sample locations are shown in Figures 1-4, 1-5 and 1-6 together with the sediment sample locations. Stations whose identification number begins with a "PR-WC-" are water column stations located upstream of Schultz Road. The "PR-WC" station numbers increase from PR-WC-01 with increasing distance upstream of Schultz Road. The water column stations that are downstream of Schultz Road begin with "PR-WCS-". The "PR-WCS-" station numbers increase from PR-WCS-01 with increasing distance downstream of Schultz Road to PR-WCS-07 at Connecticut Avenue.

In 2007, a minimum required water depth of one foot was established for the water sampling program to minimize potential re-suspension and sampling of river sediment during water column sampling. Sediment re-suspension may confound the interpretation of surface water analytical results. When the river depth at a sample location is less than 12 inches deep attempts have been made to relocate a sampling point to deeper water within the general area scheduled for sampling. The stations that most frequently cannot be sampled are located upstream of where the STP effluent enters the river. The STP effluent enters the river approximately 50 feet upstream of station PR-WC-11DS (Figure 1-4).

Two rounds of post-remediation water column sampling were conducted in June and August of 2007 and June and July of 2008, 2009 and 2010. Field observations in 2008-2010

indicated that water levels in the river were decreasing sufficiently rapidly to jeopardize an August collection. In response to these observations, the second round of the 2008 through 2010 routine annual mercury, methylmercury and TSS water column monitoring was accelerated to begin in July. In 2011 mercury, methylmercury and TSS samples were collected during August because of July schedule conflicts with wetland replanting activities associated with the 2010/2011 PR-WC-06, PR-SS-15 and sediment trap area remediation.

Quality assurance and quality control (QA/QC) samples included collection of field blanks, field replicates and pairs of matrix spike/matrix spike duplicates (MS/MSD). Equipment blanks were not necessary, since disposable sampling equipment was used at each sampling location.

The standard method for collecting Peconic River water column samples for total mercury, methylmercury and TSS analysis consists of collecting a single, large (2-liter) volume water sample at each sampling location. The collected sample is then analyzed at the analytical laboratory for the three analytes. This methodology ensures that the total mercury, methylmercury and TSS analytical results for each water sampling location represent the same water mass. This aids the interpretation of potentially anomalous results.

In addition to the routine total mercury, methylmercury and TSS sampling, routine water quality sampling was also conducted to assist in the interpretation of the total mercury and methylmercury data. This program collects water quality samples from eight stations distributed throughout the remediated sections of the river approximately two to three weeks prior to, during, and after the June and August mercury, methylmercury and TSS sampling (Table 3-1). A total of five water quality rounds were conducted in 2011. Three of the five rounds (the "short" rounds) were stand-alone water quality surveys (i.e. total mercury and methylmercury samples were not collected). Eight stations, water level permitting, are sampled during the short rounds. Two rounds (the "long" rounds) of water quality monitoring are performed concurrent with the mercury, methylmercury and TSS water column sampling. Twenty three river stations[16], water levels permitting, and the STP effluent are sampled during the long rounds.

[16] The 23 river stations include the 22 Peconic River stations and one Connetquot River station (Table 3-1). In addition to the river monitoring stations, a grab sample is also routinely collected from the STP effluent. This sample is collected from within the Ultra Violet (UV) chamber adjacent to the former chlorine house. The total number of routine water column stations thus equals 24.

3.3 Monitoring Results

Table 3-1 lists the Peconic River water column locations, schedules and sampling frequencies. Table 3-2a and 3-2b provide the analytical results and field data for the stations where conditions permitted sampling. Sixteen of the 24, including the Connetquot River, water column stations had sufficient water depth (depth greater than or equal to 1.0 foot) for sampling in June and 15 stations had sufficient depth for sampling in August, 2011. For stations that could not be sampled because of low water levels, Table 3-2a and 3-2b provides only the river depth. Figure 1-4 (PR-WC-15 to PR-WC-02), Figure 1-5 (PR-WC-06 to PR-WCS-02) and Figure 1-6 (PR-WCS-03 to PR-WCS-07) show the locations of the sampling stations. Tables 3-3 and 3-4 provide historical data for the current and past three post-cleanup years, i.e. 2008-2010 and 2011. Refer to the Final 2008 Peconic River Monitoring Report for historical monitoring data prior to 2008. Appendix D lists the details of the June and August 2011 mercury, methylmercury and TSS data.

3.4 Total Mercury

2011 is the first year since 2005 that water levels were too low to collect samples at any of the three most upstream sampling stations (PR-WC-13, PR-WC-14 and PR-WC-15). Station PR-WC-12-D7, the most upstream sample that could be collected in 2011, had June and August total mercury values of 14 ng/L and 5.7 ng/L, respectively (Tables 3-2a and 3-2b). The next station downstream was a grab sample collected at the Sewage Treatment Plant (STP) effluent outfall (STP-EFF-UVG). The June and August total mercury values at STP-EFF-UVG were the lowest values (47 ng/L and 53 ng/L, respectively) since the 2007-2010 period[17] when STP effluent samples were first collected concurrently with the routine Peconic River water column samples. The tables also show that 13 of the 15 stations that could be sampled in both June and August had total mercury values that were similar in concentration to each other.

The two stations with the highest June total mercury values were notably higher (PR-WC-06, 68 ng/L; PR-WC-08, 53 ng/L) than their August values (PR-WC-06, 33 ng/L; PR-WC-08, 31 ng/L). The June PR-WC-08 field notes indicate that this sample site is sparsely vegetated and had dense organic sediment. The elevated June total mercury values at PR-WC-08 is associated with an elevated TSS measurement (64 mg/L) and a flow measurement of 0.0 feet per

[17] The minimum, maximum and average STP-EFF-UVG total mercury values between 2007 and 2010 were 69.1 ng/L, 127 ng/L and 89.86 ng/L.

second, indicating that the elevated mercury concentration is not being transported into the area from upstream or transported downstream from the PR-WC-08 sample area, and may have been caused by a local disturbance within the collection site, such as sediment suspension and subsequent collection of suspended mercury-containing sediment during the sampling process or some other non-flow process. The cause of the June elevated PR-WC-06 value is uncertain as the TSS (2 mg/L) was quite low, suggesting that its mercury value was not caused by sediment suspension. Also, neither the field log data (Tables 3-2a and 3-2b) nor the water quality data (Appendix E) suggested an explanation for the elevated June mercury concentration.

Figure 3-1 shows the total mercury concentrations at each sample station (Site ID) and the distance of the sample station in miles upstream (negative distance) or downstream (positive distance) from the BNL STP. Downstream of PR-WC-06, the June and August total mercury concentrations are quite similar (Tables 3-2a and 3-2b and Figure 3-1[18]). The water depths at the next two stations downstream of PR-WC-06 (PR-WC-05 and PR-WC-04) were too low to sample. , At the next station (PR-WC-03, 2.1 miles downstream of the STP) the total mercury concentrations decreased to 11 ng/L and remained at 3.6 ng/L-9.4 ng/L (June samples) and 1.5 ng/L-11 ng/L for the eight August stations that could be sampled between river mile 2.98 (PR-WC-01) at Schultz Road and mile 7.23 (PR-WCS-07) at Connecticut Avenue.

The 2011 mean total mercury concentration (18.50 ng/L) is lower than the mean total mercury concentrations for the 2006-2010 data, but not statistically different from the individual annual mean total mercury concentrations (Figure 3-8), as suggested by the overlap of the 95 percent confidence limits. The 2011 total mercury annual mean is less than the mean (44.65 ng/L) of the pooled data set consisting of all routine sample data collected between 2006 and 2010 (Figure 3-9). This difference is statistically significant.

3.5 Total Suspended Solids (TSS)

A total of 14 of the TSS samples collected with the 2011 total mercury and methylmercury water column samples were less than the reporting limit of 2 mg/L. The average TSS concentration for all mercury, methylmercury, TSS stations sampled in June and August 2011 was 5.67 mg/L[19]. Note that the elevated June TSS measurement at PR-WC-08 (64 mg/L) is associated with the second most elevated total mercury value (53 ng/L). This is discussed in

[18] Figure 3-1 shows the total mercury concentrations at each sample station (Site ID) and the distance of the sample station in miles upstream (negative distance) or downstream (positive distance) from the BNL STP.

[19] The 2011 average TSS concentration was calculated using the reporting limit value of 2.0 mg/L as the value for samples that were reported as being non-detect, i.e. less than the reporting limit.

Section 3.4 above. The other June and August TSS values were all quite small for the Peconic River, less than or equal to 10 mg/L.

3.6 Methylmercury and Percent Methylmercury

Methylmercury is the biologically available form of mercury that is created by conversion of inorganic mercury to methylmercury by bacteria.[20] The June and August 2011 methylmercury results are shown on Tables 3-2a and 3-2b, respectively, and are plotted on Figure 3-3. Table 3-3 and 3-4 show the methyl mercury concentrations for each station sampled between 2008 and 2011.

The June and August samples had quite similar methylmercury values for the 13 of 15 stations with sufficient water levels for sampling. The two stations that had substantial differences between the June and August values were PR-WC-12D7 (5.9 ng/L and 0.74 ng/L, respectively) and PR-WC-08 (3 ng/L and 0.31 ng/L, respectively). The June methylmercury values at these two stations were the two highest 2011 methyl mercury values, but their August values were each substantially less than the 2011 mean concentration (0.91 ng/L). The three stations between the PR-WC-12D7 and PR-WC-08 had substantially lower June and August methylmercury concentrations (non-detect to 1.1 ng/L). The majority of the samples in the 6.45 mile section of the river between PR-WC-08 and the most downstream station (Connecticut Avenue, PR-WCS-07) had methylmercury values less than or close to 1 ng/L and 11 of these samples had values less than the maximum historic methylmercury concentration (0.89 ng/L) for the Connetquot River reference station.

The 2011 mean methyl mercury concentration (0.91 ng/L) is substantially less than the mean methylmercury concentrations for each year since completion of the 2004/2005 Peconic River cleanup (Figure 3-10). The 2011 methylmercury annual mean is also significantly less statistically than the mean (3.48 ng/L) of the pooled data set consisting of all routine sample data collected between 2006 and 2010 (Figure 3-11).

Percent methylmercury[21] is an indication of the suitability of the environment to convert inorganic mercury to methylmercury. Percent methylmercury was calculated by dividing the

[20] Because methylmercury is in a dissolved form, the mass of mercury contained in methylmercury is included in the total mercury measurement.

[21]. The magnitude of the percent methylmercury value represents the percent of the total mercury that is in the methyl form. Large percent methylmercury values indicate areas in which the conditions are more appropriate for converting inorganic mercury to methylmercury than locations with low percent methylmercury. Large percent methylmercury values do not necessarily represent large masses of methylmercury unless the total mercury concentrations are also large.

methylmercury concentration by the total mercury concentration, then multiplying the resulting ratio by 100. Percent methylmercury data are plotted on Figure 3-4.

3.7 Water Column Mercury Concentrations in PR-SS-10 Area

Recommendation 4[22] in the Final 2009 Peconic River Monitoring Report recommended monitoring of total mercury, methylmercury and TSS four times annually at stations located downstream of transects PR-SS-10-U1 and PR-SS-10-D2. Re-evaluation of the distribution of total mercury in the PR-SS-10 area prior to the initiation of the 2010 water column monitoring indicated that positioning these water column monitoring stations upstream of transect PR-SS-10-U3 and on transect PR-SS-10-D3 allows the monitoring of an additional slightly elevated mercury location on transect PR-SS-10-U3 (Figures 3-5, 3-6 and 3-7).

Figures 3-5, 3-6 and 3-7 abbreviate the two downstream water column monitoring stations (PR-SS-10-D3-WC1 and PR-SS-10-D3-WC2) as D3-WC1 and D3-WC2, respectively. The two upstream water column monitoring stations (PR-SS-10-U3-WC3, PR-SS-10-U3-WC4) are abbreviated as U3-WC3 and U3-WC4, respectively. D3-WC1 is downstream of U3-WC4 and D3-WC2 is downstream of U3-WC3. These locations monitor the potential impacts of the entire PR-SS-10 area on downstream transport of mercury from the PR-SS-10 area.

Total mercury, methylmercury and TSS samples were collected in March, April, June and August of 2011 (Table 3-5). Total mercury concentrations at the downstream stations increased slightly relative to the upstream stations during the March and April monitoring and decreased relative to the upstream stations during the June and August monitoring. The average increase in total mercury concentration was 6.2 ng/L for the four samples collected in March and April. The maximum total mercury concentration increase during the March and April was 9 ng/L (U3-WC4 to D3-WC1, April 19). However, the total mercury concentrations at the downstream stations decreased by an average of 22.5 ng/L relative to the upstream stations during the June and August monitoring. The maximum decrease in total mercury between the two upstream and two downstream stations was in August (36 ng/L from U3-WC4 to D3-WC1). For the period between March and August, the average difference between the downstream

[22] **2009 Recommendation 4:** BNL/DOE recommends that total mercury, methylmercury and TSS in the water column be monitored at two supplemental stations upstream and two supplemental stations downstream of transects PR-SS-10-U1 and PR-SS-10-D2 at the locations with mercury concentrations greater than 2.0 mg/kg. The stations will be monitored four times annually, as water levels permit, to evaluate the water column concentration of mercury and methylmercury in this area, to evaluate the potential exposure of fish in this area to potentially elevated methylmercury concentrations and to evaluate the potential downstream transport of total mercury and methylmercury from this area.

concentrations and the upstream (Downstream-Upstream) concentrations was 8.26 ng/L total mercury. This indicates that the downstream total mercury concentrations were substantially less than the upstream concentrations. These data do not support substantial downstream transport of total mercury from the PR-SS-10 area.

The downstream methylmercury concentrations were generally close to or lower than the upstream concentrations. As expected, the June and August methyl mercury values were somewhat higher than the March and April methylmercury values. This is likely caused by the increased conversion of inorganic mercury to methylmercury associated with warmer summer water temperatures than spring temperatures. The average of the differences between the upstream and downstream methylmercury concentrations was 0.12 ng/L. This indicates that for the March to August period there were slightly lower downstream methylmercury concentrations than the upstream concentrations. These data do not support substantial downstream transport of methylmercury from the PR-SS-10 area.

The total mercury, methylmercury and TSS data in Table 3-5 and Figures 3-5, 3-6 and 3-7 do not support substantial downstream transport of mercury from the PR-SS-10 area. These observations are consistent with the 2010 data.

3.8 Water Column Summary

BNL has collected routine water column samples from approximately 20 water column stations, depending on water level, since 2003. The routine samples have been analyzed for total mercury, methylmercury and TSS (Total Suspended Solids). Since 2006 BNL has also analyzed samples for water quality parameters, e.g. chlorophyll-a, nitrogen compounds, TOC (Total Organic Carbon) (Appendix E). The 2011 mean, minimum and maximum total mercury concentrations were 18.50 ng/L, 1.5 ng/L (PR-WCS-07, August), and 68 ng/L (PR-WC-06, June), respectively. Although the 2011 mean total mercury concentration is lower in 2011 than in any individual year since completion of the 2004/2005 cleanup (Figure 3-8), overlap of the error bars indicates that it is not statistically different. When the 2011 data are compared with the pooled 2006-2010 data set, the error bars do not overlap, indicating that the means are statistically different (Figure 3-9).

The 2011 mean, minimum and maximum methylmercury concentrations were 0.91 ng/L, non-detect (STP effluent outfall, June and August), and 5.9 ng/L (PR-WC-12D7, June), respectively. The 2011 mean methylmercury value is statistically less than each year except

2009 (Figure 3-10) and is also less than the pooled 2006-2010 mean methylmercury data set (Figure 3-11).

Two important contributors to the reduced total mercury concentrations are the supplemental remediation of mercury-contaminated sediment in the PR-WC-06, sediment trap and PR-SS-15 areas during the winter of 2010/2011, and 2009 operational upgrades at the STP. The June and August total mercury values at STP-EFF-UVG were the lowest values (47 ng/L and 53 ng/L, respectively) since 2007 (81.2 ng/L to 130 ng/L) when STP effluent samples were first collected concurrently with the routine Peconic River samples. The reduced STP total mercury concentrations are associated with BNL's 2009 STP sand filter bed media replacement and sewage sludge disposal, and the BNL pollution prevention program which has minimized the non-essential use of mercury.

The PR-WC-10 area had a single location in 2006 with sediment mercury concentrations as elevated as 7.1 mg/kg. Substantial supplemental sampling of the PR-WC-10 area failed to confirm the 7.1 mg/kg mercury sample value. PR-WC-10 is located in a section of the river that cannot be accessed without causing substantial negative wetland and terrestrial impacts. Recommendation 4 in the 2009 Peconic River monitoring report BNL proposed monitoring surface water concentrations of total mercury, methylmercury and TSS to evaluate the potential for downstream transport of mercury from the area. Four water column monitoring stations in the PR-SS-10 area have been sampled for total mercury, methylmercury and TSS four times annually to evaluate potential downstream transport of mercury from these locations since 2010. Two of the stations are located upstream and two are downstream of the PR-SS-10 elevated sediment mercury locations. The 2011 data, like the 2010 data, did not confirm substantial downstream mercury transport from the PR-SS-10 area.

There are no new recommendations based on the 2011 Peconic River surface water monitoring data. The 2011 Five Year Review modifications to the 2012 and future surface water monitoring will be as follows:

Approved 2011 Five-Year Review Water Column Monitoring Modifications: Per the 2011 Five Year Review, the following water column modifications will be implemented in 2012:

- BSA/DOE will monitor the water-column for total mercury, methylmercury and TSS two times per year at the 15 routine stations between PR-WC-15 (upstream of STP-EFF-UVG) and PR-WC-02.
- BSA/DOE will discontinue water-column monitoring at stations between and including PR-WC-01 and PR-WCS-07 in 2012, with the exception of PR-WCS-04 (west of the Cranberry Bogs) and PR-WCS-06 (Donahue's Pond). PR-WCS-04 is near the downstream extent of the Manor Road cleanup area and will be monitored through 2012 as part of the routine water column monitoring program. The need for continued monitoring at this location will then be evaluated. PR-WCS-06 is outside the cleanup area and will continue to be sampled as part of the routine environmental surveillance program.
- BSA/DOE will discontinue monitoring the Peconic River for water quality parameters (chlorophyll-a, N, P, TOC, and TSS) in 2012.)

In 2012 the annual Peconic River water column monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

SECTION 4 - 2011 FISH MONITORING RESULTS

4.1 Introduction

The purpose of the Peconic River fish sampling program is to monitor the effectiveness of the Peconic River cleanup and to ensure that contaminants related to BNL operations do not create a potential human health or environmental risk from fish consumption. Per the Peconic River ROD, fish must be monitored once annually for mercury and cesium-137. Fish caught on BNL property must also be monitored once annually for PCBs. Fish will be sampled in sections of the river on laboratory property when samples can be collected without negatively impacting the well-being of the fish population. The LTMM Plan states that to the extent possible, five individual fish of sufficient size to obtain an edible fillet will be collected from each of two feeding guilds within each of the five collection areas (Area A, Area D [North Street], Area P [Schultz Road], Manor Road, and Donahue's Pond) indicated on Table 4-1 and Figures 1-4, 1-5 and 1-6. The two feeding guilds are the top carnivore guild (e.g. fish eaters (piscivores) such as chain pickerel and largemouth bass) and the bottom feeder (e.g. brown bullheads). The LTMM Plan specifies alternate locations when conditions do not allow sampling the five indicated areas. Area C, an alternate location for Area D, was also sampled in 2007, 2008, 2009, and 2010 to supplement the on-site fish data. BNL also routinely samples fish at other locations as part of the BNL environmental surveillance monitoring program. The environmental surveillance monitoring data are reported each year in the BNL Site Environmental Report.

Fish Collection:

Fish were collected in the following areas between April 6 and May 13, 2011 (Table 4-2): Area A (downstream of the BNL STP), Area C, Area D at North Street, Manor Road, and Donahue's Pond. The BNL field team collected fish from Area A, Area C, Area D, Schultz Road, Manor Road, and assisted the Cold Spring Harbor fishery biologists with the collection of the Donahue's Pond samples. The BNL field team also measured, weighed and prepared all of the fish collected for off-site laboratory analysis.

The gear used and the water chemistry results are shown on Table 4-2. The 2011 water temperatures at all five fish collections stations were between 7.51 (Manor Road, April 6) and 17.6 degrees Celsius (Donahue's Pond, April 26). The dissolved oxygen concentrations were higher in 2011 than in 2010 and varied between 7.18 mg/L at Donahue's Pond on April 26 and 12.67 mg/L at Area C (April 14). The 2010 dissolved oxygen concentrations at Donahue's Pond

and Area C were 9.1 mg/L and 5.21 mg/L, respectively. The April 20 and April 21, 2011 dissolved oxygen concentrations at Area D were substantially higher than the 2010 Area D value (2.09 mg/L dissolved oxygen, August 11, 2010). The dissolved oxygen differences between the 2010 and 2011 is likely associated with the much higher 2010 water temperatures at area D (25.51 degrees Celsius) than in 2011 (7.81 and 14.01 degrees Celsius).

The total number of fish collected in 2011 was 264 (Table 4-3). Approximately 36.4 percent of the 264 fish caught were bottom feeders (96 brown bullheads) and 63.6 percent of the 2011 catch (168 fish) were predators other than brown bullheads. Bluegills and pumpkinseeds composed 14.0 percent (37 fish) and 28.0 percent (74 fish), respectively, of the total catch. Chain pickerel (33 fish) and largemouth bass (17 fish) represented approximately 14.0 and 6.4 percent, respectively, of the catch. In addition seven black crappies (2.7 percent) were collected in 2011.

Overall, the number of fish collected was larger than the number of analytical fish samples due to the need to composite some of the fish in order to achieve the required fish tissue sample mass specified by the analytical laboratory (see below).

Fish Preparation:

The BNL sample team measured the total length and weight of each individual fish, filleted each fish and weighed the fillets of each fish, labeled and bagged each fillet and then froze the fillets. As necessary to meet the analytical laboratory's (GEL Inc.) mass requirements for the requested analyses, the sampling team then grouped appropriate fillets of the same species into composites and sent the frozen individual and composite samples via overnight delivery to the analytical laboratory for processing and analysis.

Fish Tissue Compositing:

The Peconic River ROD requires that mercury, PCBs and cesium-137 be evaluated for fish collected on BNL property, and that mercury and cesium-137 be evaluated for fish collected outside BNL property. All fish samples consist only of edible tissue that was removed from the fish (filleted) by the BNL field team. The required wet weight tissue masses for mercury, PCB and cesium-137 analysis are 5 g, 120 g, and 50 g, respectively. Because the proportion of edible fish tissue to total body weight is highly variable depending on fish size and other factors, the filleted tissue from two or more fish may need to be composited together to obtain sufficient

sample mass to obtain mercury, PCB and radionuclide analyses across the size range of Peconic River fish.

BNL/DOE followed EPA guidance[23] in limiting composites to fish of the same species, fish of similar lengths, and fish collected within a week of each other. To the extent practicable, the total length of the smallest fish was also generally equal to or greater than 75 percent of the total length of the largest fish in that composite.

Table 4-4 shows the composition of the composites analyzed in 2011. For each area from which fish were collected, Table 4-4 identifies the Chain of Custody (COC) for each fish collected and each composite from that area. The Composite ID consists of the respective COC number (for example "31222") followed by a unique identifier (for example "–bc5") for each composite.

Table 4-4, page 3 of 5, also identifies the Fish ID (for example, 11--046) for each fish that was included in fish composite 31222-bc5, as well as the species, the total length, and the age of each fish. The Fish ID consists of the collection year ("11") followed by a hyphen ("-") and the sequential order in which the fish was collected, e.g. "046". Hence "11-046" represents the 46th fish collected in 2011[24], a 144 mm age 3 pumpkinseed collected from Area A. Finally, the average age of all fish within each composite is calculated as the average of the numeric ages of each fish within the composite. The four pumpkinseeds that were grouped into composite 31222-bc5 had an average total lengths of 143 mm and an average age of 2.8 years.

Fish Ageing:

BNL initiated the ageing of fish in 2008 to help explain potential age-related relationships between fish contaminant concentrations and the completion of the cleanup. In September 2004, the onsite river cleanup was completed, and in April 2005 the offsite river cleanup was completed. Fish of age 6 or younger could have been born in a cleaned up area. However, there are no year-round barriers to migration between the various sections of the river located upstream of Donahue's Pond (approximately river mile seven). None of the seasonal barriers to fish migration (e.g. the Parshall flume at stream gauging station HQ) are sufficient to prevent fish migration during periods of high water. Therefore, it is safer to assume that six-

[23] U.S. EPA 2000. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1 Fish Sampling and Analysis, Third Edition, EPA-823-B-00-007, November 2007.

[24] The BNL Fish ID is a cumulative count of all fish collected by the BNL field team and includes fish collected for other purposes and bodies of water than the Peconic River post-cleanup monitoring program from which 264 fish were collected. Analytical results for the fish that are not part of the Peconic River post-cleanup monitoring program are routinely reported in the annual Environmental Monitoring Report.

year-old fish were born during the year that remediation was completed, and seven-year-old fish were born prior to remediation being completed.

As fish grow, growth rings (similar to tree growth rings) called "annuli" are left on the fish scales and otoliths. Counting the annuli provides an estimate of fish age, similarly to counting rings on a tree. Otoliths are calcified sensory organs that function in hearing and balance. Because otolith removal and preparation for ageing are very labor intensive, fish ageing is typically done on scales for scale-bearing fish (e.g. bass and sunfish). Otolith aging is typically done for fish that do not have scales, such as catfish. For the 2011 Peconic River fish, all species except brown bullheads (a type of catfish) were aged based on scale interpretation. Brown bullheads do not have scales and were aged by otolith interpretation.

Under contract to BNL, an independent experienced fish biologist performed the otolith removal. The brown bullheads were transferred to the fish biologist via COC. The contractor removed the otoliths and returned the otoliths and brown bullheads to BNL custody. The otoliths and the scales were then transferred to a second independent contractor (EcoLogic, LLC) under separate COCs to prepare the scales and otoliths and interpret the fish ages. Scales were first cleaned and then pressed into a clear cellulose acetate plastic slide material to make a lasting impression. The labeled slides were then placed into scale envelopes labeled with the BNL Fish ID.

Otoliths were cleaned and embedded in epoxy, sectioned into thin slices, then fixed onto a glass slide with clear epoxy and labeled. The ageing was conducted using a double blind QA/QC process that involved two Ecologic, LLC fishery biologists who independently interpreted the ages of each of the fish scales and otoliths. After completing the ageing, the two biologists met to resolve any differences.

The protocol for age interpretation is described below[25]:

- For fish with no scale growth beyond the outermost annulus, ages were interpreted to be equal to the number of annuli. For example, if there were two annuli and no discernible scale growth between the outermost annulus and the outer margin of the scale, the assigned age would be two years.

- For fish with discernible growth beyond the outermost annulus, the interpreted age was based on the number of annuli with a plus sign (+) to indicate growth beyond the outermost annulus, for example 2+.

[25] BNL/DOE thanks Charles Guthrie, NYSDEC Region 1 Regional Fishery Manager for explanation of the following age interpretation convention.

- If the scale growth from the outermost annulus to the scale margin ("M") was roughly equivalent to the scale growth shown in the previous year between the two previous annuli, then the age was based on the number of annuli plus one year, followed by an "M." For example, the age of a fish whose scale had two discernible annuli plus scale growth beyond the second annulus that was roughly equal to the growth between annulus 1 and annulus 2, would be expressed as 3M. An example of this would be a fish that was born in the late spring and had completed three years of growth, but the formation of the third annulus had not yet been completed.

Appendix F shows the age interpretation data for each of the two fishery biologists, the notes they recorded for a given set of scales or otoliths, and the final agreed-upon age. The analytical data in Appendices G, H, and I, can be cross referenced with the age data in Appendix F by Fish ID or composite ID (Table 4-4). Whenever the assigned ages were used in calculations (such as when calculating the average age of the fish within a composite), the ages that had been assigned by the age interpreters were converted from the alpha numeric ageing code described above to a whole number. When the age of a composite sample was calculated, the result of the calculation was expressed with one decimal place. For example, if a composite consisted of fish with interpreted ages of 3M, 3, 3+ and 4M, the ages used in the calculation would be 3, 3, 3 and 4, respectively, and the average age of fish in the composite would be expressed as 3.3.

4.2 2011 Fish Monitoring Results

The detailed analytical results for each of the fish or composites in the 2011 collection are shown in Tables 4-5 to 4-9c, and Appendix G (mercury), Appendix H (PCBs) and Appendix I (cesium-137 and potassium-40[26]). The analytical data are discussed in two formats.

In the first format, the analytical values for each fish sample collected between the BNL STP and Donahue's Pond are discussed without regard to species or age. Figures 4-1a and 4-1b show the mercury results for each sample that was collected in 2011. These two figures should be viewed as if Figure 4-1a was the left half and Figure 4-1b was the right half of one continuous figure. The bottom feeders (brown bullheads[27], abbreviated BB) are shown on Figure 4-1a and

[26] BNL/DOE routinely reports radiological results for fauna (fish, deer, etc.) as pCi/g wet-weight. To confirm that the analytical laboratory has reported the radiological data for fish on a wet-weight basis, BNL/DOE also analyzes fish and select other fauna for potassium-40, a naturally occurring radionuclide. Fish samples that are reported on a wet-weight basis typically have potassium-40 activities in the 1 pCi/g to 4 pCi/g range. Potassium-40 analytical results greater than 10 pCi/g indicate that the results have been reported on a dry-weight basis.

[27] Although brown bullheads represent the bottom feeders in the sampled section of the river they are also predators and do consume fish. Their habitat makes them susceptible to accumulating contaminants that deposit on the bottom, such as PCBs and heavy metals, such as mercury.

the piscivores (black crappies, bluegills, chain pickerel, largemouth bass, and pumpkinseeds) are shown in Figure 4-1b. Figure 4-1b identifies the principal fish eaters (piscavores) with the abbreviations BC, BG, CP, LB, and PS, respectively. The Sample IDs along the X axis identifies the area from which the fish were collected, the species, the length in millimeters, and the age of the fish sample in years. The mean for all samples and all species and collection areas is 0.307 mg/kg.

Brown bullheads are lower on the Peconic River fish food chain than largemouth bass and chain pickerel, which are at the top of the Peconic River fish food chain. Food chain dynamics magnify the contaminant concentrations at each higher level. Brown bullheads are the only Peconic River bottom feeders that were available to be collected. A substantial proportion of their diet comes from eating benthic organisms, plants and organic detritus as well as a small proportion of fish. These foods generally have lower contaminant concentrations than brown bullheads and the bullheads concentrate the contaminants (bio-magnify) relative to the foods they eat. Fish such as chain pickerel or largemouth bass that consume other fish with relatively lower contaminant concentrations, e.g. brown bullheads, concentrate the contaminants at higher concentrations than the food they eat. Large bass and pickerel that consume smaller bass, pickerel and other fish, generally bio-magnify the contaminants at even higher concentrations. Consequently the bottom feeders are expected to have lower mercury concentrations than the top carnivores. Likewise, the two highest mercury concentrations are among the oldest largemouth bass (age 10, 1.52 mg/kg and age 6, 0.962 mg/kg). In the second format, concentration statistics and age and length data are compared on a species-specific basis for the entire sampled population. From these data, species-specific, age-specific and size-specific trends can be derived (Figures 4-3 through 4-9).

4.3 Mercury

Figures 4-1a and 4-1b show the mercury results for the entire 2011 fish collection, sorted by species and age. In summary this figure shows that the most frequent species with elevated mercury concentrations are top predators (chain pickerel, largemouth bass and pumpkinseeds) collected from the sections of the river between the STP (Area A) and the BNL boundary (Area D) [28]. Figure 4-2 and Tables 4-5, 4-6, 4-7a and 4-7d summarize Figure 4-1 by showing the mean and range of mercury concentrations for each species within each of the collection areas. Table

[28] Figures 4-3 to 4-8 show the species specific mercury values.

4-5 summarizes the fish mercury data by area. As shown by Figure 4-2, there is a general trend of mean mercury concentration decreasing from Area A (0.495 mg/kg) to Donahue's Pond (0.092 mg/kg) with increasing distance downstream. The area-specific mean mercury concentration for each fish collection area is shown with the respective 95 percent confidence intervals for each of the means[29]. The 2006-2011 fish mercury data set also clearly trends downward with increasing distance downstream to Donahue's Pond. (See Figure 4-11 discussion on page 26.).

The 0.307 mg/kg mean concentration across the entire sampled population of fish is indicative of the average for the entire population between the BNL STP and Donahue's Pond, subject to the selectivity of the collection equipment and techniques. In a similar manner, but to a lesser extent, the average ages, sizes and contaminant concentrations of the fish in each of the fish collection areas represents the respective ages, sizes and contaminant concentrations for the subpopulations inhabiting those sections of the river at the times of the respective collections. However, because movement can occur between the various sections, depending on the water level in the river, it cannot be confidently inferred that the derived subpopulation statistics permanently apply to a given subsection of the river (for example, Area A, Area C, Area D, Schultz Road, etc.) at times other than during the collection period.

BNL/DOE does not have a specific cleanup goal associated with mercury concentrations in fish tissue, but for reference purposes BNL has included the EPA water quality criterion for mercury (0.3 mg of methylmercury per kg of fish tissue, U.S. EPA, 2001) on each of the species-specific fish mercury figures. The total body burden of mercury within fish tissue, for which BNL/DOE analyzes, is routinely assumed to be equal to the concentration of methylmercury in the tissue. All analyses are reported on a wet weight basis.

Population and Subpopulation Mercury Trends:

Species-specific relationships are discussed in the next section, and are plotted in Figures 4-3 to 4-7. Table 4-5 show the area-specific mean mercury concentration for all fish collected within each of the areas and the 95 percent confidence intervals for each of the means. The 95 percent confidence intervals indicate the probability (95 percent) that the true mean mercury concentration for each of the six areas is within the range of the confidence limits shown for that area. Note that the lower part of the error bars for the mean fish mercury concentrations for each

area does not overlap the Donahue's Pond mean fish mercury concentration error bar. This indicates that the Donahue's Pond fish are statistically lower in mercury concentration than fish from the other areas, at p=0.05. This supports the appearance of a downward trend in mercury concentration for fish collected from the stations downstream of Manor Road Tables 4-7a and 4-7d show the mercury concentrations and fish length range and age for each composite sample and individual fish sample, arranged by area. Tables 4-8a and 4-9a show the mercury concentrations for each composite and individual fish sample together with the average length, fish weight, fillet weight, and age.

Species-Specific Trends:

Tables 4-7a and 4-7d (mercury), 4-7b and 4-7e (PCBs) and 4-7c and 4-7f (cesium-137) for composites and individual fish samples, respectively, provide detailed summaries of the relationships between species, age and fish tissue contaminant concentrations. Total length is provided as an indicator of the overlap in size for fish of different ages. These data are plotted on a species-specific basis on Figures 4-3a and b through 4-7a and b (mercury), 4-8 (PCBs) and 4-9 (cesium-137).

The mercury concentrations for each of the 2011 fish samples are also plotted in the species-specific Figures 4-3 to Figure 4-7 (sorted within species by age, area and length). Each of these figures identifies the fish sample with the area from which it was collected, the total length (in millimeters (mm)), and the average age of the fish in the sample. All samples with fractional lengths (e.g., L=300.5) are composites. The fish samples are identified by a BNL Fish ID, e.g. 11-141 or a Composite ID in Tables 4-4, 4-7a – 4-7f and 4-8a – 4-8c. Composite samples are identified by a composite ID containing the COC number and a "-bc" followed by a unique number, e.g. 31122-bc1. For example, Table 4-7a identifies sample 31222-bc2 as a composite consisting of six brown bullheads ranging in length between 158 and 172 mm, with a mercury concentration of 0.279 mg/kg and an average age of 2.0 years. Table 4-4 lists the individual ages, lengths and Fish IDs of each fish included in composite 31222-bc3. The mercury data plotted in Figures 4-3 to 4-8 are also shown in Tables 4-7a for composite fish samples and Table 4-7d for individual fish samples and in Appendix G for all fish mercury samples.

Figure 4-3 shows the mercury results for the four black crappies that were collected in 2011. The average mercury concentration for black crappies was 0.26 mg/kg. All of the fish were collected from Area D and three of the four samples had ages between 2.0 and 2.3 years

and mercury concentrations between 0.134 and 0.166 mg/kg. The fourth sample was four years old and had a mercury concentration of 0.58mg/kg.

Figure 4-4 shows the mercury results for the 16 bluegills that were collected from Areas C, D, and Donahue's Pond in 2011. The 2011 mean mercury concentration for bluegills was 0.23 mg/kg. The bluegill samples had average ages between 2.0 years (Area C) and 7 years (Donahue's Pond). Mercury concentrations ranged between 0.0619 mg/kg (Donahue's Pond, age 4) and 0.506 mg/kg (Area D, age 4). The Area D bluegill sample with the oldest age (6 years) had a mercury concentration of 0.225 mg/kg relative to the Donahue's Pond Age 7 sample value of 0.112 mg/kg.

Figure 4-5 plots the mercury concentration for each of the 54 brown bullhead samples analyzed for mercury in 2011. The 2011 mean mercury concentration of brown bullheads was 0.22 mg/kg, and the minimum and maximum mercury concentrations were 0.0513 mg/kg and 0.676 mg/kg, respectively. Brown bullhead ages ranged between 2 years and 14 years.

Figure 4-6 shows the mercury concentrations for each of the 14 chain pickerel samples that were analyzed for mercury in 2011. The mean mercury concentration for the 2011 samples was 0.41 mg/kg and the samples ranged between 0.0999 mg/kg (Donahue's Pond, age 3) and 0.895 mg/kg (Area A, age 3).

Figure 4-7 shows the mercury concentrations for each of the 12 largemouth bass samples that were analyzed for mercury in 2011. The mean mercury concentration for the 2011 samples was 0.53 mg/kg and the samples ranged between 0.134 mg/kg (Donahue's Pond, age 5) and 1.52 mg/kg (Area C, age 10).

Figure 4-8 shows the mercury concentrations for each of the 24 pumpkinseed samples that were analyzed for mercury in 2011. The mean mercury concentration for the 2011 samples was 0.40 mg/kg and the samples ranged between 0.157 mg/kg (Donahue's Pond, age 6) and 0.871 mg/kg (Area A, age 3).

In summary, the 2011 mean mercury concentration for all fish was 0.307 mg/kg, which is substantially lower than the 1997/2001 pre-cleanup mean (0.58 mg/kg). Figure 4-11 summarizes the 2011 fish mercury results relative to the 2006-2010 fish mercury data and three reference values. The reference values are the 1997 and 2001 pre-cleanup fish mercury concentration (0.58 mg/kg[30]), the EPA maximum average fish mercury concentration (0.47 mg/kg) that can safely be consumed for an individual eating 2 fish meals per month and the EPA mercury water

[30] Details on the pre-cleanup fish mercury concentrations are discussed in the Final 2009 Peconic River Monitoring Report, page 33.

quality criterion (0.3 mg/kg) that is based on fish consumption. For each fish collection area and each year between 2006 and 2011 the figure shows the mean mercury concentration for each year, and the ninety five percent confidence limits for each annual mean, as well as the 2011 mean mercury concentration for each collection area. The 2011 mean mercury concentrations clearly decrease with increasing distance downstream[31]. There are no clear trends in the mean annual mercury concentrations for any specific fish collection area. Although the annual mean mercury concentration at Area A appears to increase between 2008 and 2011 the overlap of their 95 percent confidence limits indicates the annual 2008-2011 means are not significantly different.

4.4 PCB Results

The Peconic River ROD requires PCBs to be analyzed for fish collected on BNL property. The 2011 mean PCB (Aroclor-1254[32]) concentration (10.12 ug/kg) is substantially lower than the mean 1996/1997 pre-cleanup mercury Aroclor-1254 concentration (1,216.5 ug/kg).

Fourteen fish samples were analyzed for PCBs in 2011. Each sample was analyzed for the seven aroclors (Aroclor-1016, Aroclor-1021, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260); hence 98 PCB analyses were performed (14 samples times seven (7) aroclors). Tables 4-7b and 4-7e provide the PCB data for the composite and individual fish samples, respectively, and detailed summaries of the relationships between species, age and fish tissue contaminant concentrations. Appendix H contains the combined PCB data for both composite and individual fish samples. The large mass (120 g) of tissue required for PCB analysis limits the number of samples that can be analyzed and mercury samples were given preferential treatment.

The reporting limits for all aroclors ranged between 9.91 and 10.2 ug/kg. All of the fish samples had values below the reporting limits for Aroclor-1016, Aroclor-1021, Aroclor-1232, Aroclor-1242, and Aroclor-1248. All but three of the Aroclor-1254 and all but one of the Aroclor-1260 values were less than the reporting limits. The three Aroclor 1254 detections were 14.3 ug/kg (brown bullhead, age 5.7), 18.4 (brown bullhead, age 6) and 22.2 ug/kg (brown bullhead, age 5). The Aroclor-1260 value for an age 5 brown bullhead was 10.4 ug/kg. These

[31] The distances of the midpoint of each fish collection area downstream of the BNL STP are: Area A (0.3miles), Area C (0.8 miles), Area D (1.6 miles), Schultz Road (2.9 miles), Manor Road (4.4 miles), and Donahue's Pond (7.0 miles).

[32] Aroclor-1254 was the only PCB reported for the 1996 and 1997 analyses.

detections are only slightly above the reporting limits. Since the initial Peconic River cleanup was initiated in 2004 and completed in 2005 some of these fish may have been exposed to the substantially higher Aroclor-1254 pre-cleanup sediment concentrations (pre-cleanup mean of 133 ug/kg, 2011 mean of 45.95 ug/kg, Table 2-1).

4.5 Cesium-137 Results

Eighty seven fish samples were analyzed for cesium-137 in 2011. Cesium-137 analytical results are provided on Table 4-7c and 4-7f for the 51 composite samples and 36 individual fish samples. Table 4-4 details the fish included in each fish composite. Table 4-8c groups the cesium-137 analytical results for composite and individual samples by collection area and Table 4-9c lists the minimum, maximum and average cesium-137 activity for each species within each area. The 87 fish samples ranged between non-detect at 0.0567 pCi/g to a maximum of 0.51 pCi/g with a mean activity of 0.17 pCi/g. Onsite fish (Areas A, C, D) had a 0.21 pCi/g average and offsite fish (Schultz Road, Manor Road, and Donahue's Pond) had a 0.12 pCi/g average. Figure 4-9 shows the 2011 cesium-137 analytical results, sorted by species, area, and age.

4.6 Fish Summary

In 2011 264 fish were caught and prepared for analysis as fillets (Table 4-3). Fifty eight of the fish were analyzed as single-fish samples. The remaining 206 fish were analyzed as composite samples consisting of two or more individual fish to meet the analytical laboratory's sample size requirements. The resulting fish samples were then allocated to analysis for mercury, PCBs, and/or cesium-137.

The 2011 mean (or average) mercury concentration for all fish was 0.307 mg/kg, which is substantially lower than the 1997/2001 pre-cleanup mean (0.58 mg/ kg[33]) and approximately the same as the EPA mercury water quality criterion (0.3 mg/kg). The 2011 minimum and maximum fish mercury concentrations were 0.0513 mg/kg (Donahue's Pond, age 6 and age 9 brown bullheads) and 1.52 mg/kg (Area C, age 10 largemouth bass), respectively. Figure 4-11 summarizes the 2011 fish mercury results relative to the 2006-2011 fish mercury data set and three reference values. The reference values are the 1997 and 2001 pre-cleanup fish mercury concentration (0.58 mg/kg), the EPA maximum average fish mercury concentration (0.47 mg/kg) that can safely be consumed for an individual eating 2 fish meals per month and the EPA

[33] Details on the pre-cleanup fish mercury concentrations are discussed in the Final 2009 Peconic River Monitoring Report, page 33.

mercury water quality criterion (0.3 mg/kg) that is based on fish consumption. The 2006-2011 Figure 4-11 mean mercury concentrations clearly decrease with increasing distance downstream, as do the 2011 fish mean mercury concentrations plotted in Figure 4-2[34]. There are no significant trends in the mean annual mercury concentrations for any specific fish collection area.

Ninety eight PCB analyses (14 samples times 7 aroclors per sample) were performed on the 2011 fish. All samples were less than the reporting limit for five of the seven aroclors (Aroclor-1016, Aroclor-1021, Aroclor-1232, Aroclor-1242, and Aroclor-1248). The 2011 mean concentration[35] for Aroclor-1254 (10.13 ug/kg) is approximately one hundredth of the 1996/1997[36] mean pre-cleanup value (1,205.21 ug/kg). The 2011 minimum and maximum values for Aroclor-1254 were 4.6 ug/kg (a J-qualified estimated value less than the 9.96 ug/kg reporting limit) and 22.2 ug/kg, respectively. Only four of the 98 analyses (Appendix H) had values greater than the reporting limit (mean reporting limit was 9.91 ug/kg). Three of the four detections above the reporting limit were for brown bullheads with Aroclor-1254 concentrations of 14.3 ug/kg, 18.4 ug/kg and 22.2 ug/kg. The fourth brown bullhead had an Aroclor-1260 concentration of 10.4 ug/kg.

Eighty seven fish samples were analyzed for cesium-137 in 2011. The 2011 mean cesium-137 activity (0.17 pCi/g) was well below the 1996/1997 pre-cleanup mean activity (1.37 pCi/g). The minimum and maximum cesium-137 activities were 0.0522 pCi/g (Donahue's Pond brown bullhead, age 5) and 0.51 pCi/g (Area A pumpkinseed age 3 .2), respectively. Onsite fish (Areas A, C, D) had a 0.21 pCi/g average and offsite fish (Schultz Road, Manor Road, and Donahue's Pond) had a 0.11 pCi/g average. Figure 4-10 shows the distribution of the 2011 cesium-137 analytical results, sorted by species, area, and age.

There are no new fish monitoring recommendations based on the 2011 fish data. As discussed in the approved 2011 Five Year Review and the Final 2010 Peconic River Monitoring Report, future fish monitoring will be modified in the following ways:

[34] The distances of the midpoint of each fish collection area downstream of the BNL STP are: Area A (0.3miles), Area C (0.8 miles), Area D (1.6 miles), Schultz Road (2.9 miles), Manor Road (4.4 miles), and Donahue's Pond (7.0 miles).
[35] The calculated mean included all reported values. Non-detects had the values of the respective detection limits.
[36] The 1996 and 1997 data are based on four 1996 samples and 67 1997 samples reported in Appendices F3 and F4, respectively, of Volume V of the Final Operable Unit V Remedial Investigation Report, May 27, 1998.

- Frequency will be modified from one round annually to one round every other spring. Between 2012 and 2016 fish will be collected in the spring of 2013 and 2015. Harvesting fish biennially will allow the fish population to grow in both number and individual size.
- Monitoring of fish from the Manor Road area will be discontinued after the 2011 collection, due to the typically low fish catch in that area. Every two years would occur in Area A[37], (downstream of the STP), Area D, Schultz Road, and Donahue's Pond, when water depths are favorable. Supplemental sampling in Area C will be discontinued unless the yield is low in the two adjacent areas (Area A and Area D).
- Scale and otolith age interpretation will continue through 2015.

In 2012 the annual Peconic River fish monitoring data will be included in the annual BNL *Site Environmental Report.* A separate annual *Peconic River Monitoring Report* will be discontinued.

[37] BSA/DOE expects to initiate discharge of treated STP effluent to the water table rather than to the Peconic River in 2014. This may cause water levels in Area A (and possibly Area D) to be too low to for fish migration except during the spring. Fish collection locations may require revision following the groundwater discharge of the STP effluent.

SECTION 5 - PR-WC-06, SEDIMENT TRAP AND PR-SS-15 AREA SUPPLEMENTAL SEDIMENT REMOVAL AND WETLAND RESTORATION

During January 2011 the Peconic River Sediment Trap, located adjacent to Z path and upstream of stream gauging station HQ, was removed as required by the Peconic River ROD. Between November 2010 and January 2011 sediment was also removed from the PR-WC-06, Sediment Trap, and PR-SS-15 areas to optimize the remedy for these three areas. The waste was transported to a Subtitle D landfill (Allied Waste Niagara Falls Landfill in Niagara Falls, NY) in late February and early March 2011. These actions were recommended in Recommendation 5 of the 2009 Peconic River Monitoring Report[38] and have been described in detail in the Final Peconic River Supplemental Sediment Removal Completion Report.

Following the completion of the sediment removal the water level in the river receded to workable depths by mid-summer and the wetland plant communities were restored between July 18 and July 21, 2011. All plants used in the restoration were harvested from adjacent previously remediated sections of the Peconic River and transplanted into the low-marsh sections of the PR-WC-06, Sediment Trap and PR-SS-15 areas that had been remediated between November 2010 and January 2011. The details of the transplant activities are included in the Final Wetland Restoration Summary that is included as Appendix G in the Final Peconic River Supplemental Sediment Removal Completion Report.

[38] **2009 Recommendation 5**: BNL/DOE recommends that the sediment trap be removed in coordination with the accelerated removal of sediment with elevated mercury concentrations. Both the sediment trap removal and the accelerated sediment removal are scheduled to be conducted in 2010.

SECTION 6 – REFERENCES

BNL, 1998. Final Operable Unit V Remedial Investigation Report, May 27, 1998, Brookhaven Science Associates, Upton, NY.

BNL, 2004. Final Operable Unit V Record of Decision for Area of Concern 30 (Peconic River), November 3, 2004, Brookhaven Science Associates, Upton, NY.

BNL, 2006. Operable Unit I Soils and Operable Unit V Long Term Monitoring and Maintenance Plan, May 2006, Brookhaven Science Associates, Upton, NY.

BNL, 2007. Final 2006 Peconic River Monitoring Report, July 2007, Brookhaven Science Associates, Upton, NY.

BNL, 2008. Final 2007 Peconic River Monitoring Report, July 2008, Brookhaven Science Associates, Upton, NY.

BNL, 2009. Final 2008 Peconic River Monitoring Report, September 2009, Brookhaven Science Associates, Upton, NY.

BNL, 2010. Final 2009 Peconic River Monitoring Report, June 2010, Brookhaven Science Associates, Upton, NY.

BNL, 2011. Final 2010 Peconic River Monitoring Report, May 2011, Brookhaven Science Associates, Upton, NY.

Envirocon, Inc., 2005. Final Closure Report, Peconic River Remediation, Phases 1 and 2. Prepared for Brookhaven National Laboratory, Upton, New York. August 2005.

Quantitative Environmental Analysis, LLC (QEA), 2003. Sampling Plan for Mercury and Methylmercury in the Water Column of the Peconic River. Prepared for Brookhaven National Laboratory, Upton, New York. February 2003.

QEA, 2004a. 2004 Sampling Plan for Mercury and Methylmercury in the Water Column of the Peconic River between Schultz Road and Connecticut Avenue. Prepared for Brookhaven National Laboratory, Upton, New York. February 2004.

QEA, 2004b. Peconic River 2003 Data Summary Report. Prepared for Brookhaven National Laboratory, Upton, New York. April 2004.

QEA, 2004c. 2004 Methylmercury Sampling Program Results: Addendum to the Peconic River 2003 Data Summary Report. Prepared for Brookhaven National Laboratory, Upton, New York. September 2004.

QEA, 2006. 2005 Peconic River Water Column Sampling Data Summary Report. Prepared for Brookhaven National Laboratory, Upton, New York. December 2006.

Terra Contracting, LLC, 2012. Final Peconic River Supplemental Sediment Removal Completion Report. Prepared for Brookhaven Science Associates, March 2012.

U.S. EPA, 1996. Method 1669, Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, July 1996, Office of Science and Technology, Office of Water, Engineering and Analysis Division (4303) U.S. Environmental Protection Agency, Washington DC 20460.

U.S. EPA, 2001. Final Water Quality Criterion for the Protection of Human Health: Methylmercury, EPA-823-R-01-001, January 2001, Office of Science and Technology, Office of Water, U.S. Environmental Protection Agency, Washington DC 20460.

U.S. EPA, 2004. Technical Memorandum, Origin of 1 Meal/Week Noncommercial Fish Consumption Rate in National Advisory for Mercury, March 11, 2004.

Table 2-1 2011 Peconic River Annual Sediment Sampling Data Summary

Sample ID	COC Site ID	Sample Date	Miles from STP	Mercury* (mg/kg)	Silver* (mg/kg)	Copper* (mg/kg)	PCBs* (ug/kg)	Cs-137* (pCi/g
On BNL Property (17 samples)								
29606-008	PR-SS-38	5/13/2011	0.36	2.7			ND 6 of 7[1]	0.87
29606-007	PR-SS-37	5/13/2011	0.47	0.41			ND 6 of 7[2]	0.64
29606-005	PR-SS-33	5/13/2011	0.49	1.5			ND 6 of 7[1]	1.91
29606-006	PR-SS-35	5/13/2011	0.49	0.11			ND 7 of 7	0.62
29606-004	PR-SS-31	5/12/2011	0.67	0.17	1.4	14.8	ND 7 of 7	0.159
29606-002	PR-SS-29	5/12/2011	0.69	0.34			ND 7 of 7	0.323
29606-003	PR-SS-30	5/12/2011	0.69	0.24			ND 7 of 7	0.58
29606-001	PR-SS-26	5/12/2011	0.75	0.08			ND 7 of 7	0.197
29600-010	PR-SS-24	5/12/2011	0.8	0.17			ND 6 of 7[2]	0.62
29600-009	PR-SS-23	5/12/2011	0.85	0.19			ND 6 of 7[2]	0.52
29600-008	PR-SS-21	5/12/2011	0.91	0.19			ND 6 of 7[2]	0.66
29604-004	PR-WC-06-D1-L50	5/12/2011	1.11	1.9			ND 7 of 7	2.91
29600-007	PR-SS-19	5/11/2011	1.2	0.96			ND 6 of 7[2]	0.79
29600-006	PR-SS-18	5/11/2011	1.27	0.13			ND 6 of 7[2]	0.4
29600-005	PR-SS-17	5/11/2011	1.33	0.14			ND 6 of 7[2]	0.51
29600-004	PR-SS-16	5/11/2011	1.4	0.35	4.1	12.7	ND 6 of 7[2]	0.556
29604-003	ST1-80-U20	5/12/2011	1.42	0.41			ND 6 of 7[2]	0.415
2011 average on BNL Property				0.59	2.75	13.75	45.95	0.75
Pre-cleanup average				*4.6*	*61.8*	*310.9*	*133*	*5.7*
Outside BNL Property (16 samples)								
29604-002	PR-SS-15-U1-L65-O	5/12/2011	1.51	0.049	0.48	1.5	ND 7 of 7	0.54
29600-003	PR-SS-15	5/11/2011	1.52	1.8			ND 6 of 7[2]	0.88
29600-002	PR-SS-14	5/11/2011	1.56	0.43			ND 6 of 7[2]	2.45
29600-001	PR-SS-12	5/11/2011	1.66	0.16			ND 6 of 7[2]	0.457
29592-009	PR-SS-10	5/11/2011	1.84	2.5			ND 6 of 7[2]	1.33
29592-008	PR-SS-09	5/11/2011	1.93	0.082			ND 7 of 7	0.192
29592-007	PR-SS-07	5/11/2011	2.02	0.023			ND 7 of 7	0.02
29592-006	PR-SS-06	5/11/2011	2.08	0.08			ND 7 of 7	0.184
29592-005	PR-SS-05	5/10/2011	2.32	0.34			ND 7 of 7	0.268
29592-004	PR-SS-04	5/10/2011	2.52	0.031			ND 7 of 7	0.09
29592-003	PR-SS-03	5/10/2011	2.65	0.33			ND 7 of 7	0.334
29592-002	PR-SS-02	5/10/2011	2.76	0.21			ND 7 of 7	0.28
29592-001	PR-SS-01	5/10/2011	2.9	0.13	2.2	11.4	ND 7 of 7	0.349
2011 average (BNL Border - Schultz Road				0.47	1.34	6.45	66.39	0.57
Pre-cleanup average (BNL Border - Schultz Road)				*1.79*	*35*	*142*	*133*	*5.4*
29590-001	PR-MR-01	5/10/2011	4.28	0.15	0.61	3.4	ND 7 of 7	0.367
29590-002	PR-MR-02	5/10/2011	4.5	0.043			ND 7 of 7	0.129
2011 average (Manor Road Area)				0.10	0.61	3.4	61.5	0.25
Pre-cleanup average (Manor Road Area)				*1.08*	*9.48*	*44.95*	*Not Sampled*	*2.88*
29539-001	PR-DP-01*	4/26/2011	6.75	0.00834 UN	0.195	1.55		

mg/kg = milligrams/kilogram = parts per million, ug/kg = micrograms/kilogram = parts per billion, pCi/g = picocuries/gram.
U' is a laboratory assigned qualifier indicating non-detection (ND).
N' is a laboratory assigned qualifier indicating that the spiked sample recovery is not within control limits..
* Silver and copper were analyzed to 10 percent of the onsite and offsite samples. 2 samples and 3 samples respectively.
* Averages do not include Donahue's Pond, which is located downstream of the remediated area.
[1] PR-SS-33 and PR-SS-38 had Aroclor-1254 detections of 62 ug/kg and 160 ug/kg, respectively.
[2] The indicated stations were qualified as having estimated Aroclor-1254 values less than the reporting limit.

Table 2-2 2006-2011 Peconic River Annual Sediment Mercury Summary

	Distance from STP (miles)	2006 Mercury[1] (mg/kg)	2007 Mercury[1] (mg/kg)	2008 Mercury[1] (mg/kg)	2009 Mercury (mg/kg)	2010 Mercury[1] (mg/kg)	2011 Mercury[1] (mg/kg)
Collection Start		6/26/2006	7/24/2007	6/17/2008	8/4/2009	5/11/2010	5/11/2011
Collection End		8/22/2006	9/13/2007	6/26/2008	8/6/2009	5/25/2010	5/13/2011
On BNL Property							
PR-SS-38	0.36	1.5	0.97	2.1	0.92	2	2.7
PR-SS-37	0.47	0.8	0.41	0.092	0.38	1	0.41
PR-SS-33	0.49	0.2	0.5	0.32	0.33	4.7	1.5
PR-SS-35	0.49	0.23	0.33	0.5	0.15	0.12	0.11
PR-SS-31	0.67	0.098	0.043	0.038	0.13	0.16	0.17
PR-SS-29	0.69	0.3	0.13	0.16	0.55	0.3	0.34
PR-SS-30	0.69	0.3	0.16	0.063	0.099	0.14	0.24
PR-SS-26	0.75	0.29	0.21	0.87	0.21	0.13	0.08
PR-SS-24	0.8	0.31	0.11	0.15	0.15	0.13	0.17
PR-SS-23	0.85	0.26	0.46	0.18	0.076	0.043	0.19
PR-SS-21	0.91	0.29	0.78	0.051	0.12	0.35	0.19
PR-WC-06-D1-L50	1.11						1.9
PR-SS-19	1.2	1.9	1.6	0.87	0.43	0.16	0.96
PR-SS-18	1.27	0.12	4.1	0.17	0.17	0.089	0.13
PR-SS-17	1.33	0.027	0.12	1.2	0.45	0.89	0.14
PR-SS-16	1.4	0.97	1.6	0.45	1.8	0.83	0.35
ST1-80-U20	1.42						0.41
Annual Onsite Average		**0.51**	**0.77**	**0.48**	**0.40**	**0.74**	**0.59**
2006-2011 Onsite Average		**0.58**					
ROD-required Onsite Average		**1.0**					
Pre-2004/2005 Onsite Cleanup Average		**4.6**					
Offsite BNL Boundary to Schultz Road							
PR-SS-15-U1-L65-O	1.51						0.049
PR-SS-15[2]	1.52	14.2	0.24	0.31	**0.31**	0.88	1.8
PR-SS-14	1.56	0.27	0.25	0.16	0.26	0.41	0.43
PR-SS-12	1.66	0.041	0.051	0.062	0.034	0.069	0.16
PR-SS-10	1.84	7.1	1.6	1.8	1.7	0.054	2.5
PR-SS-09	1.93	0.2	0.69	0.33	0.42	0.094	0.082
PR-SS-07	2.02	0.081	0.045	0.058	0.016	0.091	0.023
PR-SS-06	2.08	0.075	0.098	0.27	0.051	0.032	0.08
PR-SS-05	2.32	0.35	0.13	0.85	0.059	0.11	0.34
PR-SS-04	2.52	0.014	0.007	0.054	0.062	0.037	0.031
PR-SS-03	2.65	0.81	0.072	0.079	0.16	0.34	0.33
PR-SS-02	2.76	0.3	0.057	0.11	0.14	0.12	0.21
PR-SS-01	2.9	0.037	0.058	0.11	0.18	0.023	0.13
Annual Offsite Average (BNL Boundary to Schultz Road)		**1.96**	**0.27**	**0.35**	**0.28**	**0.19**	**0.47**
2006-2011 Offsite Average (BNL Boundary to Schultz Road)		**0.59**					
Pre-2004/2005 Cleanup Average (BNL Border - Schultz Road)		**1.79**					
ROD Required Offsite Average		**0.75**					
Offsite Manor Road Area							
PR-MR-01	4.28	0.11	0.082	0.038	0.18	0.47	0.15
PR-MR-02	4.5	0.056	0.055	0.073	0.073	0.068	0.043
Annual Offsite Manor Road Average		**0.08**	**0.07**	**0.06**	**0.13**	**0.27**	**0.10**
2006-2011 Offsite Manor Road		**0.12**					
Pre-2004/2005 Cleanup Average		**1.08**					
ROD Required Offsite Average		**0.75**					
Annual Offsite Average BNL Boundary to Manor Road Area		**1.69**	**0.25**	**0.31**	**0.26**	**0.20**	**0.42**
2006-2011 Offsite Average BNL Boundary to Manor Road Area		**0.52**					
PR-DP-01[1]	6.75	0.052	0.104	0.163		0.239	0.00834

Notes :

mg/kg = milligrams/kilogram = parts per million, ug/kg = micrograms/kilogram = parts per billion, pCi/g = picocuries/gram. 'U' is a laboratory assigned qualifier indicating non-detection (ND).

[1] Averages do not include Donahue's Pond, which is located downstream of the remediated area.

[2] PR-SS-15 Area received supplemental remediation in December/January 2011.

Table 3-1

2011 Peconic River Water Quality Sampling Stations and Scheduled Sampling Frequency

		Sampling Frequency of Water Quality Survey Relative to Methylmercury (MeHg) Water Quality Survey sampling				
Site ID	**Distance Downstream of STP (miles)**	**May 18 - 19 Water Quality Short Round 1**	**May 31 - June 2 Mercury and Water Quality Sampling Long Round 1**	**June 28 Water Quality Short Round 2**	**August 16 - 18 Mercury and Water Quality Sampling Long Round 2**	**September 7 Water Quality Short Round 3**
PR-WC-15	-0.17		X		X	
PR-WC-14	-0.13		X		X	
PR-WC-13	-0.07		X		X	
PR-WC-12D7	-0.04		X		X	
PR-WC-11DS	0.01		X		X	
PR-WC-10	0.30	X	X	X	X	X
PR-WC-09	0.56	X	X	X	X	X
PR-WC-08	0.78	X	X	X	X	X
PR-WC-07	0.96		X		X	
PR-WC-06	1.10	X	X	X	X	X
PR-WC-05	1.46		X		X	
PR-WC-04	1.70	X	X	X	X	X
PR-WC-03	2.10	X	X	X	X	X
PR-WC-02	2.52		X		X	
PR-WC-01	2.98	X	X	X	X	X
PR-WCS-01	3.42		X		X	
PR-WCS-02	3.99		X		X	
PR-WCS-03	4.44		X		X	
PR-WCS-04	4.77	X	X	X	X	X
PR-WCS-05	6.04		X		X	
PR-WCS-06	6.75		X		X	
PR-WCS-07	7.23		X		X	

[1] MeHg is an abbreviation for methylmercury. Total mercury methylmercury and TSS were analyzed.

Table 3-2 a: Results from 2011 Water Column Sampling										
5/31/2011 - 6/2/2011		Laboratory Results			Field Data					
Site ID	Date	Mercury (ng/L)	Methyl-mercury (ng/L)	TSS (mg/L)	Water Temp (deg C)	pH	Dissolved Oxygen (mg/L)	River Depth at Sample (feet)	Turbidity (NTU)	Flow (feet per second)
CONNETQUOT	5/31/2011	0.6	0.05	2 U	22.57	6.74	10.08	1.5	0.3	0.15
PR-WC-15	6/1/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-14	6/1/2011	Not Sampled, depth < 1.0 foot						0.4		
PR-WC-13	6/1/2011	Not Sampled, depth < 1.0 foot						0.3		
PR-WC-12-D7	6/1/2011	14	5.9	10	20.88	6.03	2.35	2.5	20.1	0.00
STP-EFF-UVG	6/1/2011	47	0.02 U	2 U	23.25	6.58	8.85	N/S	1.1	N/S
PR-WC-11DS	6/1/2011	46	0.11	3	23.33	6.53	9.09	1.0	1.6	0.35
PR-WC-10	6/1/2011	38	1.1	2	24.62	6.9	10.08	1.2	3.2	1.07
PR-WC-09	6/1/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-08	6/1/2011	53	3	64	24.43	8.46	13.46	2.2	3.5	0.00
PR-WC-07	6/1/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-06	6/1/2011	68	1.1	2	24.05	6.68	5.95	2.0	8.4	0.04
PR-WC-05	6/1/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-04	6/2/2011	Not Sampled, depth < 1.0 foot						0.4		
PR-WC-03	6/2/2011	11	0.66	1 U	24.65	6.31	8.57	1.3	2.3	0.01
PR-WC-02	6/2/2011	Not Sampled, depth < 1.0 foot						0.6		
PR-WC-01	6/1/2011	9.4	1.2	8	23.93	6.42		1.3	3.6	0.21
PR-WCS-01	6/1/2011	6.1	0.93	7	22.67	6.21	3.67	2.0	4.7	0.04
PR-WCS-02	6/1/2011	4.8	0.85	4	21.3	6.26	4.95	2.1	1.1	0.31
PR-WCS-03	6/1/2011	5.4	0.79	2	21.68	6.18	4.19	2.9	4.9	0.35
PR-WCS-04	6/1/2011	6.5	0.92	3	21.58	6.21	3.68	2.3	7.5	0.53
PR-WCS-05	5/31/2011	5	1.6	2 U	25.24	6.6	5.81	2.9	3.9	0.65
PR-WCS-06	5/31/2011	3.8	0.98	2 U	25.94	7.3	8.17	3.5	0.6	0.00
PR-WCS-07	5/31/2011	3.6	0.41	2 U	25.94	6.89	7.31	1.0	0.1	1.21

Abbreviations: N/S: Not sampled. It is not proactical tocsample depth or velocity from the STP effluent pipe.

Table 3-2b : Results from 2011 Water Column Sampling										
8/16/2011 - 8/18/2011		Laboratory Results			Field Data					
Site ID	Date	Mercury (ng/L)	Methyl-mercury (ng/L)	TSS (mg/L)	Water Temp (deg C)	pH	Dissolved Oxygen (mg/L)	River Depth at Sample (feet)	Turbidity (NTU)	Flow (feet per second)
CONNETQUOT	8/16/2011	1.4	0.1	1 U	20.41	7.03	8.82	1.4	4.6	0.19
PR-WC-15	8/18/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-14	8/18/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-13	8/18/2011	Not Sampled, depth < 1.0 foot						0.4		
PR-WC-12-D7	8/18/2011	5.7	0.74	1	20.18	6.39	1.80	3.0	17.9	0.00
STP-EFF-UVG	8/18/2011	53	0.02 U	1 U	24.10	6.73	6.73	N/S	0.0	N/S
PR-WC-11DS	8/18/2011	Not Sampled, depth < 1.0 foot						0.8		
PR-WC-10	8/18/2011	40	0.37	1 U				1.0		
PR-WC-09	8/18/2011	Not Sampled, depth < 1.0 foot								
PR-WC-08	8/18/2011	31	0.31	3	25.49	0.12	9.16	1.6	3.0	0.05
PR-WC-07	8/18/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-06	8/18/2011	33	0.88	10	23.40	7.09	6.51	2.0	2.8	0.08
PR-WC-05	8/17/2011	Not Sampled, depth < 1.0 foot						0.5		
PR-WC-04	8/17/2011	Not Sampled, depth < 1.0 foot						0.3		
PR-WC-03	8/17/2011	11	0.67	6	23.19	6.22	2.63	1.5	3.6	0.00
PR-WC-02	8/17/2011	Not Sampled, depth < 1.0 foot						0.5		0.00
PR-WC-01	8/17/2011	6.4	0.51	1	21.32	6.00	5.20	1.9	0.8	0.60
PR-WCS-01	8/17/2011	6	0.43	3	19.71	5.56	4.13	2.5	0.7	0.35
PR-WCS-02	8/17/2011	5.9	0.35	2	19.80	5.75	3.32	2.9	0.5	0.08
PR-WCS-03	8/17/2011	5.1	0.35	3	20.31	5.91	4.71	2.6	3.5	0.35
PR-WCS-04	8/17/2011	11	1.2	4	19.26	5.48	2.47	2.9	0.5	0.70
PR-WCS-05	8/16/2011	3.5	0.42	6	21.86	6.84	8.21	3.0	10.3	1.03/1.20
PR-WCS-06	8/16/2011	1.7	0.21	4	21.68	6.67	8.62	4.0	1.4	0.9/0.22
PR-WCS-07	8/16/2011	1.5	0.24	1	21.85	6.86	8.73	1.5	0.3	2.03

Abbreviations: N/S: Not sampled. It is not practical to sample depth or velocity from the STP effluent pipe.

Table 3-3 : Comparison of 2008-2011 Water Column Sampling Results (June Survey)

Site ID	Station Description	Dist from STP (miles)	2008			2009			2010			2011		
			Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)
Connetquot	Reference Station		4.52	0.223	16.3	2.88	0.663	0.9	1.4	0.222	2	0.6	0.05	2
PR-WC-15	Upstream of Forest Path	-0.17	d	d	d	13.1	1.99	1.4	12.9	3.76	2	d	d	d
PR-WC-14	Upstream of STP[a]	-0.13	d	d	d	d	d	d	14.5	4.25	2	d	d	d
PR-WC-13	Upstream of STP[a]	-0.07	d	d	d	d	d	d	15.1	4.4	2	d	d	d
PR-WC-12-D7	Upstream of STP[a]	-0.04	c	c	c	11.8	2.71	4.3	15.3	4.54	3	14	5.9	10
PR-WC-12DS	Downstream of Sump	-0.04	25.2	10.9	23.1	c	c	c	c	c	c	c	c	c
STP-EFF-UVC	24-hour composite	0	116	0.022	0.4	c	c	c	c	c	c	c	c	c
STP-EFF-UVG	Grab Sample	0	115	1.16	0.4	127	0.491	0.5	75.1	0.02	2	47	0.02	2
PR-WC-11DS	50 ft downstream ofoutfall	0.01	103	0.3	1.4	56	1.05	1.8	19.9	4.09	2	46	0.11	3
PR-WC-10	West of HMN	0.3	114	1.22	2.4	73.4	2.04	6.7	22.5	4.4	2	38	1.1	2
PR-WC-09	Downstream of HMN	0.56	d	d	d	98.7	1.71	6.84	29.3	4.28	2	d	d	d
PR-WC-08	South of Area B	0.78	111	2.79	14.3	50.6	1.88	4.48	29	3.76	2	53	3	64
PR-WC-07	South of Area C	0.96	d	d	d	38.2	1.29	4.97	23.6	5.25	2	d	d	d
PR-WC-06	South of Area D	1.1	876	4.67	79.1	43.7	2.44	5.34	23.6	4.67	2	68	1.1	2
PR-WC-05	Downstream of HQ	1.46	140	8.4	48	70.2	3.97	11.5	35.3	6.74	28	d	d	d
PR-WC-04	2nd downstream of HQ	1.7	d	d	d	d	d	d	23.4	3.75	2	d	d	d
PR-WC-03	3rd west of Schultz Rd.	2.1	17.2	2.7	2.9	19.8	2.33	1.3	25.3	3.9	2	11	0.66	1
PR-WC-02	2nd west of Schultz Rd.	2.52	d	d	d	19.9	2.47	1.8	20.7	3.18	2	d	d	d
PR-WC-01	Schultz Rd. (West)	2.98	16.7	3.2	7.5	8.37	1.21	1.73	15.9	1.25	2	9.4	1.2	8
PR-WCS-01	East of Schultz Rd.	3.44	17.6	2.71	10.5	9.08	1.13	3.57	16.5	4.46	5	6.1	0.93	7
PR-WCS-02	West of Manor Rd.	3.99	13.5	2.26	9.6	8.32	1.18	3.62	15.4	4.68	9	4.8	0.85	4
PR-WCS-03	Manor Rd.	4.44	11.6	2.23	8	8.78	1.09	12.4	13.8	4.56	5	5.4	0.79	2
PR-WCS-04	West of Cranberry Bogs	4.77	12.4	2.8	9.1	15.4	1.32	3.5	14.8	4.44	7	6.5	0.92	3
PR-WCS-05	East of Cranberry Bogs	6.04	4.06	1.22	4.4	3.56	0.884	2.64	3.9	0.832	2	5	1.6	2
PR-WCS-06	Middle of Donahue's Pond	6.75	4.11	1.31	1.9	3.55	0.786	1.73	4.7	1.37	2	3.8	0.98	2
PR-WCS-07	Downstream of Connecticut Ave	7.23	4.76	0.75	5.7	3.81	0.88	3.6	4.2	0.655	2	3.6	0.41	2

Notes:

a STP = Sewage Treatment Plant, ND = non-detect, detection limits: 0.1 ng/L for total mercury, 0.045ng/L for methylmercury, 1 mg/L for TSS.

b Units: mg/L = milligrams per liter, ng/L = nannograms per liter.

c Not measured or not applicable.

d Samples not collected, depth < 1.0 foot.

Table 3-4 : Comparison of 2008-2011 Water Column Sampling Results (July/August Surveys)

Site ID	Station Description	Dist from STP (miles)	2008			2009			2010			2011		
			Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)	Mercury (ng/L)	Methyl Mercury (ng/L)	TSS (mg/L)
Connetquot	Connetquot River Reference Station		1.16	0.152	5.3	2.09	0.104	1.8	0.83	0.12	2	1.4	0.1	1
PR-WC-15	Upstream of Forest Path - Unfiltered	-0.17	d	d	d	d	d	d	d	d	d	d	d	d
PR-WC-14	Upstream of STP[a]	-0.13	d	d	d	d	d	d	c	c	c	d	d	d
PR-WC-13	Upstream of STP[a]	-0.07	c	c	c	d	d	d	c	c	c	d	d	d
PR-WC-12-D7	Upstream of STP[a]	-0.04	d	d	d	8.92	2.63	2.7	13.3	4.27	6	5.7	0.74	1
PR-WC-12DS	Downstream of Sump	-0.04	d	d	d	c	c	c	c	c	c	c	c	c
STP-EFF-UVC	24-hour composite	0	86.7	0.02 U	0.3 U	c	c	c	d	d	d	c	c	c
STP-EFF-UVG	Grab Sample	0	94.1	0.02 U	0.6	115	0.024	0.4	69.1	0.0573	2	53	0.02	1
PR-WC-11DS	50 ft. downstream of STP Outfall	0.01	d	d	d	d	d	d	33.4	2.31	2	c	c	c
PR-WC-10	West of HMN	0.3	94.4	0.61	1.4	110	0.965	1.2	36.8	1.92	2	40	0.37	1
PR-WC-09	Downstream of HMN	0.56	d	d	d	100	1.27	1.3	55.2	1.95	2	d	d	d
PR-WC-08	South of Area B	0.78	68.3	3.48	29	44.4	0.853	2.1	48	2.18	2	31	0.31	3
PR-WC-07	South of Area C	0.96	d	d	d	44.7	1.24	4.6	20	2.28	2	d	d	d
PR-WC-06	North of Area D	1.1	d	d	d	93.6	1.79	4	17.2	1.84	2	33	0.88	10
PR-WC-05	Downstream of HQ	1.46	d	d	d	22.9	8.08	3.4	26.6	2.61	3	d	d	d
PR-WC-04	2nd Downstream of HQ	1.7	d	d	d	d	d	d	14	1.7	2	d	d	d
PR-WC-03	3rd west of Schultz Rd.	2.1	374	4.18	165	18.7	1.66	3.5	12	4.3	2	11	0.67	6
PR-WC-02	2nd west of Schultz Rd.	2.52	d	d	d	d	d	d	c	c	c	d	d	d
PR-WC-01	Schultz Rd. (West)	2.98	d	d	d	7.59	1.31	2.6	4.6	0.829	2	6.4	0.51	2
PR-WCS-01	East of Schultz Rd.	3.44	d	d	d	6.51	1.2	5.3	9	2.45	13	6	0.43	2
PR-WCS-02	West of Manor Rd.	3.99	4.3	0.55	8	5.97	1.05	7.3	7.9	2.69	2	5.9	0.35	2
PR-WCS-03	Manor Rd.	4.44	3.1	0.57	4.4	6.87	1.04	5.6	6.9	2.05	2	5.1	0.35	1
PR-WCS-04	West of Cranberry Bogs	4.77	4.99	0.77	5.6	8.81	1.01	7.1	7.6	1.89	4	11	1.2	2
PR-WCS-05	East of Cranberry Bogs	6.04	6.22	0.39	9.7	3.84	0.778	5.5	3.1	0.5	2	3.5	0.42	6
PR-WCS-06	Middle of Donahue's Pond	6.75	2.43	0.4	3.3	3.17	0.663	4.7	3.2	0.565	3	1.7	0.21	4
PR-WCS-07	Downstream of Connecticut Ave	7.23	c	c	c	3.53	0.654	3.6	3.6	0.687	2	1.5	0.24	1

Table 3-5 2011 Results from PR-SS-10-D3-WC1 & WC2 and PR-SS-10-U3-WC3 & WC4 Sampling

Sample Date	Sample Station[1]	Mercury (ng/L)	Methyl-mercury (ng/L)	TSS[2] (mg/L)	Sample Station[1]	Mercury (ng/L)	Methyl-mercury (ng/L)	TSS[2] (mg/L)
3/17/2011	U3-WC4	21.8	0.432	16	U3-WC3	22.3	0.469	10
	D3-WC1	30.3	0.562	7	D3-WC2	25.7	0.462	4
4/19/2011	U3-WC4	15	0.47	2U	U3-WC3	16	0.49	2U
	D3-WC1	24	0.52	2JB	D3-WC2	20	0.58	2U
6/2/2011	U3-WC4	25	2.1	1U	U3-WC3	35	2.5	5
	D3-WC1	11	1.6	1U	D3-WC2	11	1.5	1U
8/17/2011	U3-WC4	65	1.1	14	U3-WC3	56	0.92	9
	D3-WC1	29	1.1	3	D3-WC2	39	1.2	21

[1] The Sample Stations have been abreviated by dropping the "PR-SS-10-" portion of the station name. Thus PR-SS-10-U3-WC4 has been abbreviated as U3-WC4, etc.

[2] Qualifiers:

B - Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

U - Indicates that the analyte was analyzed for but not detected.

Table 4-1. Peconic River Fish Collection Locations

Remediation Area	Approximate Distance Downstream of BNL STP (miles)*	Location Description
Area A	0.3	Between stream gauging stations HE and HMN.
Area C	0.8	From approximately 260 feet downstream of PR-WC-07 to approximately 225 feet upstream of PR-SS-29. This is an alternate location for Area D that may be sampled when fish population size allows.
Area D (North Street)	1.6	Along North Street in the ponded sections of the river upstream and downstream of stream gauging station HQ. If water level or fish population size is not sufficient for fish collection the ponded section of the river in remediation Area C may be substituted.
Area P (Schultz Road.)	2.9	Upstream of Schultz Road. If water level or fish population size is not sufficient for fish collection Ice Pond, in remediation Area P may be substituted.
Manor Road	4.4	Within the section of the Peconic River between approximately 100 yards upstream and downstream of Manor Road.
Donahue's Pond	7.0	Donahue's Pond is an impounded section of the Peconic River at the Peconic River Sportsman's Club. Donahue's Pond is approximately 2 miles downstream of the Manor Road cleanup area.

* Distance is from BNL STP to the approximate mid-point of the respective fish collection area.

Table 4-2 : 2011 Fish Collection Summary Gear and Water Chemistry
Total Fish Catch

Date	Area A	Area C	Area D (North Street)	Area P (Schultz Rd.)	Manor Road	Donahue's Pond
	4/12/2011	4/14/2011	4/20/2011, 4/21/2011	5/6/2011	4/6/2011, 4/12/2011	4/26/2011 5/13/2011
Fish Collected By	BNL	BNL	BNL	BNL	BNL	CSHFH[1] & BNL
Gear Used	Electrofishing	Electrofishing	Electrofishing & Hoop Net	Hoop Net	Hoop Net	Gill Net & Fishing Poles
Time	900	900	0900, 0900	1300	1300, 1300	0900, 0700
Water Temperature (degrees C)	8.26	11.54	7.81, 14.01	15.48	7.51, 11.92	17.6, nr
pH	7.18	8.78	8.91, 8.73	6.43	7.68, 8.69	7.32, nr
Turbidity	10.3	3.8	10.3, 1.90	0.8	1.2, 1.50	0.3, nr
Conductivity (υS/cm³)	84	335	328, 259	79	118, 65.00	74, nr
Dissolved Oxygen (mg/L)	10.32	12.67	10.91, 11.69	9.05	10.81, 8.00	7.18, nr

* υS/cm³ - microSiemens per cubic centimeter.

[1] CSHFH - Fishery Biologists from Cold Spring Harbor Fish Hatchery

Table 4-3 : 2011 Peconic
Total Fish Catch

Species	DEC Species Code	Area A	Area C	Area D (North Street)	Area P (Schultz Rd.)	Manor Road	Donahue's Pond
Single Fish							
Black Crappie	603			3			
Bluegill	598		1	3			
Brown Bullhead	444		4	6	1	9	10
Chain Pickerel	349			1	2	1	1
Largemouth Bass	601	3	1	3	2		2
Pumpkinseed	596		2	1	1		1
Total Catch Per Area		3	8	17	6	10	14
Total Catch (Single Fish)	58						
Composites							
Black Crappie	603			4			
Bluegill	598		14	9			10
Brown Bullhead	444	16	6	33		11	
Chain Pickerel	349	13	9	6			
Largemouth Bass	601		6				
Pumpkinseed	596	22	22	25			
Total Catch Per Area		51	57	77		11	10
Total Catch (Composites)	206						

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA A	31122	276058	31122-bc1	6M	Brown Bullhead	305	11-002	31122-001
				4M	Brown Bullhead	260	11-003	31122-001
				5M	Brown Bullhead	250	11-004	31122-001
Average Age of fish : 5.0								
Average Length of fish : 272								
AREA A	31122	276058	31122-bc2	6M	Brown Bullhead	245	11-005	31122-002
				3M	Brown Bullhead	223	11-006	31122-002
Average Age of fish : 4.5								
Average Length of fish : 234								
AREA A	31122	276058	31122-bc3	2M	Brown Bullhead	172	11-007	31122-003
				2M	Brown Bullhead	172	11-008	31122-003
				2M	Brown Bullhead	166	11-009	31122-003
				2M	Brown Bullhead	165	11-010	31122-003
				2M	Brown Bullhead	164	11-011	31122-003
				2M	Brown Bullhead	158	11-012	31122-003
Average Age of fish : 2.0								
Average Length of fish : 166								
AREA A	31122	276058	31122-bc4	2M	Brown Bullhead	147	11-013	31122-004
				2M	Brown Bullhead	140	11-014	31122-004
Average Age of fish : 2.0								
Average Length of fish : 144								
AREA A	31122	276058	31122-bc5	2M	Brown Bullhead	138	11-015	31122-005
				2M	Brown Bullhead	138	11-016	31122-005
				2M	Brown Bullhead	133	11-017	31122-005
Average Age of fish : 2.0								
Average Length of fish : 136								
AREA A	31122	276058	31122-bc9	3M	Chain Pickerel	385	11-021	31122-009
				3M	Chain Pickerel	354	11-022	31122-009
Average Age of fish : 3.0								
Average Length of fish : 370								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA A	31122	276058	31122-bc10	3+	Chain Pickerel	342	11-023	31122-010
				3+	Chain Pickerel	330	11-024	31122-010
				3+	Chain Pickerel	305	11-025	31122-010
Average Age of fish : 3.0								
Average Length of fish : 326								
AREA A	31122	276058	31122-bc11	2M	Chain Pickerel	194	11-026	31122-011
				1+	Chain Pickerel	176	11-027	31122-011
				1+	Chain Pickerel	165	11-028	31122-011
				1+	Chain Pickerel	160	11-029	31122-011
				1+	Chain Pickerel	150	11-030	31122-011
Average Age of fish : 1.2								
Average Length of fish : 169								
AREA A	31122	276058	31122-bc12	1+	Chain Pickerel	133	11-031	31122-012
				1+	Chain Pickerel	124	11-032	31122-012
				1M	Chain Pickerel	117	11-033	31122-012
Average Age of fish : 1.0								
Average Length of fish : 125								
AREA A	31122	276058	31122-bc13	3M	Pumpkinseed	158	11-034	31122-013
				3M	Pumpkinseed	175	11-035	31122-013
				3M	Pumpkinseed	175	11-036	31122-013
				3+	Pumpkinseed	156	11-037	31122-013
				3M	Pumpkinseed	155	11-038	31122-013
				4M	Pumpkinseed	155	11-039	31122-013
Average Age of fish : 3.2								
Average Length of fish : 162								
AREA A	31122	276058	31122-bc14	3M	Pumpkinseed	153	11-040	31122-014
				4M	Pumpkinseed	151	11-041	31122-014
				3M	Pumpkinseed	150	11-042	31122-014
				3M	Pumpkinseed	148	11-043	31122-014
				3M	Pumpkinseed	147	11-044	31122-014
				3M	Pumpkinseed	144	11-045	31122-014
Average Age of fish : 3.2								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
Average Length of fish : 149								
AREA A	31122	276058	31122-bc15	3M	Pumpkinseed	144	11-046	31122-015
				2M	Pumpkinseed	143	11-047	31122-015
				2M	Pumpkinseed	143	11-048	31122-015
				4M	Pumpkinseed	142	11-049	31122-015
Average Age of fish : 2.8								
Average Length of fish : 143								
AREA A	31122	276058	31122-bc16	3	Pumpkinseed	140	11-050	31122-016
				3M	Pumpkinseed	135	11-051	31122-016
Average Age of fish : 3.0								
Average Length of fish : 138								
AREA A	31122	276058	31122-bc17	2M	Pumpkinseed	127	11-052	31122-017
				2M	Pumpkinseed	119	11-053	31122-017
Average Age of fish : 2.0								
Average Length of fish : 123								
AREA A	31122	276058	31122-bc18	2M	Pumpkinseed	114	11-054	31122-018
				2M	Pumpkinseed	98	11-055	31122-018
Average Age of fish : 2.0								
Average Length of fish : 106								
AREA C	31130	276239	31130-bc1	6M	Brown Bullhead	360	11-076	31130-001
				7M	Brown Bullhead	356	11-077	31130-001
Average Age of fish : 6.5								
Average Length of fish : 358								
AREA C	31130	276239	31130-bc3	2M	Brown Bullhead	225	11-079	31130-003
				2M	Brown Bullhead	189	11-080	31130-003
				2M	Brown Bullhead	177	11-081	31130-003
				2M	Brown Bullhead	175	11-082	31130-003
Average Age of fish : 2.0								
Average Length of fish : 192								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA C	31130	276239	31130-bc8	1M	Largemouth Bass	105	11-087	31130-008
				1M	Largemouth Bass	100	11-088	31130-008
				1M	Largemouth Bass	92	11-089	31130-008
				1M	Largemouth Bass	91	11-090	31130-008
				1M	Largemouth Bass	87	11-091	31130-008
				1M	Largemouth Bass	81	11-092	31130-008
Average Age of fish : 1.0								
Average Length of fish : 93								
AREA C	31130	276239	31130-bc9	1+	Chain Pickerel	166	11-093	31130-009
				1+	Chain Pickerel	156	11-094	31130-009
				1+	Chain Pickerel	148	11-095	31130-009
				1+	Chain Pickerel	135	11-096	31130-009
				1+	Chain Pickerel	135	11-097	31130-009
				1+	Chain Pickerel	134	11-098	31130-009
Average Age of fish : 1.0								
Average Length of fish : 146								
AREA C	31130	276239	31130-bc10	1+	Chain Pickerel	134	11-099	31130-010
				1+	Chain Pickerel	128	11-100	31130-010
				1+	Chain Pickerel	124	11-101	31130-010
Average Age of fish : 1.0								
Average Length of fish : 129								
AREA C	31130	276239	31130-bc11	7+	Bluegill	230	11-102	31130-011
				5M	Bluegill	201	11-103	31130-011
				4M	Bluegill	194	11-104	31130-011
Average Age of fish : 5.3								
Average Length of fish : 208								
AREA C	31130	276239	31130-bc12	4M	Bluegill	178	11-105	31130-012
				2M	Bluegill	173	11-106	31130-012
				2M	Bluegill	134	11-107	31130-012
Average Age of fish : 2.7								
Average Length of fish : 162								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA C	31130	276239	31130-bc13	2M	Bluegill	132	11-108	31130-013
				2M	Bluegill	127	11-109	31130-013
				2M	Bluegill	124	11-110	31130-013
				2M	Bluegill	122	11-111	31130-013
				2M	Bluegill	121	11-112	31130-013
				2M	Bluegill	119	11-113	31130-013
Average Age of fish : 2.0								
Average Length of fish : 124								
AREA C	31130	276239	31130-bc15	2M	Bluegill	104	11-115	31130-015
				2M	Bluegill	92	11-116	31130-015
Average Age of fish : 2.0								
Average Length of fish : 98								
AREA C	31130	276239	31130-bc16	4M	Pumpkinseed	186	11-117	31130-016
				4M	Pumpkinseed	186	11-118	31130-016
				4M	Pumpkinseed	180	11-119	31130-016
				4+	Pumpkinseed	177	11-120	31130-016
				4M	Pumpkinseed	169	11-121	31130-016
Average Age of fish : 4.0								
Average Length of fish : 180								
AREA C	31130	276239	31130-bc17	5M	Pumpkinseed	172	11-122	31130-017
				5M	Pumpkinseed	159	11-123	31130-017
				3M	Pumpkinseed	152	11-124	31130-017
Average Age of fish : 4.3								
Average Length of fish : 161								
AREA C	31130	276239	31130-bc18	2M	Pumpkinseed	147	11-125	31130-018
				3M	Pumpkinseed	146	11-126	31130-018
				2M	Pumpkinseed	130	11-127	31130-018
				3M	Pumpkinseed	128	11-128	31130-018
				2M	Pumpkinseed	128	11-129	31130-018
Average Age of fish : 2.4								
Average Length of fish : 136								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA C	31130	276239	31130-bc19	2M	Pumpkinseed	126	11-130	31130-019
				2M	Pumpkinseed	123	11-131	31130-019
				2M	Pumpkinseed	121	11-132	31130-019
				2M	Pumpkinseed	113	11-133	31130-019
				2M	Pumpkinseed	113	11-134	31130-019
				2+	Pumpkinseed	111	11-135	31130-019
Average Age of fish : 2.0								
Average Length of fish : 118								
AREA C	31130	276239	31130-bc22	2M	Pumpkinseed	103	11-138	31130-022
				2M	Pumpkinseed	100	11-139	31130-022
				2M	Pumpkinseed	91	11-140	31130-022
Average Age of fish : 2.0								
Average Length of fish : 98								
AREA D - Upstream of HQ	31153	276677	31153-bc1	6M	Brown Bullhead	340	11-141	31153-001
				4M	Brown Bullhead	339	11-142	31153-001
Average Age of fish : 5.0								
Average Length of fish : 340								
AREA D - Upstream of HQ	31153	276677	31153-bc2	6M	Brown Bullhead	335	11-143	31153-002
				6M	Brown Bullhead	325	11-144	31153-002
Average Age of fish : 6.0								
Average Length of fish : 330								
AREA D - Upstream of HQ	31153	276677	31153-bc3	5M	Brown Bullhead	321	11-145	31153-003
				5M	Brown Bullhead	315	11-146	31153-003
Average Age of fish : 5.0								
Average Length of fish : 318								
AREA D - Upstream of HQ	31153	276677	31153-bc4	6M	Brown Bullhead	315	11-147	31153-004
				6M	Brown Bullhead	311	11-148	31153-004
				6M	Brown Bullhead	306	11-149	31153-004
Average Age of fish : 6.0								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
Average Length of fish : 311								
AREA D - Upstream of HQ	31153	276677	31153-bc5	6M	Brown Bullhead	306	11-150	31153-005
				5M	Brown Bullhead	302	11-151	31153-005
				5M	Brown Bullhead	300	11-152	31153-005
Average Age of fish : 5.3								
Average Length of fish : 303								
AREA D - Upstream of HQ	31153	276677	31153-bc6	6M	Brown Bullhead	300	11-153	31153-006
				6M	Brown Bullhead	296	11-154	31153-006
				5M	Brown Bullhead	300	11-155	31153-006
Average Age of fish : 5.7								
Average Length of fish : 299								
AREA D - Upstream of HQ	31153	276677	31153-bc7	5M	Brown Bullhead	293	11-156	31153-007
				6M	Brown Bullhead	290	11-157	31153-007
				6M	Brown Bullhead	288	11-158	31153-007
Average Age of fish : 5.7								
Average Length of fish : 290								
AREA D - Upstream of HQ	31153	276677	31153-bc8	6M	Brown Bullhead	285	11-159	31153-008
				5M	Brown Bullhead	282	11-160	31153-008
				4M	Brown Bullhead	275	11-161	31153-008
Average Age of fish : 5.0								
Average Length of fish : 281								
AREA D - Upstream of HQ	31153	276677	31153-bc9	5M	Brown Bullhead	264	11-162	31153-009
				3M	Brown Bullhead	262	11-163	31153-009
				3M	Brown Bullhead	259	11-164	31153-009
				5M	Brown Bullhead	250	11-165	31153-009
Average Age of fish : 4.0								
Average Length of fish : 259								
AREA D - Upstream of HQ	31153	276677	31153-bc10	2M	Brown Bullhead	241	11-166	31153-010
				3M	Brown Bullhead	236	11-167	31153-010

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
				2M	Brown Bullhead	216	11-168	31153-010
Average Age of fish : 2.3								
Average Length of fish : 231								
AREA D - Upstream of HQ	31153	276677	31153-bc11	2M	Brown Bullhead	210	11-169	31153-011
				2M	Brown Bullhead	205	11-170	31153-011
				2M	Brown Bullhead	193	11-171	31153-011
Average Age of fish : 2.0								
Average Length of fish : 203								
AREA D - Upstream of HQ	31153	276677	31153-bc17	3M	Black Crappie	155	11-177	31153-017
				2M	Black Crappie	148	11-178	31153-017
				2M	Black Crappie	141	11-179	31153-017
				2M	Black Crappie	130	11-180	31153-017
Average Age of fish : 2.2								
Average Length of fish : 144								
AREA D - Upstream of HQ	31153	276677	31153-bc19	2M	Bluegill	132	11-182	31153-019
				3M	Bluegill	105	11-183	31153-019
				2M	Bluegill	104	11-184	31153-019
				2M	Bluegill	100	11-185	31153-019
Average Age of fish : 2.2								
Average Length of fish : 110								
AREA D - Upstream of HQ	31153	276677	31153-bc20	3M	Pumpkinseed	171	11-186	31153-020
				3M	Pumpkinseed	167	11-187	31153-020
Average Age of fish : 3.0								
Average Length of fish : 169								
AREA D - Upstream of HQ	31153	276677	31153-bc21	3M	Pumpkinseed	163	11-188	31153-021
				2M	Pumpkinseed	118	11-189	31153-021
Average Age of fish : 2.5								
Average Length of fish : 140								
AREA D - Upstream of HQ	31156	276765	31156-bc2	5M	Brown Bullhead	225	11-192	31156-002

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
				3M	Brown Bullhead	200	11-193	31156-002
Average Age of fish : 4.0								
Average Length of fish : 212								
AREA D - Upstream of HQ	31156	276765	31156-bc5	1M	Chain Pickerel	159	11-196	31156-005
				1M	Chain Pickerel	155	11-197	31156-005
Average Age of fish : 1.0								
Average Length of fish : 157								
AREA D - Upstream of HQ	31156	276765	31156-bc6	1M	Chain Pickerel	150	11-198	31156-006
				1+	Chain Pickerel	130	11-199	31156-006
Average Age of fish : 1.0								
Average Length of fish : 140								
AREA D - Upstream of HQ	31156	276765	31156-bc7	1+	Chain Pickerel	129	11-200	31156-007
				1+	Chain Pickerel	125	11-201	31156-007
Average Age of fish : 1.0								
Average Length of fish : 127								
AREA D - Upstream of HQ	31156	276765	31156-bc13	4M	Bluegill	174	11-207	31156-013
				4M	Bluegill	156	11-208	31156-013
Average Age of fish : 4.0								
Average Length of fish : 165								
AREA D - Upstream of HQ	31156	276765	31156-bc14	4M	Bluegill	140	11-209	31156-014
				3M	Bluegill	140	11-210	31156-014
				2+	Bluegill	135	11-211	31156-014
Average Age of fish : 3.0								
Average Length of fish : 138								
AREA D - Upstream of HQ	31156	276765	31156-bc16	5M	Pumpkinseed	170	11-213	31156-016
				5M	Pumpkinseed	164	11-214	31156-016
Average Age of fish : 5.0								
Average Length of fish : 167								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
AREA D - Upstream of HQ	31156	276765	31156-bc18	4M	Pumpkinseed	157	11-216	31156-018
				5M	Pumpkinseed	156	11-217	31156-018
				4	Pumpkinseed	154	11-218	31156-018
Average Age of fish : 4.3								
Average Length of fish : 156								
AREA D - Upstream of HQ	31156	276765	31156-bc19	4M	Pumpkinseed	154	11-219	31156-019
				3+	Pumpkinseed	154	11-220	31156-019
				4M	Pumpkinseed	150	11-221	31156-019
Average Age of fish : 3.7								
Average Length of fish : 153								
AREA D - Upstream of HQ	31156	276765	31156-bc20	3+	Pumpkinseed	155	11-222	31156-020
				4M	Pumpkinseed	150	11-223	31156-020
				4M	Pumpkinseed	150	11-224	31156-020
Average Age of fish : 3.7								
Average Length of fish : 152								
AREA D - Upstream of HQ	31156	276765	31156-bc21	4M	Pumpkinseed	143	11-225	31156-021
				3+	Pumpkinseed	137	11-226	31156-021
				3+	Pumpkinseed	136	11-227	31156-021
				4M	Pumpkinseed	126	11-228	31156-021
Average Age of fish : 3.5								
Average Length of fish : 136								
AREA D - Upstream of HQ	31156	276765	31156-bc22	4M	Pumpkinseed	126	11-229	31156-022
				4M	Pumpkinseed	122	11-230	31156-022
				4M	Pumpkinseed	115	11-231	31156-022
				4M	Pumpkinseed	113	11-232	31156-022
				4M	Pumpkinseed	111	11-233	31156-022
				4M	Pumpkinseed	105	11-234	31156-022
Average Age of fish : 4.0								
Average Length of fish : 115								
MANOR ROAD	31124	276063	31124-bc10	6M	Brown Bullhead	256	11-065	31124-010

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
				7M	Brown Bullhead	254	11-066	31124-010
Average Age of fish : 6.5								
Average Length of fish : 255								
MANOR ROAD	31124	276063	31124-bc11	5M	Brown Bullhead	254	11-067	31124-011
				5M	Brown Bullhead	254	11-068	31124-011
Average Age of fish : 5.0								
Average Length of fish : 254								
MANOR ROAD	31124	276063	31124-bc12	5M	Brown Bullhead	250	11-069	31124-012
				5M	Brown Bullhead	243	11-070	31124-012
Average Age of fish : 5.0								
Average Length of fish : 246								
MANOR ROAD	31124	276063	31124-bc13	5M	Brown Bullhead	240	11-071	31124-013
				6M	Brown Bullhead	249	11-072	31124-013
Average Age of fish : 5.5								
Average Length of fish : 244								
MANOR ROAD	31124	276063	31124-bc14	4M	Brown Bullhead	217	11-073	31124-014
				3M	Brown Bullhead	191	11-074	31124-014
				4M	Brown Bullhead	190	11-075	31124-014
Average Age of fish : 3.7								
Average Length of fish : 199								
DONAHUE'S POND	29544	276993	29544-bc11	7M	Bluegill	210	11-245	29544-011
				7M	Bluegill	210	11-246	29544-011
Average Age of fish : 7.0								
Average Length of fish : 210								
DONAHUE'S POND	29544	276993	29544-bc12	6M	Bluegill	210	11-247	29544-012
				4M	Bluegill	209	11-248	29544-012
Average Age of fish : 5.0								
Average Length of fish : 210								

Table 4-4 : Composition of the 2011 Fish Composites

Area	COC	SDG*	Composite ID	Individual Fish Age	Individual Fish species	Total Length (mm)	Fish ID	UIDs*
DONAHUE'S POND	29544	276993	29544-bc13	6M	Bluegill	204	11-249	29544-013
				6M	Bluegill	197	11-250	29544-013
Average Age of fish : 6.0								
Average Length of fish : 200								
DONAHUE'S POND	29544	276993	29544-bc14	4M	Bluegill	195	11-251	29544-014
				4M	Bluegill	194	11-252	29544-014
Average Age of fish : 4.0								
Average Length of fish : 194								
DONAHUE'S POND	29544	276993	29544-bc15	6M	Bluegill	193	11-253	29544-015
				6+	Bluegill	191	11-254	29544-015
Average Age of fish : 6								
Average Length of fish : 192								

Table 4-5 : Peconic River Fish Mercury Concentrations by Fish Location - 2011				
Fish Collection Area *	**Number of Mercury Samples**	**Average Mercury Concentration (mg/kg)**	**Minimum Mercury Concentration (mg/kg)**	**Maximum Mercury Concentration (mg/kg)**
All Fish Samples (Area A to Donahue's Pond)	124	0.307	0.0513	1.52
AREA A	18	0.495	0.155	0.895
AREA C	22	0.37	0.129	1.52
AREA D - Upstream of HQ	44	0.295	0.0941	0.962
DONAHUE'S POND	19	0.092	0.0513	0.174
MANOR ROAD	15	0.303	0.104	0.582
SCHULTZ ROAD	6	0.283	0.0545	0.416

* Distance is from BNL STP to the approximate mid-point of the respective fish collection area.

Table 4-6 : Peconic River Fish Mercury Concentrations by Species and Age (Individual Fish)								
Species	**Number of Fish**	**Average[1] Length (mm)**	**Minimum[1] Length (mm)**	**Maximum[1] Length (mm)**	**Number of Analytical Samples**	**Average Mercury Concentration (mg/kg)[2]**	**Minimum Mercury Concentration (mg/kg)[2]**	**Maximum Mercury Concentration (mg/kg)[2]**
Black Crappie	3	189	142	275	3	0.287	0.134	0.581
Age 4M	1	275	275	275	1	0.581	0.581	0.581
Age 2M	2	146	142	149	2	0.14	0.134	0.146
Bluegill	4	158	110	215	4	0.226	0.212	0.251
Age 6+	1	215	215	215	1	0.225	0.225	0.225
Age 3M	2	153	120	185	2	0.231	0.212	0.251
Age 2M	1	110	110	110	1	0.217	0.217	0.217
Brown Bullhead	30	269	149	354	30	0.173	0.051	0.408
Age 14M	1	337	337	337	1	0.161	0.161	0.161
Age 10M	1	321	321	321	1	0.091	0.091	0.091
Age 9M	1	318	318	318	1	0.051	0.051	0.051
Age 7M	2	332	328	335	2	0.07	0.066	0.074
Age 6M	9	317	271	354	9	0.187	0.051	0.408
Age 5M	8	282	257	320	8	0.191	0.055	0.335
Age 2M	8	166	149	191	8	0.193	0.112	0.313
Chain Pickerel	5	308	195	358	5	0.406	0.1	0.629
Age 5M	1	358	358	358	1	0.582	0.582	0.582
Age 3+	2	324	318	330	2	0.202	0.1	0.305
Age 3M	1	340	340	340	1	0.416	0.416	0.416
Age 1M	1	195	195	195	1	0.629	0.629	0.629
Largemouth Bass	11	241	88	450	11	0.531	0.134	1.52
Age 10M	1	450	450	450	1	1.52	1.52	1.52
Age 6M	3	339	280	402	3	0.704	0.387	0.962

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Average Mercury Concentration (mg/kg)[2]	Minimum Mercury Concentration (mg/kg)[2]	Maximum Mercury Concentration (mg/kg)[2]
Age 5M	2	235	216	254	2	0.154	0.134	0.174
Age 4M	1	232	232	232	1	0.372	0.372	0.372
Age 2M	1	133	133	133	1	0.421	0.421	0.421
Age 1M	3	118	88	133	3	0.37	0.256	0.43
Pumpkinseed	5	148	108	196	5	0.32	0.157	0.52
Age 6+	1	196	196	196	1	0.157	0.157	0.157
Age 5M	1	162	162	162	1	0.423	0.423	0.423
Age 4+	1	166	166	166	1	0.163	0.163	0.163
Age 2M	2	108	108	108	2	0.428	0.335	0.52

[1] Average length, minimum length and maximum length were calculated for all aged fish.

[2] The average, minimum and maximum concentrations and the average ages in this table represent only the fish that were analyzed for mercury.

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
FORGE POND - Bluegill								
Composite : 29029-bc14	2	220	210	229	1			
Mercury						0.219	0.00398	E
Age of Fish :								
FORGE POND - Bluegill								
Composite : 29029-bc15	2	206	201	210	1			
Mercury						0.0567	0.00354	E
Age of Fish :								
FORGE POND - Bluegill								
Composite : 29029-bc16	2	195	195	195	1			
Mercury						0.109	0.00346	E
Age of Fish :								
FORGE POND - Bluegill								
Composite : 29029-bc17	3	184	179	188	1			
Mercury						0.0776	0.00374	E
Age of Fish :								
DONAHUE'S POND - Bluegill								
Composite : 29544-bc11	2	210	210	210	1			
Mercury						0.112	0.00363	*N
Age of Fish : 7.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
DONAHUE'S POND - Bluegill								
Composite : 29544-bc12	2	210	209	210	1			
Mercury						0.103	0.00353	*N
Age of Fish : 5.0 years								
DONAHUE'S POND - Bluegill								
Composite : 29544-bc13	2	201	197	204	1			
Mercury						0.0941	0.00374	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Bluegill								
Composite : 29544-bc14	2	195	194	195	1			
Mercury						0.0619	0.00347	*N
Age of Fish : 4.0 years								
DONAHUE'S POND - Bluegill								
Composite : 29544-bc15	2	192	191	193	1			
Mercury						0.0697	0.00406	*N
Age of Fish : 6.0 years								
AREA A - Brown Bullhead								
Composite : 31122-bc1	3	272	250	305	1			
Mercury						0.584	0.0395	
Age of Fish : 5.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA A - Brown Bullhead								
Composite : 31122-bc2	2	234	223	245	1			
Mercury						0.293	0.00383	
Age of Fish : 4.5 years								
AREA A - Brown Bullhead								
Composite : 31122-bc3	6	166	158	172	1			
Mercury						0.279	0.00395	
Age of Fish : 2.0 years								
AREA A - Brown Bullhead								
Composite : 31122-bc4	2	144	140	147	1			
Mercury						0.676	0.0386	
Age of Fish : 2.0 years								
AREA A - Brown Bullhead								
Composite : 31122-bc5	3	136	133	138	1			
Mercury						0.155	0.0034	
Age of Fish : 2.0 years								
AREA A - Chain Pickerel								
Composite : 31122-bc9	2	370	354	385	1			
Mercury						0.859	0.0383	
Age of Fish : 3.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA A - Chain Pickerel								
Composite : 31122-bc10	3	326	305	342	1			
Mercury						0.895	0.0381	
Age of Fish : 3.0 years								
AREA A - Chain Pickerel								
Composite : 31122-bc11	5	169	150	194	1			
Mercury						0.3	0.00408	
Age of Fish : 1.2 years								
AREA A - Chain Pickerel								
Composite : 31122-bc12	3	125	117	133	1			
Mercury						0.241	0.00389	
Age of Fish : 1.0 years								
AREA A - Pumpkinseed								
Composite : 31122-bc13	6	162	155	175	1			
Mercury						0.759	0.0376	
Age of Fish : 3.2 years								
AREA A - Pumpkinseed								
Composite : 31122-bc14	6	149	144	153	1			
Mercury						0.535	0.00383	
Age of Fish : 3.2 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA A - Pumpkinseed								
Composite : 31122-bc15	4	143	142	144	1			
Mercury						0.476	0.00341	
Age of Fish : 2.8 years								
AREA A - Pumpkinseed								
Composite : 31122-bc16	2	138	135	140	1			
Mercury						0.871	0.0392	
Age of Fish : 3.0 years								
AREA A - Pumpkinseed								
Composite : 31122-bc17	2	123	119	127	1			
Mercury						0.466	0.00353	
Age of Fish : 2.0 years								
AREA A - Pumpkinseed								
Composite : 31122-bc18	2	106	98	114	1			
Mercury						0.248	0.00371	
Age of Fish : 2.0 years								
MANOR ROAD - Brown Bullhead								
Composite : 31124-bc10	2	255	254	256	1			
Mercury						0.394	0.00346	
Age of Fish : 6.5 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
MANOR ROAD - Brown Bullhead								
Composite : 31124-bc11	2	254	254	254	1			
Mercury						0.342	0.00357	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Composite : 31124-bc12	2	247	243	250	1			
Mercury						0.275	0.00383	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Composite : 31124-bc13	2	245	240	249	1			
Mercury						0.342	0.00385	
Age of Fish : 5.5 years								
MANOR ROAD - Brown Bullhead								
Composite : 31124-bc14	3	199	190	217	1			
Mercury						0.142	0.00379	
Age of Fish : 3.7 years								
AREA C - Brown Bullhead								
Composite : 31130-bc1	2	358	356	360	1			
Mercury						0.235	0.00399	N
Age of Fish : 6.5 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA C - Brown Bullhead								
Composite : 31130-bc3	4	192	175	225	1			
Mercury						0.245	0.00374	N
Age of Fish : 2.0 years								
AREA C - Largemouth Bass								
Composite : 31130-bc8	6	93	81	105	1			
Mercury						0.464	0.00368	N
Age of Fish : 1.0 years								
AREA C - Chain Pickerel								
Composite : 31130-bc9	6	146	134	166	1			
Mercury						0.4	0.00362	N
Age of Fish : 1.0 years								
AREA C - Chain Pickerel								
Composite : 31130-bc10	3	129	124	134	1			
Mercury						0.209	0.00368	N
Age of Fish : 1.0 years								
AREA C - Bluegill								
Composite : 31130-bc11	3	208	194	230	1			
Mercury						0.365	0.0034	N
Age of Fish : 5.3 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA C - Bluegill								
Composite : 31130-bc12	3	162	134	178	1			
Mercury						0.443	0.00353	N
Age of Fish : 2.7 years								
AREA C - Bluegill								
Composite : 31130-bc13	6	124	119	132	1			
Mercury						0.209	0.00386	N
Age of Fish : 2.0 years								
AREA C - Bluegill								
Composite : 31130-bc15	2	98	92	104	1			
Mercury						0.25	0.00341	N
Age of Fish : 2.0 years								
AREA C - Pumpkinseed								
Composite : 31130-bc16	5	180	169	186	1			
Mercury						0.45	0.00395	N
Age of Fish : 4.0 years								
AREA C - Pumpkinseed								
Composite : 31130-bc17	3	161	152	172	1			
Mercury						0.482	0.00381	N
Age of Fish : 4.3 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA C - Pumpkinseed								
Composite : 31130-bc18	5	136	128	147	1			
Mercury						0.325	0.00346	N
Age of Fish : 2.4 years								
AREA C - Pumpkinseed								
Composite : 31130-bc19	6	118	111	126	1			
Mercury						0.332	0.00376	N
Age of Fish : 2.0 years								
AREA C - Pumpkinseed								
Composite : 31130-bc22	3	98	91	103	1			
Mercury						0.351	0.00408	N
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc1	2	340	339	340	1			
Mercury						0.293	0.00368	
Age of Fish : 5.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc2	2	330	325	335	1			
Mercury						0.273	0.00359	
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc3	2	318	315	321	1			
Mercury						0.173	0.0037	
Age of Fish : 5.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc4	3	311	306	315	1			
Mercury						0.293	0.00408	
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc5	3	303	300	306	1			
Mercury						0.198	0.00364	
Age of Fish : 5.3 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc6	3	299	296	300	1			
Mercury						0.127	0.00351	
Age of Fish : 5.7 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc7	3	290	288	293	1			
Mercury						0.433	0.00408	
Age of Fish : 5.7 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc8	3	281	275	285	1			
Mercury						0.111	0.00394	
Age of Fish : 5.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc9	4	259	250	264	1			
Mercury						0.201	0.00374	
Age of Fish : 4.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc10	3	231	216	241	1			
Mercury						0.246	0.00365	
Age of Fish : 2.3 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc11	3	203	193	210	1			
Mercury						0.132	0.00383	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Black Crappie								
Composite : 31153-bc17	4	144	130	155	1			
Mercury						0.166	0.00378	
Age of Fish : 2.3 years								
AREA D - Upstream of HQ - Bluegill								
Composite : 31153-bc19	4	110	100	132	1			
Mercury						0.18	0.00375	
Age of Fish : 2.3 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31153-bc20	2	169	167	171	1			
Mercury						0.376	0.00341	
Age of Fish : 3.0 years								
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31153-bc21	2	141	118	163	1			
Mercury						0.407	0.00381	
Age of Fish : 2.5 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31156-bc2	2	213	200	225	1			
Mercury						0.139	0.00381	
Age of Fish : 4.0 years								
AREA D - Upstream of HQ - Chain Pickerel								
Composite : 31156-bc5	2	157	155	159	1			
Mercury						0.328	0.00405	
Age of Fish : 1.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Chain Pickerel								
Composite : 31156-bc6	2	140	130	150	1			
Mercury						0.187	0.00402	
Age of Fish : 1.0 years								
AREA D - Upstream of HQ - Chain Pickerel								
Composite : 31156-bc7	2	127	125	129	1			
Mercury						0.233	0.00374	
Age of Fish : 1.0 years								
AREA D - Upstream of HQ - Bluegill								
Composite : 31156-bc13	2	165	156	174	1			
Mercury						0.506	0.00392	
Age of Fish : 4.0 years								
AREA D - Upstream of HQ - Bluegill								
Composite : 31156-bc14	3	138	135	140	1			
Mercury						0.377	0.0034	
Age of Fish : 3.0 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc16	2	167	164	170	1			
Mercury						0.498	0.00399	
Age of Fish : 5.0 years								
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc18	3	156	154	157	1			
Mercury						0.215	0.00372	
Age of Fish : 4.3 years								
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc19	3	153	150	154	1			
Mercury						0.223	0.00381	
Age of Fish : 3.7 years								
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc20	3	152	150	155	1			
Mercury						0.286	0.00367	
Age of Fish : 3.7 years								

Table 4-7a : Peconic River Fish Mercury Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc21	4	136	126	143	1			
Mercury						0.377	0.00384	
Age of Fish : 3.5 years								
AREA D - Upstream of HQ - Pumpkinseed								
Composite : 31156-bc22	6	115	105	126	1			
Mercury						0.267	0.00366	
Age of Fish : 4.0 years								

Note: [1] The average lengths, weights and analyte concentrations represent only the fish composites in this table.

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
AREA A - Chain Pickerel								
Composite : 31122-bc10	3	326	305	342	1			
Aroclor 1016						10.2	10.2	U
Aroclor 1221						10.2	10.2	U
Aroclor 1232						10.2	10.2	U
Aroclor 1242						10.2	10.2	U
Aroclor 1248						10.2	10.2	U
Aroclor 1254						5.9	10.2	J
Aroclor 1260						10.2	10.2	U
Age of Fish : 3.0 years								
AREA C - Brown Bullhead								
Composite : 31130-bc1	2	358	356	360	1			
Aroclor 1016						9.93	9.93	U
Aroclor 1221						9.93	9.93	U
Aroclor 1232						9.93	9.93	U
Aroclor 1242						9.93	9.93	U
Aroclor 1248						9.93	9.93	U
Aroclor 1254						9.93	9.93	U
Aroclor 1260						9.93	9.93	U
Age of Fish : 6.5 years								
AREA C - Bluegill								
Composite : 31130-bc11	3	208	194	230	1			
Aroclor 1016						9.92	9.92	U
Aroclor 1221						9.92	9.92	U
Aroclor 1232						9.92	9.92	U

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
Aroclor 1242						9.92	9.92	U
Aroclor 1248						9.92	9.92	U
Aroclor 1254						9.92	9.92	U
Aroclor 1260						9.92	9.92	U
Age of Fish : 5.3 years								
AREA C - Pumpkinseed								
Composite : 31130-bc16	5	180	169	186	1			
Aroclor 1016						9.94	9.94	U
Aroclor 1221						9.94	9.94	U
Aroclor 1232						9.94	9.94	U
Aroclor 1242						9.94	9.94	U
Aroclor 1248						9.94	9.94	U
Aroclor 1254						7.8	9.94	J
Aroclor 1260						9.94	9.94	U
Age of Fish : 4.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc1	2	340	339	340	1			
Aroclor 1016						9.97	9.97	U
Aroclor 1221						9.97	9.97	U
Aroclor 1232						9.97	9.97	U
Aroclor 1242						9.97	9.97	U
Aroclor 1248						9.97	9.97	U
Aroclor 1254						7.2	9.97	J
Aroclor 1260						9.97	9.97	U

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
Age of Fish : 5.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc2	2	330	325	335	1			
Aroclor 1016						9.94	9.94	U
Aroclor 1221						9.94	9.94	U
Aroclor 1232						9.94	9.94	U
Aroclor 1242						9.94	9.94	U
Aroclor 1248						9.94	9.94	U
Aroclor 1254						18.4	9.94	
Aroclor 1260						8.9	9.94	J
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc3	2	318	315	321	1			
Aroclor 1016						9.92	9.92	U
Aroclor 1221						9.92	9.92	U
Aroclor 1232						9.92	9.92	U
Aroclor 1242						9.92	9.92	U
Aroclor 1248						9.92	9.92	U
Aroclor 1254						22.2	9.92	
Aroclor 1260						10.4	9.92	
Age of Fish : 5.0 years								

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc4	3	311	306	315	1			
Aroclor 1016						9.96	9.96	U
Aroclor 1221						9.96	9.96	U
Aroclor 1232						9.96	9.96	U
Aroclor 1242						9.96	9.96	U
Aroclor 1248						9.96	9.96	U
Aroclor 1254						4.6	9.96	J
Aroclor 1260						9.96	9.96	U
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc5	3	303	300	306	1			
Aroclor 1016						9.91	9.91	U
Aroclor 1221						9.91	9.91	U
Aroclor 1232						9.91	9.91	U
Aroclor 1242						9.91	9.91	U
Aroclor 1248						9.91	9.91	U
Aroclor 1254						9.91	9.91	U
Aroclor 1260						9.91	9.91	U
Age of Fish : 5.3 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc6	3	299	296	300	1			

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[1] Length (mm)	Maximum[1] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
Aroclor 1016						9.96	9.96	U
Aroclor 1221						9.96	9.96	U
Aroclor 1232						9.96	9.96	U
Aroclor 1242						9.96	9.96	U
Aroclor 1248						9.96	9.96	U
Aroclor 1254						14.3	9.96	
Aroclor 1260						6.4	9.96	J
Age of Fish : 5.7 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc7	3	290	288	293	1			
Aroclor 1016						9.98	9.98	U
Aroclor 1221						9.98	9.98	U
Aroclor 1232						9.98	9.98	U
Aroclor 1242						9.98	9.98	U
Aroclor 1248						9.98	9.98	U
Aroclor 1254						6.7	9.98	J
Aroclor 1260						9.98	9.98	U
Age of Fish : 5.7 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc8	3	281	275	285	1			
Aroclor 1016						9.98	9.98	U
Aroclor 1221						9.98	9.98	U
Aroclor 1232						9.98	9.98	U

Table 4-7b : Peconic River Fish PCB Concentrations by Species and Age (Composites)								
Species	**Number of Fish**	**Average[1] Length (mm)**	**Minimum[1] Length (mm)**	**Maximum[1] Length (mm)**	**Number of Analytical Samples**	**Conc. (ug/kg)**	**MDL (ug/kg)**	**Lab Qual**
Aroclor 1242						9.98	9.98	U
Aroclor 1248						9.98	9.98	U
Aroclor 1254						7.6	9.98	J
Aroclor 1260						9.98	9.98	U
Age of Fish : 5.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Composite : 31153-bc9	4	259	250	264	1			
Aroclor 1016						9.94	9.94	U
Aroclor 1221						9.94	9.94	U
Aroclor 1232						9.94	9.94	U
Aroclor 1242						9.94	9.94	U
Aroclor 1248						9.94	9.94	U
Aroclor 1254						7.4	9.94	J
Aroclor 1260						9.94	9.94	U
Age of Fish : 4.0 years								
Note: [1] The average lengths, weights and analyte concentrations represent only the fish composites in this table.								

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA A - Brown Bullhead									
Composite : 31122-bc1	3	272	250	305	1				
Cesium-137						0.257	0.0497	0.0205	J
Age of Fish : 5.0 years									
AREA A - Brown Bullhead									
Composite : 31122-bc2	2	234	223	245	1				
Cesium-137						0.25	0.0986	0.0719	J
Age of Fish : 4.5 years									
AREA A - Brown Bullhead									
Composite : 31122-bc3	6	166	158	172	1				
Cesium-137						0.223	0.0605	0.0423	J
Age of Fish : 2.0 years									
AREA A - Chain Pickerel									
Composite : 31122-bc9	2	370	354	385	1				
Cesium-137						0.377	0.0706	0.0435	J
Age of Fish : 3.0 years									
AREA A - Chain Pickerel									
Composite : 31122-bc10	3	326	305	342	1				
Cesium-137						0.282	0.072	0.0376	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 3.0 years									
AREA A - Chain Pickerel									
Composite : 31122-bc11	5	169	150	194	1				
Cesium-137						0.143	0.0892	0.0663	J
Age of Fish : 1.2 years									
AREA A - Pumpkinseed									
Composite : 31122-bc13	6	162	155	175	1				
Cesium-137						0.358	0.0777	0.0385	J
Age of Fish : 3.2 years									
AREA A - Pumpkinseed									
Composite : 31122-bc14	6	149	144	153	1				
Cesium-137						0.51	0.118	0.0603	J
Age of Fish : 3.2 years									
AREA A - Pumpkinseed									
Composite : 31122-bc15	4	143	142	144	1				
Cesium-137						0.175	0.0842	0.073	J
Age of Fish : 2.8 years									

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA C - Brown Bullhead									
Composite : 31130-bc1	2	358	356	360	1				
Cesium-137						0.25	0.0547	0.0234	J
Age of Fish : 6.5 years									
AREA C - Brown Bullhead									
Composite : 31130-bc3	4	192	175	225	1				
Cesium-137						0.2	0.0661	0.0582	J
Age of Fish : 2.0 years									
AREA C - Bluegill									
Composite : 31130-bc11	3	208	194	230	1				
Cesium-137						0.252	0.0991	0.0703	J
Age of Fish : 5.3 years									
AREA C - Bluegill									
Composite : 31130-bc12	3	162	134	178	1				
Cesium-137						0.157	0.058	0.0654	J
Age of Fish : 2.7 years									
AREA C - Bluegill									
Composite : 31130-bc13	6	124	119	132	1				
Cesium-137						0.147	0.0846	0.0548	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 2.0 years									
AREA C - Pumpkinseed									
Composite : 31130-bc16	5	180	169	186	1				
Cesium-137						0.194	0.0537	0.039	J
Age of Fish : 4.0 years									
AREA C - Pumpkinseed									
Composite : 31130-bc17	3	161	152	172	1				
Cesium-137						0.215	0.0697	0.0495	J
Age of Fish : 4.3 years									
AREA C - Pumpkinseed									
Composite : 31130-bc18	5	136	128	147	1				
Cesium-137						0.202	0.0601	0.0378	J
Age of Fish : 2.4 years									
AREA C - Pumpkinseed									
Composite : 31130-bc19	6	118	111	126	1				
Cesium-137						0.13	0.0789	0.0893	J
Age of Fish : 2.0 years									

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc1	2	340	339	340	1				
Cesium-137						0.244	0.0441	0.0198	J
Age of Fish : 5.0 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc2	2	330	325	335	1				
Cesium-137						0.216	0.0394	0.0156	J
Age of Fish : 6.0 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc3	2	318	315	321	1				
Cesium-137						0.178	0.0366	0.0213	J
Age of Fish : 5.0 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc4	3	311	306	315	1				
Cesium-137						0.178	0.0335	0.0197	J
Age of Fish : 6.0 years									

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc5	3	303	300	306	1				
Cesium-137						0.204	0.0397	0.015	J
Age of Fish : 5.3 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc6	3	299	296	300	1				
Cesium-137						0.22	0.0485	0.0251	J
Age of Fish : 5.7 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc7	3	290	288	293	1				
Cesium-137						0.189	0.0393	0.0212	J
Age of Fish : 5.7 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc8	3	281	275	285	1				
Cesium-137						0.199	0.044	0.0232	J
Age of Fish : 5.0 years									

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc9	4	259	250	264	1				
Cesium-137						0.177	0.0354	0.0198	J
Age of Fish : 4.0 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc10	3	231	216	241	1				
Cesium-137						0.149	0.069	0.0524	J
Age of Fish : 2.3 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31153-bc11	3	203	193	210	1				
Cesium-137						0.131	0.0564	0.0393	J
Age of Fish : 2.0 years									
AREA D - Upstream of HQ - Black Crappie									
Composite : 31153-bc17	4	144	130	155	1				
Cesium-137						0.185	0.105	0.0891	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 2.3 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31153-bc20	2	169	167	171	1				
Cesium-137						0.143	0.0634	0.0357	J
Age of Fish : 3.0 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31153-bc21	2	141	118	163	1				
Cesium-137						0.16	0.0481	0.0552	J
Age of Fish : 2.5 years									
AREA D - Upstream of HQ - Brown Bullhead									
Composite : 31156-bc2	2	213	200	225	1				
Cesium-137						0.132	0.0756	0.0669	J
Age of Fish : 4.0 years									
AREA D - Upstream of HQ - Bluegill									
Composite : 31156-bc13	2	165	156	174	1				
Cesium-137						0.189	0.0847	0.0705	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 4.0 years									
AREA D - Upstream of HQ - Bluegill									
Composite : 31156-bc14	3	138	135	140	1				
Cesium-137						0.181	0.0582	0.0423	J
Age of Fish : 3.0 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc16	2	167	164	170	1				
Cesium-137						0.175	0.0517	0.0387	J
Age of Fish : 5.0 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc18	3	156	154	157	1				
Cesium-137						0.163	0.0524	0.043	J
Age of Fish : 4.3 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc19	3	153	150	154	1				
Cesium-137						0.178	0.0505	0.0407	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 3.7 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc20	3	152	150	155	1				
Cesium-137						0.133	0.0415	0.0274	J
Age of Fish : 3.7 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc21	4	136	126	143	1				
Cesium-137						0.175	0.0531	0.0515	J
Age of Fish : 3.5 years									
AREA D - Upstream of HQ - Pumpkinseed									
Composite : 31156-bc22	6	115	105	126	1				
Cesium-137						0.147	0.0522	0.0491	J
Age of Fish : 4.0 years									
MANOR ROAD - Brown Bullhead									
Composite : 31124-bc10	2	255	254	256	1				
Cesium-137						0.14	0.0386	0.0245	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 6.5 years									
MANOR ROAD - Brown Bullhead									
Composite : 31124-bc11	2	254	254	254	1				
Cesium-137						0.092	0.0319	0.0257	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Composite : 31124-bc12	2	247	243	250	1				
Cesium-137						0.118	0.0451	0.0401	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Composite : 31124-bc13	2	245	240	249	1				
Cesium-137						0.159	0.0373	0.0238	J
Age of Fish : 5.5 years									
MANOR ROAD - Brown Bullhead									
Composite : 31124-bc14	3	199	190	217	1				
Cesium-137						0.117	0.0717	0.0796	J
Age of Fish : 3.7 years									

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
DONAHUE'S POND - Bluegill									
Composite : 29544-bc11	2	210	210	210	1				
Cesium-137						0.0575	0.0758	0.14	U
Age of Fish : 7.0 years									
DONAHUE'S POND - Bluegill									
Composite : 29544-bc12	2	210	209	210	1				
Cesium-137						0.227	0.0905	0.102	J
Age of Fish : 5.0 years									
DONAHUE'S POND - Bluegill									
Composite : 29544-bc13	2	201	197	204	1				
Cesium-137						0.0361	0.0769	0.131	U
Age of Fish : 6.0 years									
DONAHUE'S POND - Bluegill									
Composite : 29544-bc14	2	195	194	195	1				
Cesium-137						0.0476	0.0498	0.0914	U
Age of Fish : 4.0 years									
DONAHUE'S POND - Bluegill									
Composite : 29544-bc15	2	192	191	193	1				
Cesium-137						0.124	0.0529	0.104	J

Table 4-7c : Peconic River Fish Cs-137 Concentrations by Species and Age (Composites)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Age of Fish : 6.0 years									

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA A - Largemouth Bass								
Fish ID : '11-018	1	133	133	133	1			
Mercury						0.421	0.00408	
Age of Fish : 2.0 years								
AREA A - Largemouth Bass								
Fish ID : '11-019	1	133	133	133	1			
Mercury						0.425	0.00372	
Age of Fish : 1.0 years								
AREA A - Largemouth Bass								
Fish ID : '11-020	1	132	132	132	1			
Mercury						0.43	0.00366	
Age of Fish : 1.0 years								
AREA C - Brown Bullhead								
Fish ID : '11-078	1	310	310	310	1			
Mercury						0.287	0.00351	N
Age of Fish : 6.0 years								
AREA C - Brown Bullhead								
Fish ID : '11-083	1	156	156	156	1			
Mercury						0.129	0.00368	N
Age of Fish : 2.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA C - Brown Bullhead								
Fish ID : '11-084	1	156	156	156	1			
Mercury						0.14	0.00401	N
Age of Fish : 2.0 years								
AREA C - Brown Bullhead								
Fish ID : '11-085	1	149	149	149	1			
Mercury						0.238	0.00357	N
Age of Fish : 2.0 years								
AREA C - Largemouth Bass								
Fish ID : '11-086	1	450	450	450	1			
Mercury						1.52	0.0774	N
Age of Fish : 10.0 years								
AREA C - Bluegill								
Fish ID : '11-114	1	110	110	110	1			
Mercury						0.217	0.00341	N
Age of Fish : 2.0 years								
AREA C - Pumpkinseed								
Fish ID : '11-136	1	108	108	108	1			

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
Mercury						0.335	0.00367	N
Age of Fish : 2.0 years								
AREA C - Pumpkinseed								
Fish ID : '11-137	1	108	108	108	1			
Mercury						0.52	0.00381	N
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-172	1	191	191	191	1			
Mercury						0.313	0.0035	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-173	1	185	185	185	1			
Mercury						0.209	0.00358	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-174	1	182	182	182	1			
Mercury						0.12	0.00352	

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Chain Pickerel								
Fish ID : '11-175	1	195	195	195	1			
Mercury						0.629	0.0392	
Age of Fish : 1.0 years								
AREA D - Upstream of HQ - Black Crappie								
Fish ID : '11-176	1	275	275	275	1			
Mercury						0.581	0.034	
Age of Fish : 4.0 years								
AREA D - Upstream of HQ - Bluegill								
Fish ID : '11-181	1	185	185	185	1			
Mercury						0.251	0.00383	
Age of Fish : 3.0 years								
AREA D - Upstream of HQ - Largemouth Bass								
Fish ID : '11-190	1	88	88	88	1			
Mercury						0.256	0.00388	
Age of Fish : 1.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-191	1	335	335	335	1			
Mercury						0.0941	0.00358	
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-194	1	162	162	162	1			
Mercury						0.112	0.00342	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Brown Bullhead								
Fish ID : '11-195	1	150	150	150	1			
Mercury						0.285	0.00382	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Largemouth Bass								
Fish ID : '11-202	1	402	402	402	1			
Mercury						0.764	0.0351	
Age of Fish : 6.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Largemouth Bass								
Fish ID : '11-203	1	334	334	334	1			
Mercury						0.962	0.0347	
Age of Fish : 6.0 years								
AREA D - Upstream of HQ - Black Crappie								
Fish ID : '11-204	1	149	149	149	1			
Mercury						0.134	0.00357	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Black Crappie								
Fish ID : '11-205	1	142	142	142	1			
Mercury						0.146	0.00364	
Age of Fish : 2.0 years								
AREA D - Upstream of HQ - Bluegill								
Fish ID : '11-206	1	215	215	215	1			
Mercury						0.225	0.00401	
Age of Fish : 6.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
AREA D - Upstream of HQ - Bluegill								
Fish ID : '11-212	1	120	120	120	1			
Mercury						0.212	0.0038	
Age of Fish : 3.0 years								
AREA D - Upstream of HQ - Pumpkinseed								
Fish ID : '11-215,216	1	162	162	162	1			
Mercury						0.423	0.00359	
Age of Fish : 5.0 years								
SCHULTZ ROAD - Brown Bullhead								
Fish ID : '11-256	1	320	320	320	1			
Mercury						0.0545	0.00374	*
Age of Fish : 5.0 years								
SCHULTZ ROAD - Largemouth Bass								
Fish ID : '11-257	1	280	280	280	1			
Mercury						0.387	0.00358	*
Age of Fish : 6.0 years								
SCHULTZ ROAD - Largemouth Bass								
Fish ID : '11-258	1	232	232	232	1			

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
Mercury						0.372	0.00368	*
Age of Fish : 4.0 years								
SCHULTZ ROAD - Chain Pickerel								
Fish ID : '11-259	1	340	340	340	1			
Mercury						0.416	0.00383	*
Age of Fish : 3.0 years								
SCHULTZ ROAD - Chain Pickerel								
Fish ID : '11-260	1	330	330	330	1			
Mercury						0.305	0.00396	*
Age of Fish : 3.0 years								
SCHULTZ ROAD - Pumpkinseed								
Fish ID : '11-261	1	166	166	166	1			
Mercury						0.163	0.00354	*
Age of Fish : 4.0 years								
MANOR ROAD - Chain Pickerel								
Fish ID : '11-001	1	358	358	358	1			
Mercury						0.582	0.0361	
Age of Fish : 5.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
MANOR ROAD - Brown Bullhead								
Fish ID : '11-056	1	293	293	293	1			
Mercury						0.27	0.00387	
Age of Fish : 6.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-057	1	282	282	282	1			
Mercury						0.104	0.0036	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-058	1	281	281	281	1			
Mercury						0.238	0.00386	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-059	1	275	275	275	1			
Mercury						0.369	0.00364	
Age of Fish : 6.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-060	1	273	273	273	1			
Mercury						0.292	0.00401	
Age of Fish : 5.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
MANOR ROAD - Brown Bullhead								
Fish ID : '11-061	1	271	271	271	1			
Mercury						0.408	0.00403	
Age of Fish : 6.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-062	1	271	271	271	1			
Mercury						0.235	0.00344	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-063	1	269	269	269	1			
Mercury						0.335	0.00381	
Age of Fish : 5.0 years								
MANOR ROAD - Brown Bullhead								
Fish ID : '11-064	1	257	257	257	1			
Mercury						0.211	0.0038	
Age of Fish : 5.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-235	1	354	354	354	1			

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
Mercury						0.0869	0.00374	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-236	1	354	354	354	1			
Mercury						0.0568	0.00357	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-237	1	340	340	340	1			
Mercury						0.0578	0.00387	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-238	1	337	337	337	1			
Mercury						0.161	0.00352	*N
Age of Fish : 14.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-239	1	335	335	335	1			
Mercury						0.0742	0.00353	*N
Age of Fish : 7.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-240	1	328	328	328	1			
Mercury						0.0657	0.00342	*N
Age of Fish : 7.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-241	1	321	321	321	1			
Mercury						0.0914	0.0034	*N
Age of Fish : 10.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-242	1	318	318	318	1			
Mercury						0.0513	0.00351	*N
Age of Fish : 9.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-243	1	317	317	317	1			
Mercury						0.0513	0.00392	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Brown Bullhead								
Fish ID : '11-244	1	305	305	305	1			
Mercury						0.0545	0.00389	*N
Age of Fish : 5.0 years								

Table 4-7d : Peconic River Fish Mercury Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual
DONAHUE'S POND - Pumpkinseed								
Fish ID : '11-255	1	196	196	196	1			
Mercury						0.157	0.00365	*N
Age of Fish : 6.0 years								
DONAHUE'S POND - Chain Pickerel								
Fish ID : '11-262	1	318	318	318	1			
Mercury						0.0999	0.00357	E
Age of Fish : 3.0 years								
DONAHUE'S POND - Largemouth Bass								
Fish ID : '11-263	1	254	254	254	1			
Mercury						0.174	0.00389	E
Age of Fish : 5.0 years								
DONAHUE'S POND - Largemouth Bass								
Fish ID : '11-264	1	216	216	216	1			
Mercury						0.134	0.00407	E
Age of Fish : 5.0 years								

Table 4-7e : Peconic River Fish PCB Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual
AREA C - Largemouth Bass								
Fish ID : '11-086	1	450	450	450	1			
Aroclor 1016						9.94	9.94	U
Aroclor 1221						9.94	9.94	U
Aroclor 1232						9.94	9.94	U
Aroclor 1242						9.94	9.94	U
Aroclor 1248						9.94	9.94	U
Aroclor 1254						9.94	9.94	U
Aroclor 1260						9.94	9.94	U
Age of Fish : 10.0 years								

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
AREA C - Brown Bullhead									
Fish ID : '11-078	1	310	310	310	1				
Cesium-137						0.254	0.0602	0.0453	J
Age of Fish : 6.0 years									
AREA C - Largemouth Bass									
Fish ID : '11-086	1	450	450	450	1				
Cesium-137						0.335	0.0631	0.0329	J
Age of Fish : 10.0 years									
AREA D - Upstream of HQ - Black Crappie									
Fish ID : '11-176	1	275	275	275	1				
Cesium-137						0.213	0.049	0.0314	J
Age of Fish : 4.0 years									
AREA D - Upstream of HQ - Bluegill									
Fish ID : '11-181	1	185	185	185	1				
Cesium-137						0.184	0.0585	0.0624	J
Age of Fish : 3.0 years									
AREA D - Upstream of HQ - Brown Bullhead									
Fish ID : '11-191	1	335	335	335	1				

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Cesium-137						0.189	0.061	0.0431	J
Age of Fish : 6.0 years									
AREA D - Upstream of HQ - Largemouth Bass									
Fish ID : '11-202	1	402	402	402	1				
Cesium-137						0.178	0.0438	0.0253	J
Age of Fish : 6.0 years									
AREA D - Upstream of HQ - Largemouth Bass									
Fish ID : '11-203	1	334	334	334	1				
Cesium-137						0.239	0.0517	0.0276	J
Age of Fish : 6.0 years									
AREA D - Upstream of HQ - Bluegill									
Fish ID : '11-206	1	215	215	215	1				
Cesium-137						0.138	0.0599	0.0435	J
Age of Fish : 6.0 years									
SCHULTZ ROAD - Brown Bullhead									
Fish ID : '11-256	1	320	320	320	1				
Cesium-137						0.0567	0.0412	0.05	J
Age of Fish : 5.0 years									

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
SCHULTZ ROAD - Largemouth Bass									
Fish ID : '11-257	1	280	280	280	1				
Cesium-137						0.13	0.0353	0.0445	J
Age of Fish : 6.0 years									
SCHULTZ ROAD - Largemouth Bass									
Fish ID : '11-258	1	232	232	232	1				
Cesium-137						0.104	0.0645	0.0475	J
Age of Fish : 4.0 years									
SCHULTZ ROAD - Chain Pickerel									
Fish ID : '11-259	1	340	340	340	1				
Cesium-137						0.189	0.0636	0.0526	J
Age of Fish : 3.0 years									
SCHULTZ ROAD - Chain Pickerel									
Fish ID : '11-260	1	330	330	330	1				
Cesium-137						0.117	0.101	0.0847	J
Age of Fish : 3.0 years									
MANOR ROAD - Chain Pickerel									
Fish ID : '11-001	1	358	358	358	1				

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Cesium-137						0.189	0.103	0.0962	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-056	1	293	293	293	1				
Cesium-137						0.0742	0.0507	0.0983	U
Age of Fish : 6.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-057	1	282	282	282	1				
Cesium-137						0.0889	0.054	0.0488	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-058	1	281	281	281	1				
Cesium-137						0.146	0.0508	0.0496	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-059	1	275	275	275	1				
Cesium-137						0.151	0.0655	0.0434	J
Age of Fish : 6.0 years									

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
MANOR ROAD - Brown Bullhead									
Fish ID : '11-060	1	273	273	273	1				
Cesium-137						0.17	0.104	0.0864	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-061	1	271	271	271	1				
Cesium-137						0.157	0.0518	0.0525	J
Age of Fish : 6.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-062	1	271	271	271	1				
Cesium-137						0.0706	0.0576	0.0444	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-063	1	269	269	269	1				
Cesium-137						0.154	0.0543	0.0658	J
Age of Fish : 5.0 years									
MANOR ROAD - Brown Bullhead									
Fish ID : '11-064	1	257	257	257	1				
Cesium-137						0.113	0.051	0.0663	J
Age of Fish : 5.0 years									

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-235	1	354	354	354	1				
Cesium-137						0.173	0.088	0.0869	J
Age of Fish : 6.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-236	1	354	354	354	1				
Cesium-137						0.0958	0.0736	0.0793	J
Age of Fish : 6.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-237	1	340	340	340	1				
Cesium-137						0.0297	0.071	0.0849	U
Age of Fish : 6.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-238	1	337	337	337	1				
Cesium-137						0.163	0.0481	0.0472	J
Age of Fish : 14.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-239	1	335	335	335	1				

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
Cesium-137						0.0939	0.0702	0.134	U
Age of Fish : 7.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-240	1	328	328	328	1				
Cesium-137						0.0794	0.107	0.0964	U
Age of Fish : 7.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-241	1	321	321	321	1				
Cesium-137						0.116	0.0533	0.0575	J
Age of Fish : 10.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-242	1	318	318	318	1				
Cesium-137						0.112	0.0585	0.118	U
Age of Fish : 9.0 years									
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-243	1	317	317	317	1				
Cesium-137						0.0304	0.0761	0.129	U
Age of Fish : 6.0 years									

Table 4-7f : Peconic River Fish Cs-137 Concentrations by Species and Age (Individual)

Species	Number of Fish	Average[1] Length (mm)	Minimum[2] Length (mm)	Maximum[3] Length (mm)	Number of Analytical Samples	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual
DONAHUE'S POND - Brown Bullhead									
Fish ID : '11-244	1	305	305	305	1				
Cesium-137						0.0486	0.049	0.0522	U
Age of Fish : 5.0 years									
DONAHUE'S POND - Pumpkinseed									
Fish ID : '11-255	1	196	196	196	1				
Cesium-137						0.107	0.0776	0.147	U
Age of Fish : 6.0 years									
DONAHUE'S POND - Chain Pickerel									
Fish ID : '11-262	1	318	318	318	1				
Cesium-137						0.0715	0.0177	0.0153	J
Age of Fish : 3.0 years									
DONAHUE'S POND - Largemouth Bass									
Fish ID : '11-263	1	254	254	254	1				
Cesium-137						0.0813	0.019	0.0171	J
Age of Fish : 5.0 years									

Table 4-8a - Peconic River Fish Samples - Mercury by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (mg/kg)	MDL (mg/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31122-001	A	31122-bc1	Mercury	0.584	0.04			Brown Bullhead	271.67	333.33	75.2	5
31122-002	A	31122-bc2	Mercury	0.293	0.004			Brown Bullhead	234	192	40.8	4
31122-003	A	31122-bc3	Mercury	0.279	0.004			Brown Bullhead	166.17	59.67	11.27	2
31122-004	A	31122-bc4	Mercury	0.676	0.039			Brown Bullhead	143.5	36	6.7	2
31122-005	A	31122-bc5	Mercury	0.155	0.003			Brown Bullhead	136.33	30.67	5.27	2
31122-006	A	'11-018	Mercury	0.421	0.004			Largemouth Bass	133	26	9.8	2
31122-007	A	'11-019	Mercury	0.425	0.004			Largemouth Bass	133	26	9.1	1
31122-008	A	'11-020	Mercury	0.43	0.004			Largemouth Bass	132	26	9.1	1
31122-009	A	31122-bc9	Mercury	0.859	0.038			Chain Pickerel	369.5	285	103.25	3
31122-010	A	31122-bc10	Mercury	0.895	0.038			Chain Pickerel	325.67	193.33	69.9	3
31122-011	A	31122-bc11	Mercury	0.3	0.004			Chain Pickerel	169	28	11.68	1
31122-012	A	31122-bc12	Mercury	0.241	0.004			Chain Pickerel	124.67	10	4.37	1
31122-013	A	31122-bc13	Mercury	0.759	0.038			Pumpkinseed	162.33	101.33	32.62	3
31122-014	A	31122-bc14	Mercury	0.535	0.004			Pumpkinseed	148.83	77.67	26.65	3
31122-015	A	31122-bc15	Mercury	0.476	0.003			Pumpkinseed	143	62	19.8	2
31122-016	A	31122-bc16	Mercury	0.871	0.039			Pumpkinseed	137.5	52	19	3
31122-017	A	31122-bc17	Mercury	0.466	0.004			Pumpkinseed	123	37	12.65	2
31122-018	A	31122-bc18	Mercury	0.248	0.004			Pumpkinseed	106	22	7.5	2
31130-001	C	31130-bc1	Mercury	0.235	0.004	N		Brown Bullhead	358	662	126.2	6
31130-002	C	'11-078	Mercury	0.287	0.004	N		Brown Bullhead	310	384	80.2	6
31130-003	C	31130-bc3	Mercury	0.245	0.004	N		Brown Bullhead	191.5	95	19.18	2
31130-004	C	'11-083	Mercury	0.129	0.004	N		Brown Bullhead	156	52	11.6	2
31130-005	C	'11-084	Mercury	0.14	0.004	N		Brown Bullhead	156	50	11.2	2
31130-006	C	'11-085	Mercury	0.238	0.004	N		Brown Bullhead	149	40	7.7	2
31130-007	C	'11-086	Mercury	1.52	0.077	N		Largemouth Bass	450	1562	482.2	1
31130-008	C	31130-bc8	Mercury	0.464	0.004	N		Largemouth Bass	92.67	8.67	2.47	1
31130-009	C	31130-bc9	Mercury	0.4	0.004	N		Chain Pickerel	145.67	16.67	7.03	1
31130-010	C	31130-bc10	Mercury	0.209	0.004	N		Chain Pickerel	128.67	10.67	5	1
31130-011	C	31130-bc11	Mercury	0.365	0.003	N		Bluegill	208.33	240	62.3	5
31130-012	C	31130-bc12	Mercury	0.443	0.004	N		Bluegill	161.67	90	26.63	2
31130-013	C	31130-bc13	Mercury	0.209	0.004	N		Bluegill	124.17	38.67	11.32	2
31130-014	C	'11-114	Mercury	0.217	0.003	N		Bluegill	110	24	8.2	2
31130-015	C	31130-bc15	Mercury	0.25	0.003	N		Bluegill	98	17	5.4	2

Table 4-8a - Peconic River Fish Samples - Mercury by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (mg/kg)	MDL (mg/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31130-016	C	31130-bc16	Mercury	0.45	0.004	N		Pumpkinseed	179.6	132	38.08	4
31130-017	C	31130-bc17	Mercury	0.482	0.004	N		Pumpkinseed	161	92	30.4	4
31130-018	C	31130-bc18	Mercury	0.325	0.003	N		Pumpkinseed	135.8	52	15.92	2
31130-019	C	31130-bc19	Mercury	0.332	0.004	N		Pumpkinseed	117.83	31.67	11.27	2
31130-020	C	'11-136	Mercury	0.335	0.004	N		Pumpkinseed	108	22	7.8	2
31130-021	C	'11-137	Mercury	0.52	0.004	N		Pumpkinseed	108	24	7.3	2
31130-022	C	31130-bc22	Mercury	0.351	0.004	N		Pumpkinseed	98	16.67	5.63	2
31153-001	D	31153-bc1	Mercury	0.293	0.004			Brown Bullhead	339.5	547	108.4	5
31153-002	D	31153-bc2	Mercury	0.273	0.004			Brown Bullhead	330	538	120.05	6
31153-003	D	31153-bc3	Mercury	0.173	0.004			Brown Bullhead	318	443	99.85	5
31153-004	D	31153-bc4	Mercury	0.293	0.004			Brown Bullhead	310.67	402	89.8	6
31153-005	D	31153-bc5	Mercury	0.198	0.004			Brown Bullhead	302.67	368	80.27	5
31153-006	D	31153-bc6	Mercury	0.127	0.004			Brown Bullhead	298.67	334	76.4	5
31153-007	D	31153-bc7	Mercury	0.433	0.004			Brown Bullhead	290.33	330.67	74.63	5
31153-008	D	31153-bc8	Mercury	0.111	0.004			Brown Bullhead	280.67	290.67	63.37	5
31153-009	D	31153-bc9	Mercury	0.201	0.004			Brown Bullhead	258.75	213.5	49.38	4
31153-010	D	31153-bc10	Mercury	0.246	0.004			Brown Bullhead	231	152	33.6	2
31153-011	D	31153-bc11	Mercury	0.132	0.004			Brown Bullhead	202.67	104.67	22.8	2
31153-012	D	'11-172	Mercury	0.313	0.004			Brown Bullhead	191	82	18	2
31153-013	D	'11-173	Mercury	0.209	0.004			Brown Bullhead	185	72	14.7	2
31153-014	D	'11-174	Mercury	0.12	0.004			Brown Bullhead	182	70	15.2	2
31153-015	D	'11-175	Mercury	0.629	0.039			Chain Pickerel	195	40	16.4	1
31153-016	D	'11-176	Mercury	0.581	0.034			Black Crappie	275	318	112.4	4
31153-017	D	31153-bc17	Mercury	0.166	0.004			Black Crappie	143.5	39.5	15.28	2
31153-018	D	'11-181	Mercury	0.251	0.004			Bluegill	185	162	63.5	3
31153-019	D	31153-bc19	Mercury	0.18	0.004			Bluegill	110.25	27	10.57	2
31153-020	D	31153-bc20	Mercury	0.376	0.003			Pumpkinseed	169	120	39.2	3
31153-021	D	31153-bc21	Mercury	0.407	0.004			Pumpkinseed	140.5	79	28.35	2
31153-022	D	'11-190	Mercury	0.256	0.004			Largemouth Bass	88	8	7.2	1
31156-001	D	'11-191	Mercury	0.094	0.004			Brown Bullhead	335	568	144.5	6
31156-002	D	31156-bc2	Mercury	0.139	0.004			Brown Bullhead	212.5	129	34.8	4
31156-003	D	'11-194	Mercury	0.112	0.003			Brown Bullhead	162	56	15.2	2
31156-004	D	'11-195	Mercury	0.285	0.004			Brown Bullhead	150	42	9.8	2

Table 4-8a - Peconic River Fish Samples - Mercury by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (mg/kg)	MDL (mg/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31156-005	D	31156-bc5	Mercury	0.328	0.004			Chain Pickerel	157	18	7.65	1
31156-006	D	31156-bc6	Mercury	0.187	0.004			Chain Pickerel	140	12	5.5	1
31156-007	D	31156-bc7	Mercury	0.233	0.004			Chain Pickerel	127	11	5.25	1
31156-008	D	'11-202	Mercury	0.764	0.035			Largemouth Bass	402	772	233.6	6
31156-009	D	'11-203	Mercury	0.962	0.035			Largemouth Bass	334	462	161.1	6
31156-010	D	'11-204	Mercury	0.134	0.004			Black Crappie	149	46	18	2
31156-011	D	'11-205	Mercury	0.146	0.004			Black Crappie	142	38	13.9	2
31156-012	D	'11-206	Mercury	0.225	0.004			Bluegill	215	224	80.7	6
31156-013	D	31156-bc13	Mercury	0.506	0.004			Bluegill	165	110	42	4
31156-014	D	31156-bc14	Mercury	0.377	0.003			Bluegill	138.33	58	23.5	3
31156-015	D	'11-212	Mercury	0.212	0.004			Bluegill	120	34	13.6	3
31156-016	D	31156-bc16	Mercury	0.498	0.004			Pumpkinseed	167	111	38.7	5
31156-017	D	'11-215,216	Mercury	0.423	0.004			Pumpkinseed	162	106	38.6	5
31156-018	D	31156-bc18	Mercury	0.215	0.004			Pumpkinseed	155.67	91.33	32.77	4
31156-019	D	31156-bc19	Mercury	0.223	0.004			Pumpkinseed	152.67	83.33	28.23	3
31156-020	D	31156-bc20	Mercury	0.286	0.004			Pumpkinseed	151.67	81.33	30.93	3
31156-021	D	31156-bc21	Mercury	0.377	0.004			Pumpkinseed	135.5	58	20.63	3
31156-022	D	31156-bc22	Mercury	0.267	0.004			Pumpkinseed	115.33	32	12.53	4
29585-001	SR	'11-256	Mercury	0.055	0.004	*		Brown Bullhead	320	490	146	5
29585-002	SR	'11-257	Mercury	0.387	0.004	*		Largemouth Bass	280	308	76.8	6
29585-003	SR	'11-258	Mercury	0.372	0.004	*		Largemouth Bass	232	176	64.9	4
29585-004	SR	'11-259	Mercury	0.416	0.004	*		Chain Pickerel	340	264	108.2	3
29585-005	SR	'11-260	Mercury	0.305	0.004	*		Chain Pickerel	330	184	68.7	3
29585-006	SR	'11-261	Mercury	0.163	0.004	*		Pumpkinseed	166	104	28	4
31108-001	MR	'11-001	Mercury	0.582	0.036			Chain Pickerel	358	227.2	86.8	5
31124-001	MR	'11-056	Mercury	0.27	0.004			Brown Bullhead	293	334	83.9	6
31124-002	MR	'11-057	Mercury	0.104	0.004			Brown Bullhead	282	296	73.3	5
31124-003	MR	'11-058	Mercury	0.238	0.004			Brown Bullhead	281	276	76.2	5
31124-004	MR	'11-059	Mercury	0.369	0.004			Brown Bullhead	275	276	72.7	6
31124-005	MR	'11-060	Mercury	0.292	0.004			Brown Bullhead	273	222	64.5	5
31124-006	MR	'11-061	Mercury	0.408	0.004			Brown Bullhead	271	246	71.3	6
31124-007	MR	'11-062	Mercury	0.235	0.003			Brown Bullhead	271	236	68.1	5
31124-008	MR	'11-063	Mercury	0.335	0.004			Brown Bullhead	269	254	76.1	5

Table 4-8a - Peconic River Fish Samples - Mercury by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (mg/kg)	MDL (mg/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31124-009	MR	'11-064	Mercury	0.211	0.004			Brown Bullhead	257	222	61	5
31124-010	MR	31124-bc10	Mercury	0.394	0.003			Brown Bullhead	255	222	59.9	6
31124-011	MR	31124-bc11	Mercury	0.342	0.004			Brown Bullhead	254	190	49.65	5
31124-012	MR	31124-bc12	Mercury	0.275	0.004			Brown Bullhead	246.5	184	48.95	5
31124-013	MR	31124-bc13	Mercury	0.342	0.004			Brown Bullhead	244.5	195	51.75	5
31124-014	MR	31124-bc14	Mercury	0.142	0.004			Brown Bullhead	199.33	90.67	26.57	3
29544-001	DP	'11-235	Mercury	0.087	0.004	*N		Brown Bullhead	354	700	205.9	6
29544-002	DP	'11-236	Mercury	0.057	0.004	*N		Brown Bullhead	354	632	164.7	6
29544-003	DP	'11-237	Mercury	0.058	0.004	*N		Brown Bullhead	340	584	144.2	6
29544-004	DP	'11-238	Mercury	0.161	0.004	*N		Brown Bullhead	337	546	110.7	1
29544-005	DP	'11-239	Mercury	0.074	0.004	*N		Brown Bullhead	335	478	88.9	7
29544-006	DP	'11-240	Mercury	0.066	0.003	*N		Brown Bullhead	328	498	116.8	7
29544-007	DP	'11-241	Mercury	0.091	0.003	*N		Brown Bullhead	321	538	108.5	1
29544-008	DP	'11-242	Mercury	0.051	0.004	*N		Brown Bullhead	318	512	113	9
29544-009	DP	'11-243	Mercury	0.051	0.004	*N		Brown Bullhead	317	500	112.1	6
29544-010	DP	'11-244	Mercury	0.055	0.004	*N		Brown Bullhead	305	434	99.3	5
29544-011	DP	29544-bc11	Mercury	0.112	0.004	*N		Bluegill	210	222	65.45	7
29544-012	DP	29544-bc12	Mercury	0.103	0.004	*N		Bluegill	209.5	202	46.75	5
29544-013	DP	29544-bc13	Mercury	0.094	0.004	*N		Bluegill	200.5	204	54.5	6
29544-014	DP	29544-bc14	Mercury	0.062	0.003	*N		Bluegill	194.5	176	50	4
29544-015	DP	29544-bc15	Mercury	0.07	0.004	*N		Bluegill	192	175	49.6	6
29544-016	DP	'11-255	Mercury	0.157	0.004	*N		Pumpkinseed	196	162	60	6
29608-001	DP	'11-262	Mercury	0.1	0.004	E		Chain Pickerel	318	198	101.2	3
29608-002	DP	'11-263	Mercury	0.174	0.004	E		Largemouth Bass	254	228	95.4	5
29608-003	DP	'11-264	Mercury	0.134	0.004	E		Largemouth Bass	216	128	52.6	5

Table 4-8b - Peconic River Fish Samples - PCBs by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (ug/kg)	MDL (ug/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31122-010	A	31122-bc10	Aroclor 1016	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1221	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1232	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1242	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1248	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1254	5.9	10.2	J		Chain Pickerel	325.67	193.33	69.9	3
31122-010	A	31122-bc10	Aroclor 1260	10.2	10.2	U		Chain Pickerel	325.67	193.33	69.9	3
31130-001	C	31130-bc1	Aroclor 1016	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1221	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1232	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1242	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1248	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1254	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Aroclor 1260	9.93	9.93	U		Brown Bullhead	358	662	126.2	6
31130-007	C	'11-086	Aroclor 1016	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1221	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1232	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1242	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1248	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1254	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Aroclor 1260	9.94	9.94	U		Largemouth Bass	450	1562	482.2	1
31130-011	C	31130-bc11	Aroclor 1016	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1221	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1232	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1242	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1248	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1254	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Aroclor 1260	9.92	9.92	U		Bluegill	208.33	240	62.3	5
31130-016	C	31130-bc16	Aroclor 1016	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Aroclor 1221	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Aroclor 1232	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Aroclor 1242	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Aroclor 1248	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Aroclor 1254	7.8	9.94	J		Pumpkinseed	179.6	132	38.08	4

Table 4-8b - Peconic River Fish Samples - PCBs by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (ug/kg)	MDL (ug/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31130-016	C	31130-bc16	Aroclor 1260	9.94	9.94	U		Pumpkinseed	179.6	132	38.08	4
31153-001	D	31153-bc1	Aroclor 1016	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1221	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1232	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1242	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1248	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1254	7.2	9.97	J		Brown Bullhead	339.5	547	108.4	5
31153-001	D	31153-bc1	Aroclor 1260	9.97	9.97	U		Brown Bullhead	339.5	547	108.4	5
31153-002	D	31153-bc2	Aroclor 1016	9.94	9.94	U		Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1221	9.94	9.94	U		Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1232	9.94	9.94	U		Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1242	9.94	9.94	U		Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1248	9.94	9.94	U		Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1254	18.4	9.94			Brown Bullhead	330	538	120.05	6
31153-002	D	31153-bc2	Aroclor 1260	8.9	9.94	J		Brown Bullhead	330	538	120.05	6
31153-003	D	31153-bc3	Aroclor 1016	9.92	9.92	U		Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1221	9.92	9.92	U		Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1232	9.92	9.92	U		Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1242	9.92	9.92	U		Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1248	9.92	9.92	U		Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1254	22.2	9.92			Brown Bullhead	318	443	99.85	5
31153-003	D	31153-bc3	Aroclor 1260	10.4	9.92			Brown Bullhead	318	443	99.85	5
31153-004	D	31153-bc4	Aroclor 1016	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1221	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1232	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1242	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1248	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1254	4.6	9.96	J		Brown Bullhead	310.67	402	89.8	6
31153-004	D	31153-bc4	Aroclor 1260	9.96	9.96	U		Brown Bullhead	310.67	402	89.8	6
31153-005	D	31153-bc5	Aroclor 1016	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-005	D	31153-bc5	Aroclor 1221	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-005	D	31153-bc5	Aroclor 1232	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-005	D	31153-bc5	Aroclor 1242	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-005	D	31153-bc5	Aroclor 1248	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5

Table 4-8b - Peconic River Fish Samples - PCBs by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (ug/kg)	MDL (ug/kg)	Lab Qual	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31153-005	D	31153-bc5	Aroclor 1254	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-005	D	31153-bc5	Aroclor 1260	9.91	9.91	U		Brown Bullhead	302.67	368	80.27	5
31153-006	D	31153-bc6	Aroclor 1016	9.96	9.96	U		Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1221	9.96	9.96	U		Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1232	9.96	9.96	U		Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1242	9.96	9.96	U		Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1248	9.96	9.96	U		Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1254	14.3	9.96			Brown Bullhead	298.67	334	76.4	5
31153-006	D	31153-bc6	Aroclor 1260	6.4	9.96	J		Brown Bullhead	298.67	334	76.4	5
31153-007	D	31153-bc7	Aroclor 1016	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1221	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1232	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1242	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1248	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1254	6.7	9.98	J		Brown Bullhead	290.33	330.67	74.63	5
31153-007	D	31153-bc7	Aroclor 1260	9.98	9.98	U		Brown Bullhead	290.33	330.67	74.63	5
31153-008	D	31153-bc8	Aroclor 1016	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1221	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1232	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1242	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1248	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1254	7.6	9.98	J		Brown Bullhead	280.67	290.67	63.37	5
31153-008	D	31153-bc8	Aroclor 1260	9.98	9.98	U		Brown Bullhead	280.67	290.67	63.37	5
31153-009	D	31153-bc9	Aroclor 1016	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1221	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1232	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1242	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1248	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1254	7.4	9.94	J		Brown Bullhead	258.75	213.5	49.38	4
31153-009	D	31153-bc9	Aroclor 1260	9.94	9.94	U		Brown Bullhead	258.75	213.5	49.38	4

Table 4-8c Peconic River Fish Samples - Cesium-137 and Potassium-40 by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual[1]	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31122-001	A	31122-bc1	Cesium-137	0.257	0.0497	0.0205	J		Brown Bullhead	271.67	333.33	75.2	5
31122-002	A	31122-bc2	Cesium-137	0.25	0.0986	0.0719	J		Brown Bullhead	234	192	40.8	4
31122-003	A	31122-bc3	Cesium-137	0.223	0.0605	0.0423	J		Brown Bullhead	166.17	59.67	11.27	2
31122-009	A	31122-bc9	Cesium-137	0.377	0.0706	0.0435	J		Chain Pickerel	369.5	285	103.25	3
31122-010	A	31122-bc10	Cesium-137	0.282	0.072	0.0376	J		Chain Pickerel	325.67	193.33	69.9	3
31122-011	A	31122-bc11	Cesium-137	0.143	0.0892	0.0663	J		Chain Pickerel	169	28	11.68	1
31122-013	A	31122-bc13	Cesium-137	0.358	0.0777	0.0385	J		Pumpkinseed	162.33	101.33	32.62	3
31122-014	A	31122-bc14	Cesium-137	0.51	0.118	0.0603	J		Pumpkinseed	148.83	77.67	26.65	3
31122-015	A	31122-bc15	Cesium-137	0.175	0.0842	0.073	J		Pumpkinseed	143	62	19.8	2
31130-001	C	31130-bc1	Cesium-137	0.25	0.0547	0.0234	J		Brown Bullhead	358	662	126.2	6
31130-001	C	31130-bc1	Potassium-40	3.26	0.705	0.228			Brown Bullhead	358	662	126.2	6
31130-002	C	'11-078	Cesium-137	0.254	0.0602	0.0453	J		Brown Bullhead	310	384	80.2	6
31130-002	C	'11-078	Potassium-40	4.27	0.922	0.595			Brown Bullhead	310	384	80.2	6
31130-003	C	31130-bc3	Cesium-137	0.2	0.0661	0.0582	J		Brown Bullhead	191.5	95	19.18	2
31130-003	C	31130-bc3	Potassium-40	3.67	1.16	0.623			Brown Bullhead	191.5	95	19.18	2
31130-007	C	'11-086	Cesium-137	0.335	0.0631	0.0329	J		Largemouth Bass	450	1562	482.2	1
31130-007	C	'11-086	Potassium-40	3.41	0.837	0.39			Largemouth Bass	450	1562	482.2	1
31130-011	C	31130-bc11	Cesium-137	0.252	0.0991	0.0703	J		Bluegill	208.33	240	62.3	5
31130-011	C	31130-bc11	Potassium-40	2.84	1	0.717			Bluegill	208.33	240	62.3	5
31130-012	C	31130-bc12	Cesium-137	0.157	0.058	0.0654	J		Bluegill	161.67	90	26.63	2
31130-013	C	31130-bc13	Cesium-137	0.147	0.0846	0.0548	J		Bluegill	124.17	38.67	11.32	2
31130-013	C	31130-bc13	Potassium-40	2.79	0.853	0.445			Bluegill	124.17	38.67	11.32	2
31130-016	C	31130-bc16	Cesium-137	0.194	0.0537	0.039	J		Pumpkinseed	179.6	132	38.08	4
31130-016	C	31130-bc16	Potassium-40	2.61	0.783	0.407			Pumpkinseed	179.6	132	38.08	4
31130-017	C	31130-bc17	Cesium-137	0.215	0.0697	0.0495	J		Pumpkinseed	161	92	30.4	4
31130-017	C	31130-bc17	Potassium-40	2.31	0.796	0.512			Pumpkinseed	161	92	30.4	4
31130-018	C	31130-bc18	Cesium-137	0.202	0.0601	0.0378	J		Pumpkinseed	135.8	52	15.92	2
31130-018	C	31130-bc18	Potassium-40	2.83	0.759	0.559			Pumpkinseed	135.8	52	15.92	2
31130-019	C	31130-bc19	Cesium-137	0.13	0.0789	0.0893	J		Pumpkinseed	117.83	31.67	11.27	2
31130-019	C	31130-bc19	Potassium-40	3.45	1.12	0.98			Pumpkinseed	117.83	31.67	11.27	2
31153-001	D	31153-bc1	Cesium-137	0.244	0.0441	0.0198	J		Brown Bullhead	339.5	547	108.4	5
31153-002	D	31153-bc2	Cesium-137	0.216	0.0394	0.0156	J		Brown Bullhead	330	538	120.05	6
31153-003	D	31153-bc3	Cesium-137	0.178	0.0366	0.0213	J		Brown Bullhead	318	443	99.85	5
31153-004	D	31153-bc4	Cesium-137	0.178	0.0335	0.0197	J		Brown Bullhead	310.67	402	89.8	6
31153-005	D	31153-bc5	Cesium-137	0.204	0.0397	0.015	J		Brown Bullhead	302.67	368	80.27	5
31153-006	D	31153-bc6	Cesium-137	0.22	0.0485	0.0251	J		Brown Bullhead	298.67	334	76.4	5

Table 4-8c Peconic River Fish Samples - Cesium-137 and Potassium-40 by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual[1]	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31153-007	D	31153-bc7	Cesium-137	0.189	0.0393	0.0212	J		Brown Bullhead	290.33	330.67	74.63	5
31153-008	D	31153-bc8	Cesium-137	0.199	0.044	0.0232	J		Brown Bullhead	280.67	290.67	63.37	5
31153-009	D	31153-bc9	Cesium-137	0.177	0.0354	0.0198	J		Brown Bullhead	258.75	213.5	49.38	4
31153-010	D	31153-bc10	Cesium-137	0.149	0.069	0.0524	J		Brown Bullhead	231	152	33.6	2
31153-011	D	31153-bc11	Cesium-137	0.131	0.0564	0.0393	J		Brown Bullhead	202.67	104.67	22.8	2
31153-016	D	'11-176	Cesium-137	0.213	0.049	0.0314	J		Black Crappie	275	318	112.4	4
31153-017	D	31153-bc17	Cesium-137	0.185	0.105	0.0891	J		Black Crappie	143.5	39.5	15.28	2
31153-018	D	'11-181	Cesium-137	0.184	0.0585	0.0624	J		Bluegill	185	162	63.5	3
31153-020	D	31153-bc20	Cesium-137	0.143	0.0634	0.0357	J		Pumpkinseed	169	120	39.2	3
31153-021	D	31153-bc21	Cesium-137	0.16	0.0481	0.0552	J		Pumpkinseed	140.5	79	28.35	2
31156-001	D	'11-191	Cesium-137	0.189	0.061	0.0431	J		Brown Bullhead	335	568	144.5	6
31156-002	D	31156-bc2	Cesium-137	0.132	0.0756	0.0669	J		Brown Bullhead	212.5	129	34.8	4
31156-008	D	'11-202	Cesium-137	0.178	0.0438	0.0253	J		Largemouth Bass	402	772	233.6	6
31156-009	D	'11-203	Cesium-137	0.239	0.0517	0.0276	J		Largemouth Bass	334	462	161.1	6
31156-012	D	'11-206	Cesium-137	0.138	0.0599	0.0435	J		Bluegill	215	224	80.7	6
31156-013	D	31156-bc13	Cesium-137	0.189	0.0847	0.0705	J		Bluegill	165	110	42	4
31156-014	D	31156-bc14	Cesium-137	0.181	0.0582	0.0423	J		Bluegill	138.33	58	23.5	3
31156-016	D	31156-bc16	Cesium-137	0.175	0.0517	0.0387	J		Pumpkinseed	167	111	38.7	5
31156-018	D	31156-bc18	Cesium-137	0.163	0.0524	0.043	J		Pumpkinseed	155.67	91.33	32.77	4
31156-019	D	31156-bc19	Cesium-137	0.178	0.0505	0.0407	J		Pumpkinseed	152.67	83.33	28.23	3
31156-020	D	31156-bc20	Cesium-137	0.133	0.0415	0.0274	J		Pumpkinseed	151.67	81.33	30.93	3
31156-021	D	31156-bc21	Cesium-137	0.175	0.0531	0.0515	J		Pumpkinseed	135.5	58	20.63	3
31156-022	D	31156-bc22	Cesium-137	0.147	0.0522	0.0491	J		Pumpkinseed	115.33	32	12.53	4
29585-001	SR	'11-256	Cesium-137	0.0567	0.0412	0.05	J		Brown Bullhead	320	490	146	5
29585-002	SR	'11-257	Cesium-137	0.13	0.0353	0.0445	J		Largemouth Bass	280	308	76.8	6
29585-003	SR	'11-258	Cesium-137	0.104	0.0645	0.0475	J		Largemouth Bass	232	176	64.9	4
29585-004	SR	'11-259	Cesium-137	0.189	0.0636	0.0526	J		Chain Pickerel	340	264	108.2	3
29585-005	SR	'11-260	Cesium-137	0.117	0.101	0.0847	J		Chain Pickerel	330	184	68.7	3
31108-001	MR	'11-001	Cesium-137	0.189	0.103	0.0962	J		Chain Pickerel	358	227.2	86.8	5
31124-001	MR	'11-056	Cesium-137	0.0742	0.0507	0.0983	U		Brown Bullhead	293	334	83.9	6
31124-001	MR	'11-056	Potassium-40	2.67	1.02	0.748			Brown Bullhead	293	334	83.9	6
31124-002	MR	'11-057	Cesium-137	0.0889	0.054	0.0488	J		Brown Bullhead	282	296	73.3	5
31124-002	MR	'11-057	Potassium-40	3.23	0.909	0.523			Brown Bullhead	282	296	73.3	5
31124-003	MR	'11-058	Cesium-137	0.146	0.0508	0.0496	J		Brown Bullhead	281	276	76.2	5
31124-003	MR	'11-058	Potassium-40	3.19	0.914	0.576			Brown Bullhead	281	276	76.2	5
31124-004	MR	'11-059	Cesium-137	0.151	0.0655	0.0434	J		Brown Bullhead	275	276	72.7	6

Table 4-8c Peconic River Fish Samples - Cesium-137 and Potassium-40 by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual[1]	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
31124-004	MR	'11-059	Potassium-40	3.31	1.01	0.647			Brown Bullhead	275	276	72.7	6
31124-005	MR	'11-060	Cesium-137	0.17	0.104	0.0864	J		Brown Bullhead	273	222	64.5	5
31124-005	MR	'11-060	Potassium-40	2.84	1.37	1.01			Brown Bullhead	273	222	64.5	5
31124-006	MR	'11-061	Cesium-137	0.157	0.0518	0.0525	J		Brown Bullhead	271	246	71.3	6
31124-006	MR	'11-061	Potassium-40	2.56	0.805	0.504			Brown Bullhead	271	246	71.3	6
31124-007	MR	'11-062	Cesium-137	0.0706	0.0576	0.0444	J		Brown Bullhead	271	236	68.1	5
31124-007	MR	'11-062	Potassium-40	3.72	0.869	0.504			Brown Bullhead	271	236	68.1	5
31124-008	MR	'11-063	Cesium-137	0.154	0.0543	0.0658	J		Brown Bullhead	269	254	76.1	5
31124-008	MR	'11-063	Potassium-40	2.87	1.08	0.946			Brown Bullhead	269	254	76.1	5
31124-009	MR	'11-064	Cesium-137	0.113	0.051	0.0663	J		Brown Bullhead	257	222	61	5
31124-009	MR	'11-064	Potassium-40	4.89	1.13	0.729			Brown Bullhead	257	222	61	5
31124-010	MR	31124-bc10	Cesium-137	0.14	0.0386	0.0245	J		Brown Bullhead	255	222	59.9	6
31124-010	MR	31124-bc10	Potassium-40	3.65	0.655	0.253			Brown Bullhead	255	222	59.9	6
31124-011	MR	31124-bc11	Cesium-137	0.092	0.0319	0.0257	J		Brown Bullhead	254	190	49.65	5
31124-011	MR	31124-bc11	Potassium-40	3.25	0.766	0.311			Brown Bullhead	254	190	49.65	5
31124-012	MR	31124-bc12	Cesium-137	0.118	0.0451	0.0401	J		Brown Bullhead	246.5	184	48.95	5
31124-012	MR	31124-bc12	Potassium-40	3.58	0.971	0.396			Brown Bullhead	246.5	184	48.95	5
31124-013	MR	31124-bc13	Cesium-137	0.159	0.0373	0.0238	J		Brown Bullhead	244.5	195	51.75	5
31124-013	MR	31124-bc13	Potassium-40	3.84	0.718	0.139			Brown Bullhead	244.5	195	51.75	5
31124-014	MR	31124-bc14	Cesium-137	0.117	0.0717	0.0796	J		Brown Bullhead	199.33	90.67	26.57	3
31124-014	MR	31124-bc14	Potassium-40	3.64	1.09	0.812			Brown Bullhead	199.33	90.67	26.57	3
29544-001	DP	'11-235	Cesium-137	0.173	0.088	0.0869	J		Brown Bullhead	354	700	205.9	6
29544-001	DP	'11-235	Potassium-40	3.11	1.26	0.767			Brown Bullhead	354	700	205.9	6
29544-002	DP	'11-236	Cesium-137	0.0958	0.0736	0.0793	J		Brown Bullhead	354	632	164.7	6
29544-002	DP	'11-236	Potassium-40	3.75	0.961	0.733			Brown Bullhead	354	632	164.7	6
29544-003	DP	'11-237	Cesium-137	0.0297	0.071	0.0849	U		Brown Bullhead	340	584	144.2	6
29544-003	DP	'11-237	Potassium-40	2.38	1.32	0.787			Brown Bullhead	340	584	144.2	6
29544-004	DP	'11-238	Cesium-137	0.163	0.0481	0.0472	J		Brown Bullhead	337	546	110.7	1
29544-004	DP	'11-238	Potassium-40	3.28	0.931	0.481			Brown Bullhead	337	546	110.7	1
29544-005	DP	'11-239	Cesium-137	0.0939	0.0702	0.134	U		Brown Bullhead	335	478	88.9	7
29544-005	DP	'11-239	Potassium-40	2.31	1.16	0.991			Brown Bullhead	335	478	88.9	7
29544-006	DP	'11-240	Cesium-137	0.0794	0.107	0.0964	U		Brown Bullhead	328	498	116.8	7
29544-006	DP	'11-240	Potassium-40	3.6	1.35	1.08			Brown Bullhead	328	498	116.8	7
29544-007	DP	'11-241	Cesium-137	0.116	0.0533	0.0575	J		Brown Bullhead	321	538	108.5	1
29544-007	DP	'11-241	Potassium-40	2.81	0.975	0.663			Brown Bullhead	321	538	108.5	1
29544-008	DP	'11-242	Cesium-137	0.112	0.0585	0.118	U		Brown Bullhead	318	512	113	9

Table 4-8c Peconic River Fish Samples - Cesium-137 and Potassium-40 by Area

Sample ID	Area	BNL Fish ID or Compsite ID	Analyte	Value (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual[1]	Rev Qual	Species	Avg Length (mm)	Individual or Composite Avg Weight Whole(g)	Individual or Composite Avg Weight Fillet(g)	Avg Age
29544-008	DP	'11-242	Potassium-40	2.58	1.22	1.2			Brown Bullhead	318	512	113	9
29544-009	DP	'11-243	Cesium-137	0.0304	0.0761	0.129	U		Brown Bullhead	317	500	112.1	6
29544-009	DP	'11-243	Potassium-40	3.34	1.54	1.26			Brown Bullhead	317	500	112.1	6
29544-010	DP	'11-244	Cesium-137	0.0486	0.049	0.0522	U		Brown Bullhead	305	434	99.3	5
29544-010	DP	'11-244	Potassium-40	3.97	1.02	0.672			Brown Bullhead	305	434	99.3	5
29544-011	DP	29544-bc11	Cesium-137	0.0575	0.0758	0.14	U		Bluegill	210	222	65.45	7
29544-011	DP	29544-bc11	Potassium-40	3.13	1.58	1.22			Bluegill	210	222	65.45	7
29544-012	DP	29544-bc12	Cesium-137	0.227	0.0905	0.102	J		Bluegill	209.5	202	46.75	5
29544-012	DP	29544-bc12	Potassium-40	2.82	1.53	1.19			Bluegill	209.5	202	46.75	5
29544-013	DP	29544-bc13	Cesium-137	0.0361	0.0769	0.131	U		Bluegill	200.5	204	54.5	6
29544-013	DP	29544-bc13	Potassium-40	3.27	1.06	1.22			Bluegill	200.5	204	54.5	6
29544-014	DP	29544-bc14	Cesium-137	0.0476	0.0498	0.0914	U		Bluegill	194.5	176	50	4
29544-014	DP	29544-bc14	Potassium-40	2.39	0.987	0.711			Bluegill	194.5	176	50	4
29544-015	DP	29544-bc15	Cesium-137	0.124	0.0529	0.104	J		Bluegill	192	175	49.6	6
29544-015	DP	29544-bc15	Potassium-40	4.45	1.19	0.937			Bluegill	192	175	49.6	6
29544-016	DP	'11-255	Cesium-137	0.107	0.0776	0.147	U		Pumpkinseed	196	162	60	6
29608-001	DP	'11-262	Cesium-137	0.0715	0.0177	0.0153	J		Chain Pickerel	318	198	101.2	3
29608-001	DP	'11-262	Potassium-40	2.77	0.423	0.175			Chain Pickerel	318	198	101.2	3
29608-002	DP	'11-263	Cesium-137	0.0813	0.019	0.0171	J		Largemouth Bass	254	228	95.4	5
29608-002	DP	'11-263	Potassium-40	2.26	0.427	0.188			Largemouth Bass	254	228	95.4	5

[1] Qualifiers

J - The associated numerical value is an estimated quantity.

U - The analyte was analyzed for but not detected.

Table 4-9a : Minimum, Maximum and Average Mercury Concentrations in Fish (Individual & Composites)

Species	Number of Fish	Minimum Value (mg/kg)	Maximum Value (mg/kg)	Average Value (mg/kg)
AREA A				
Brown Bullhead - Mercury	16	0.155	0.676	0.36431
Chain Pickerel - Mercury	13	0.241	0.895	0.50969
Largemouth Bass - Mercury	3	0.421	0.43	0.42533
Pumpkinseed - Mercury	22	0.248	0.871	0.58355
AREA C				
Bluegill - Mercury	15	0.209	0.443	0.293
Brown Bullhead - Mercury	10	0.129	0.287	0.2244
Chain Pickerel - Mercury	9	0.209	0.4	0.33633
Largemouth Bass - Mercury	7	0.464	1.52	0.61486
Pumpkinseed - Mercury	24	0.325	0.52	0.38421
AREA D - Upstream of HQ				
Black Crappie - Mercury	7	0.134	0.581	0.21786
Bluegill - Mercury	12	0.18	0.506	0.29592
Brown Bullhead - Mercury	39	0.0941	0.433	0.21316
Chain Pickerel - Mercury	7	0.187	0.629	0.30357
Largemouth Bass - Mercury	3	0.256	0.962	0.66067
Pumpkinseed - Mercury	26	0.215	0.498	0.31796
SCHULTZ ROAD				
Brown Bullhead - Mercury	1	0.0545	0.0545	0.0545
Chain Pickerel - Mercury	2	0.305	0.416	0.3605
Largemouth Bass - Mercury	2	0.372	0.387	0.3795
Pumpkinseed - Mercury	1	0.163	0.163	0.163
MANOR ROAD				
Brown Bullhead - Mercury	20	0.104	0.408	0.2797
Chain Pickerel - Mercury	1	0.582	0.582	0.582
DONAHUE'S POND				
Bluegill - Mercury	10	0.0619	0.112	0.08814
Brown Bullhead - Mercury	10	0.0513	0.161	0.07509
Chain Pickerel - Mercury	1	0.0999	0.0999	0.0999
Largemouth Bass - Mercury	2	0.134	0.174	0.154
Pumpkinseed - Mercury	1	0.157	0.157	0.157

Notes :

1 - Average length is the average for all aged fish.

2 - Minimum/Maximum is the minimum/maximum for all aged fish.

Table 4-9b : Minimum, Maximum and Average PCB Concentrations in Fish (Individual & Composites)

Species	Number of Fish	Minimum Value (ug/kg)	Maximum Value (ug/kg)	Average Value (ug/kg)
AREA A				
Chain Pickerel - Aroclor 1016	3	10.2	10.2	10.2
Chain Pickerel - Aroclor 1221	3	10.2	10.2	10.2
Chain Pickerel - Aroclor 1232	3	10.2	10.2	10.2
Chain Pickerel - Aroclor 1242	3	10.2	10.2	10.2
Chain Pickerel - Aroclor 1248	3	10.2	10.2	10.2
Chain Pickerel - Aroclor 1254	3	5.9	5.9	5.9
Chain Pickerel - Aroclor 1260	3	10.2	10.2	10.2
AREA C				
Bluegill - Aroclor 1016	3	9.92	9.92	9.92
Bluegill - Aroclor 1221	3	9.92	9.92	9.92
Bluegill - Aroclor 1232	3	9.92	9.92	9.92
Bluegill - Aroclor 1242	3	9.92	9.92	9.92
Bluegill - Aroclor 1248	3	9.92	9.92	9.92
Bluegill - Aroclor 1254	3	9.92	9.92	9.92
Bluegill - Aroclor 1260	3	9.92	9.92	9.92
Brown Bullhead - Aroclor 1016	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1221	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1232	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1242	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1248	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1254	2	9.93	9.93	9.93
Brown Bullhead - Aroclor 1260	2	9.93	9.93	9.93
Largemouth Bass - Aroclor 1016	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1221	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1232	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1242	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1248	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1254	1	9.94	9.94	9.94
Largemouth Bass - Aroclor 1260	1	9.94	9.94	9.94
Pumpkinseed - Aroclor 1016	5	9.94	9.94	9.94
Pumpkinseed - Aroclor 1221	5	9.94	9.94	9.94
Pumpkinseed - Aroclor 1232	5	9.94	9.94	9.94
Pumpkinseed - Aroclor 1242	5	9.94	9.94	9.94
Pumpkinseed - Aroclor 1248	5	9.94	9.94	9.94
Pumpkinseed - Aroclor 1254	5	7.8	7.8	7.8
Pumpkinseed - Aroclor 1260	5	9.94	9.94	9.94

Table 4-9b : Minimum, Maximum and Average PCB Concentrations in Fish (Individual & Composites)

Species	Number of Fish	Minimum Value (ug/kg)	Maximum Value (ug/kg)	Average Value (ug/kg)
AREA D - Upstream of HQ				
Brown Bullhead - Aroclor 1016	25	9.91	9.98	9.9516
Brown Bullhead - Aroclor 1221	25	9.91	9.98	9.9516
Brown Bullhead - Aroclor 1232	25	9.91	9.98	9.9516
Brown Bullhead - Aroclor 1242	25	9.91	9.98	9.9516
Brown Bullhead - Aroclor 1248	25	9.91	9.98	9.9516
Brown Bullhead - Aroclor 1254	25	4.6	22.2	10.1812
Brown Bullhead - Aroclor 1260	25	6.4	10.4	9.4796

Notes :

1 - Average length is the average for all aged fish.
2 - Minimum/Maximum is the
minimum/maximum for all aged fish.

Table 4-9c : Minimum, Maximum and Average Cs-137 Concentrations in Fish (Individual & Composites)

Species	Number of Fish	Minimum Value (pCi/g)	Maximum Value (pCi/g)	Average Value (pCi/g)	Average Error (pCi/g)
AREA A					
Brown Bullhead - Cesium-137	11	0.223	0.257	0.23718	0.0645
Chain Pickerel - Cesium-137	10	0.143	0.377	0.2315	0.0803
Pumpkinseed - Cesium-137	16	0.175	0.51	0.36925	0.0944
AREA C					
Bluegill - Cesium-137	12	0.147	0.252	0.17575	0.0816
Brown Bullhead - Cesium-137	7	0.2	0.254	0.222	0.062
Largemouth Bass - Cesium-137	1	0.335	0.335	0.335	0.0631
Pumpkinseed - Cesium-137	19	0.13	0.215	0.17921	0.0659
AREA D - Upstream of HQ					
Black Crappie - Cesium-137	5	0.185	0.213	0.1906	0.0938
Bluegill - Cesium-137	7	0.138	0.189	0.17757	0.0661
Brown Bullhead - Cesium-137	34	0.131	0.244	0.18374	0.0466
Largemouth Bass - Cesium-137	2	0.178	0.239	0.2085	0.0478
Pumpkinseed - Cesium-137	25	0.133	0.178	0.1584	0.0514
SCHULTZ ROAD					
Brown Bullhead - Cesium-137	1	0.0567	0.0567	0.0567	0.0412
Chain Pickerel - Cesium-137	2	0.117	0.189	0.153	0.0823
Largemouth Bass - Cesium-137	2	0.104	0.13	0.117	0.0499
MANOR ROAD					
Brown Bullhead - Cesium-137	20	0.0706	0.17	0.12469	0.053
Chain Pickerel - Cesium-137	1	0.189	0.189	0.189	0.103
DONAHUE'S POND					
Bluegill - Cesium-137	10	0.0361	0.227	0.09844	0.0692
Brown Bullhead - Cesium-137	10	0.0297	0.173	0.09418	0.0695
Chain Pickerel - Cesium-137	1	0.0715	0.0715	0.0715	0.0177
Largemouth Bass - Cesium-137	1	0.0813	0.0813	0.0813	0.019
Pumpkinseed - Cesium-137	1	0.107	0.107	0.107	0.0776

Notes :

1 - Average length is the average for all aged fish.
2 - Minimum/Maximum is the
minimum/maximum for all aged fish.

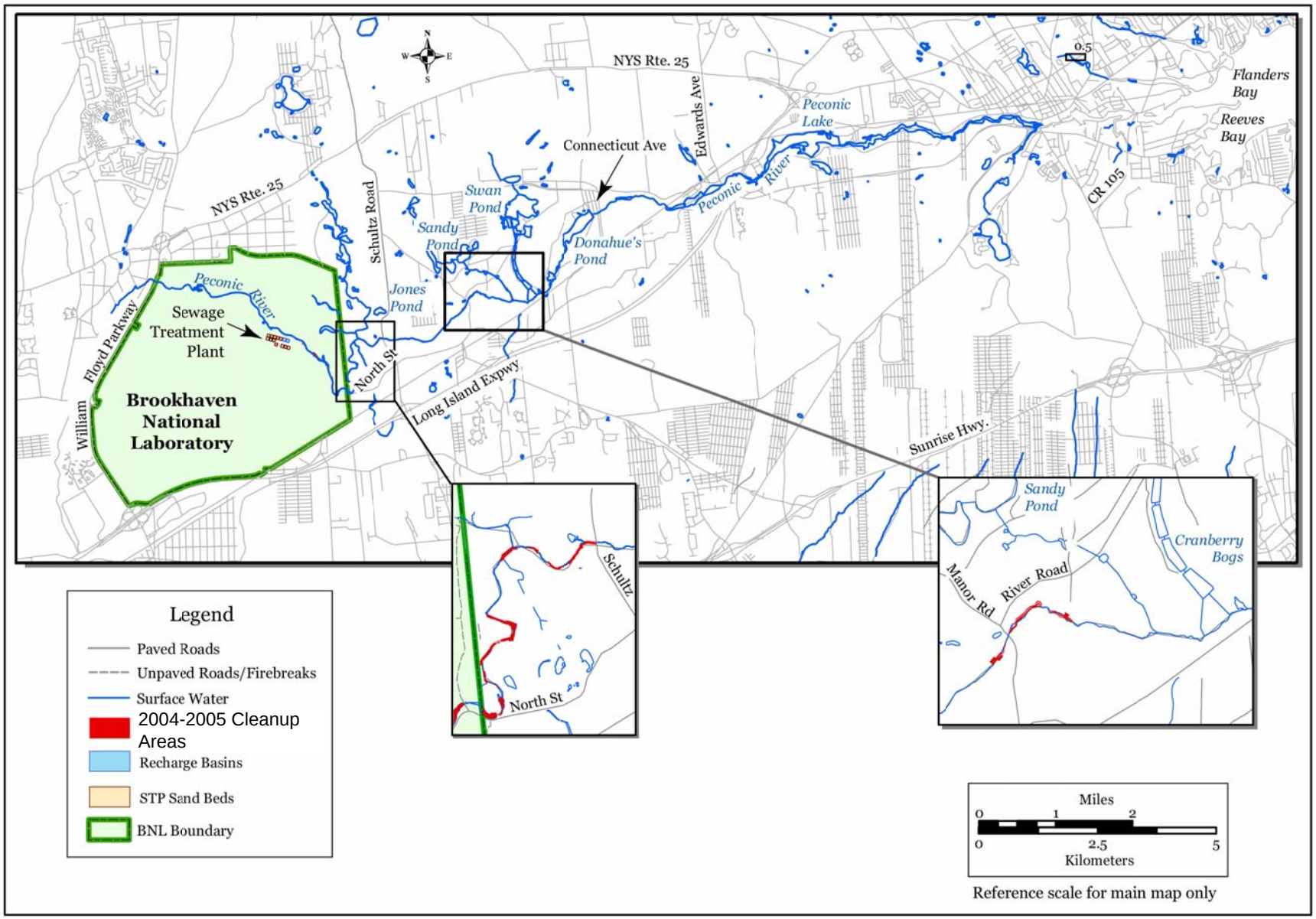


Figure 1-1. The Peconic River. The sections of the river that were remediated are indicated in the two call-out boxes, These two sections are shown in detail in Figures 1-2 and 1-3.

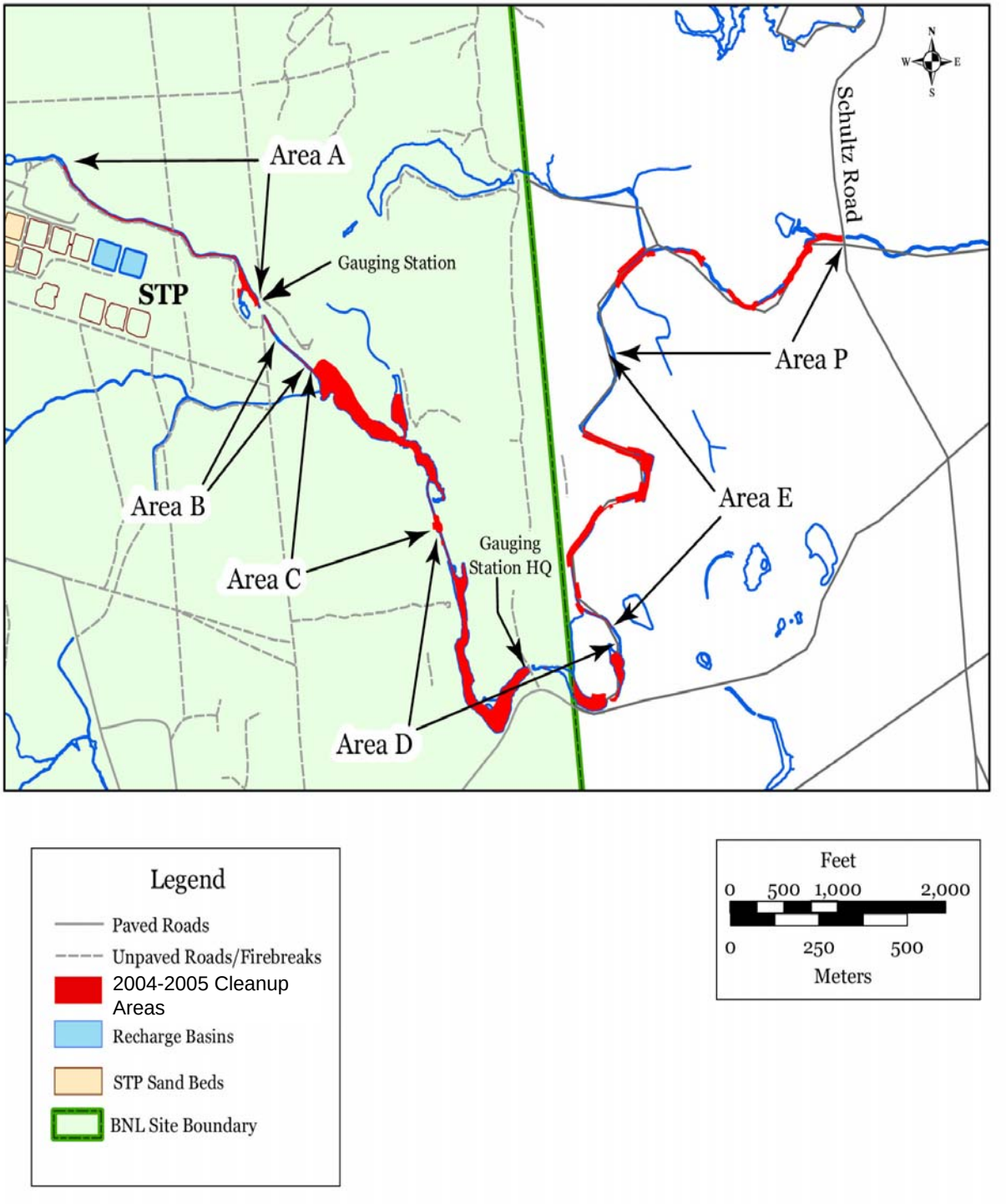


Figure 1-2. Peconic River Cleanup Areas between the BNL Sewage Treatment Plant and Schultz Road.

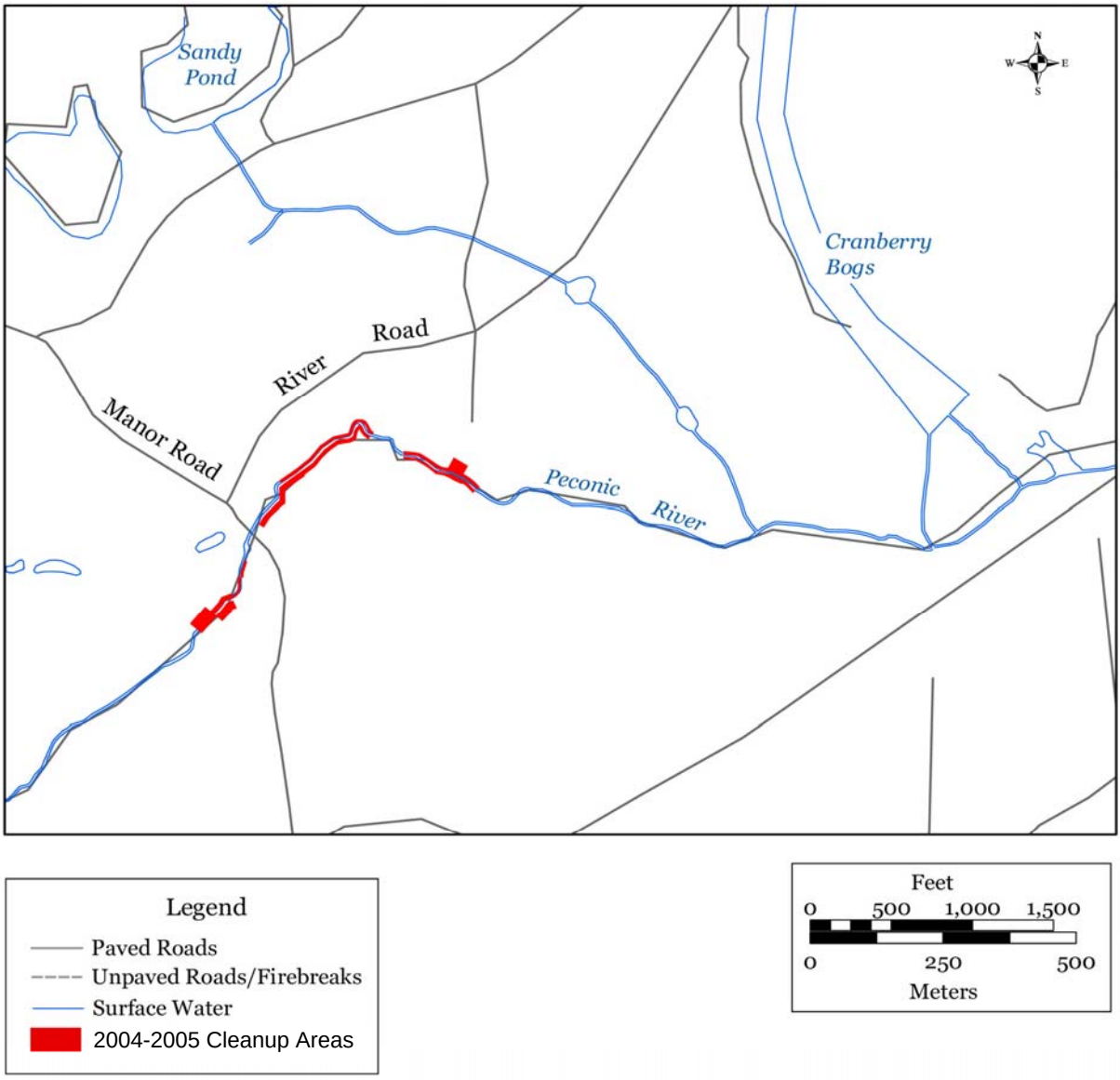
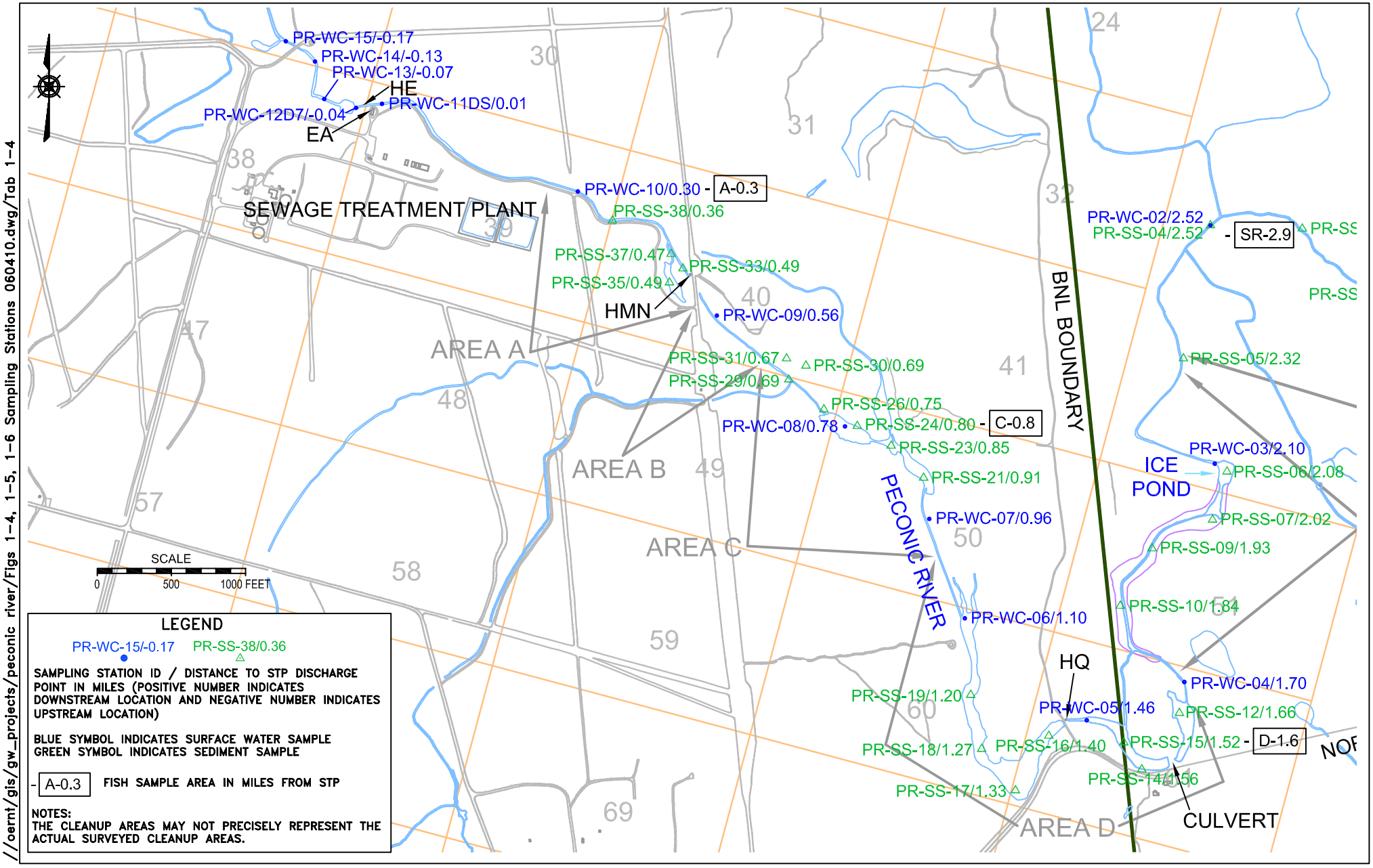


Figure 1-3. Peconic River Cleanup Areas Adjacent to Manor Road



//oernt/gis/gw_projects/peconic river/Figs 1-4, 1-5, 1-6 Sampling Stations 060410.dwg/Tab 1-4

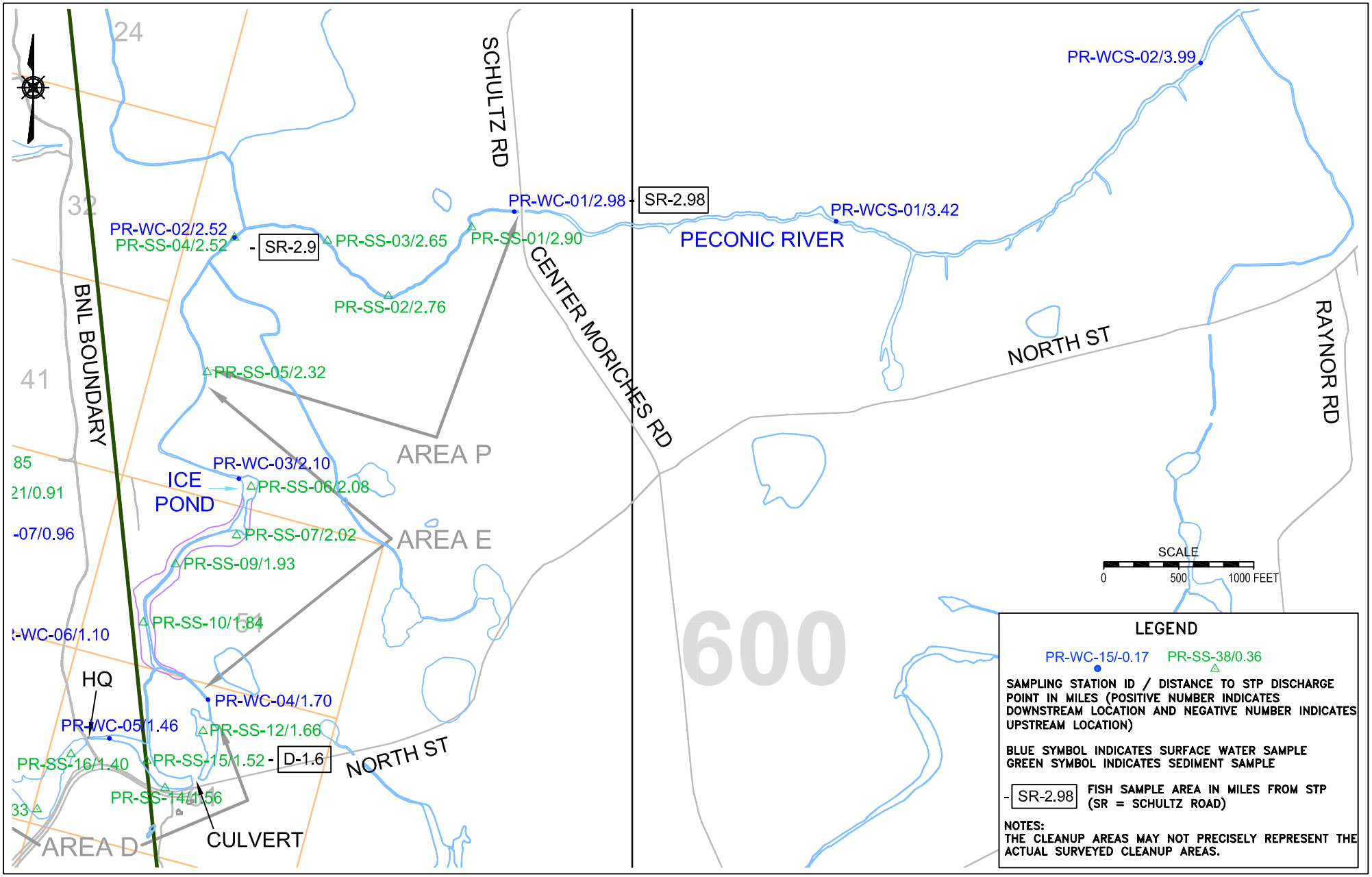
BROOKHAVEN NATIONAL LABORATORY

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

FIGURE 1-4
WATER, SEDIMENT AND FISH SAMPLING STATIONS BETWEEN PR-WC-15 AND BNL BOUNDARY
MERCURY SAMPLING STATIONS
PECONIC RIVER STUDY

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	06/04/10	–
CHKD:	APPD:	REV.:	NOTES:
WM	–	–	–
MAP NO.:		1-4	



//oernt/gis/gw_projects/peconic river/Figs 1-4, 1-5, 1-6 Sampling Stations 060410.dwg/Tab 1-5

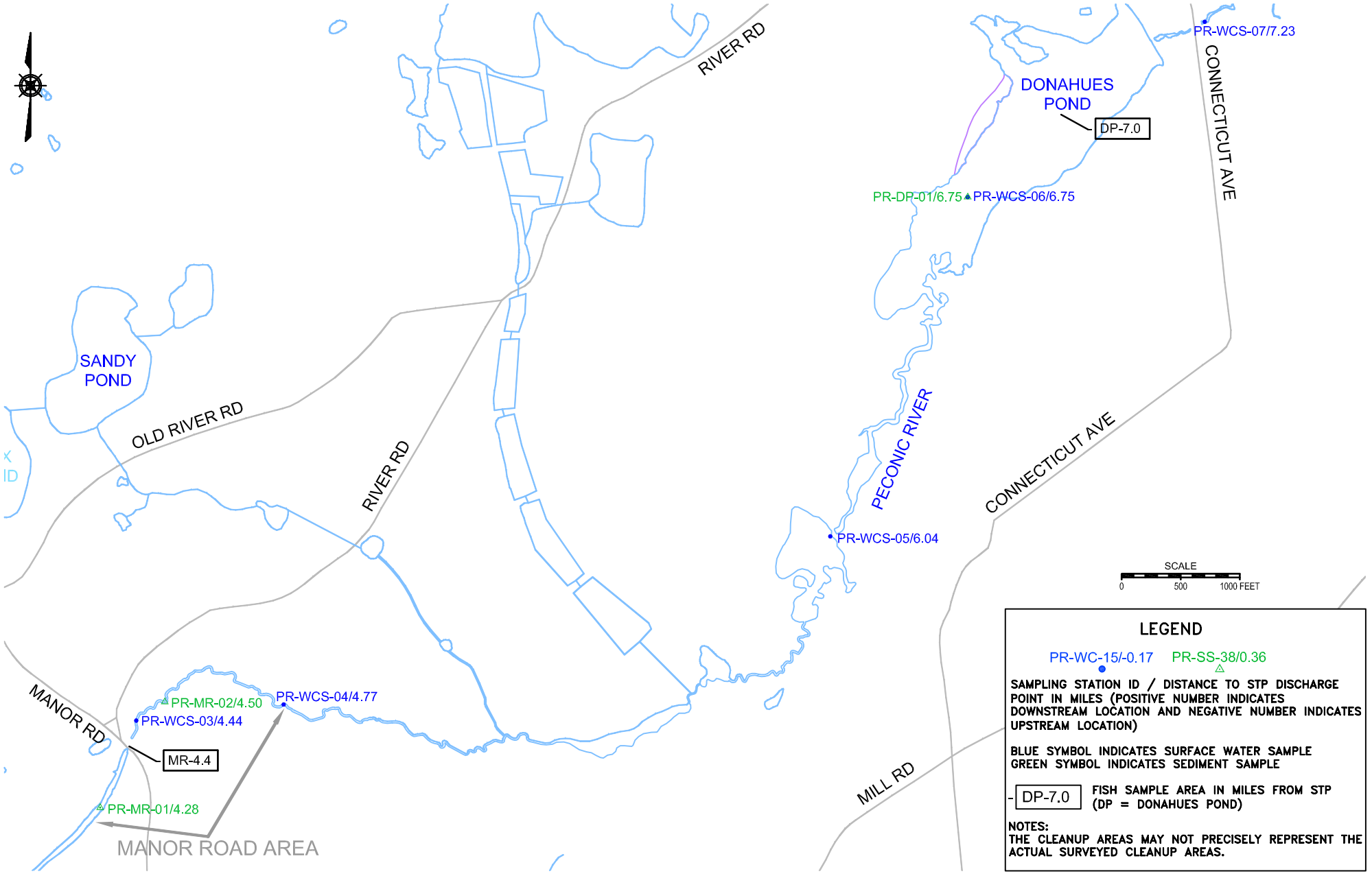
BROOKHAVEN NATIONAL LABORATORY

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

FIGURE 1-5
WATER, SEDIMENT AND FISH SAMPLING STATIONS
BETWEEN BNL BOUNDARY AND SCHULTZ ROAD
MERCURY SAMPLING STATIONS
PECONIC RIVER STUDY

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	06/04/10	–
CHKD:	APPD:	REV.:	NOTES:
WM	–	–	–
MAP NO.:		1-5	



//oernt/gis/gw_projects/peconic river/Figs 1-4, 1-5, 1-6 Sampling Stations 060410.dwg/Tab 1-6

BROOKHAVEN NATIONAL LABORATORY

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

FIGURE 1-6
WATER, SEDIMENT AND FISH SAMPLING STATIONS
BETWEEN MANOR RD AND CONNECTICUT AVE
MERCURY SAMPLING STATIONS
PECONIC RIVER STUDY

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	06/04/10	–
CHKD:	APPD:	REV.:	NOTES:
WM	–	–	–

MAP NO.: 1-6

Figure 2-1 2011 Peconic River Sediment Mercury Results
Routine Sediment Monitoring Stations

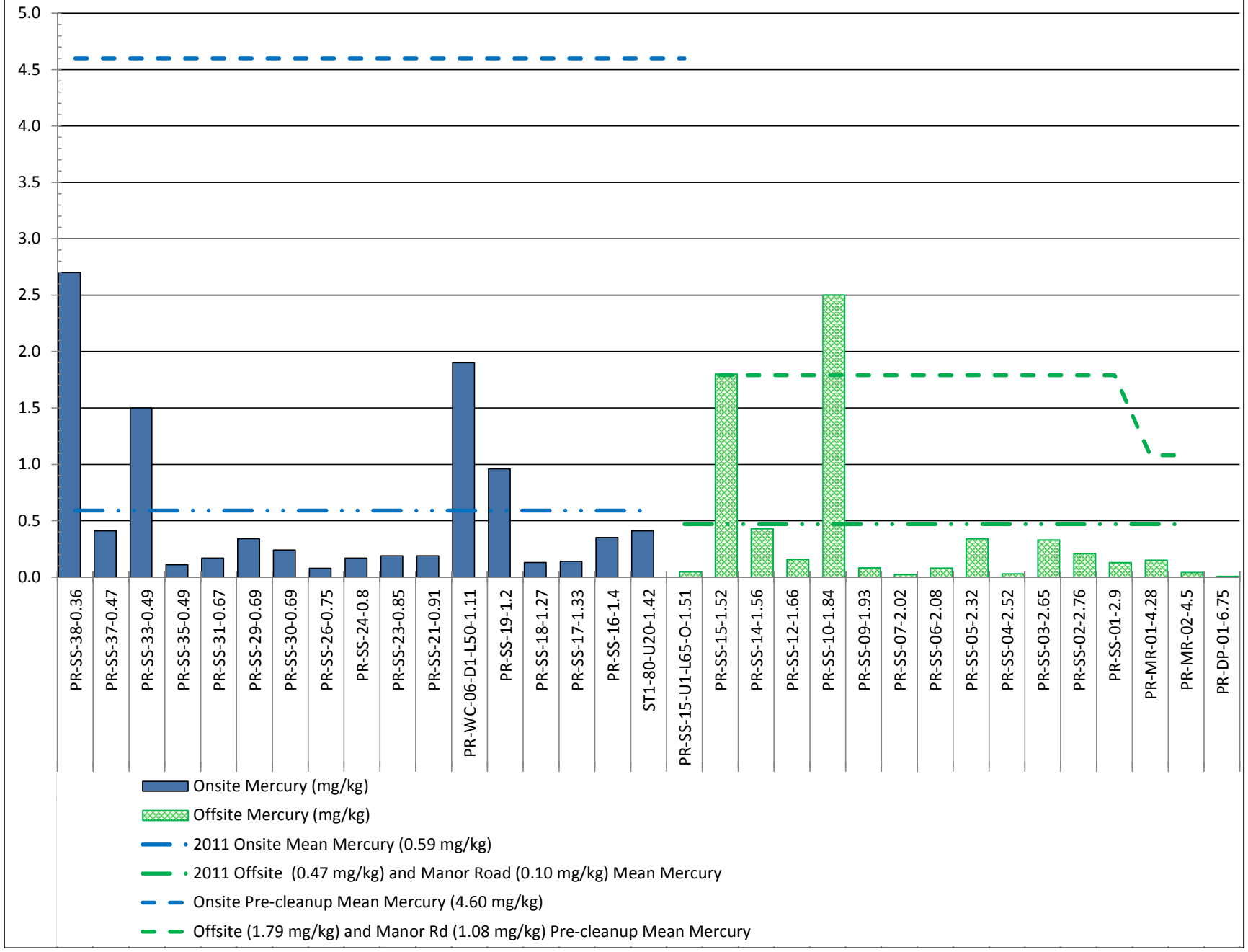
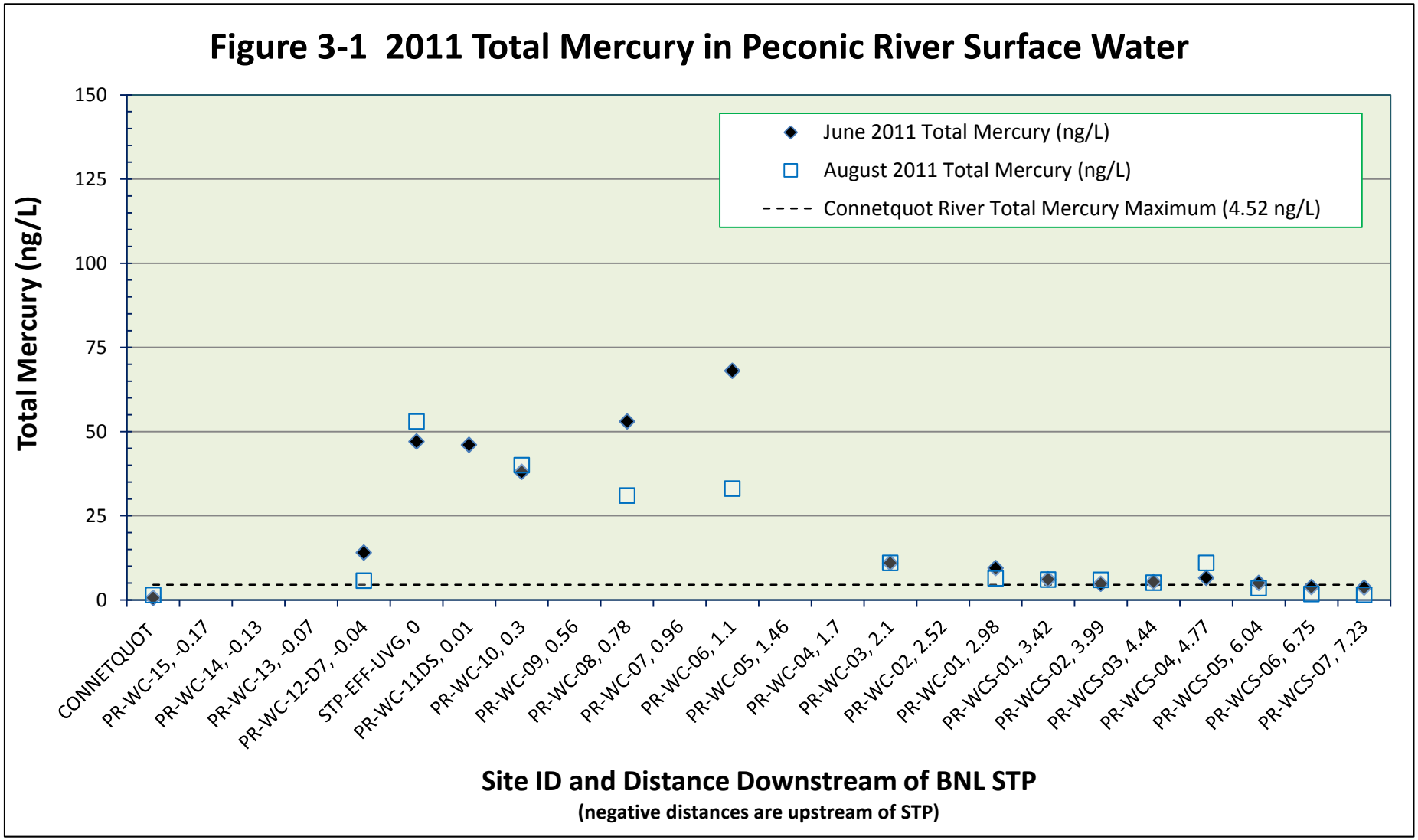


Figure 3-1 2011 Total Mercury in Peconic River Surface Water



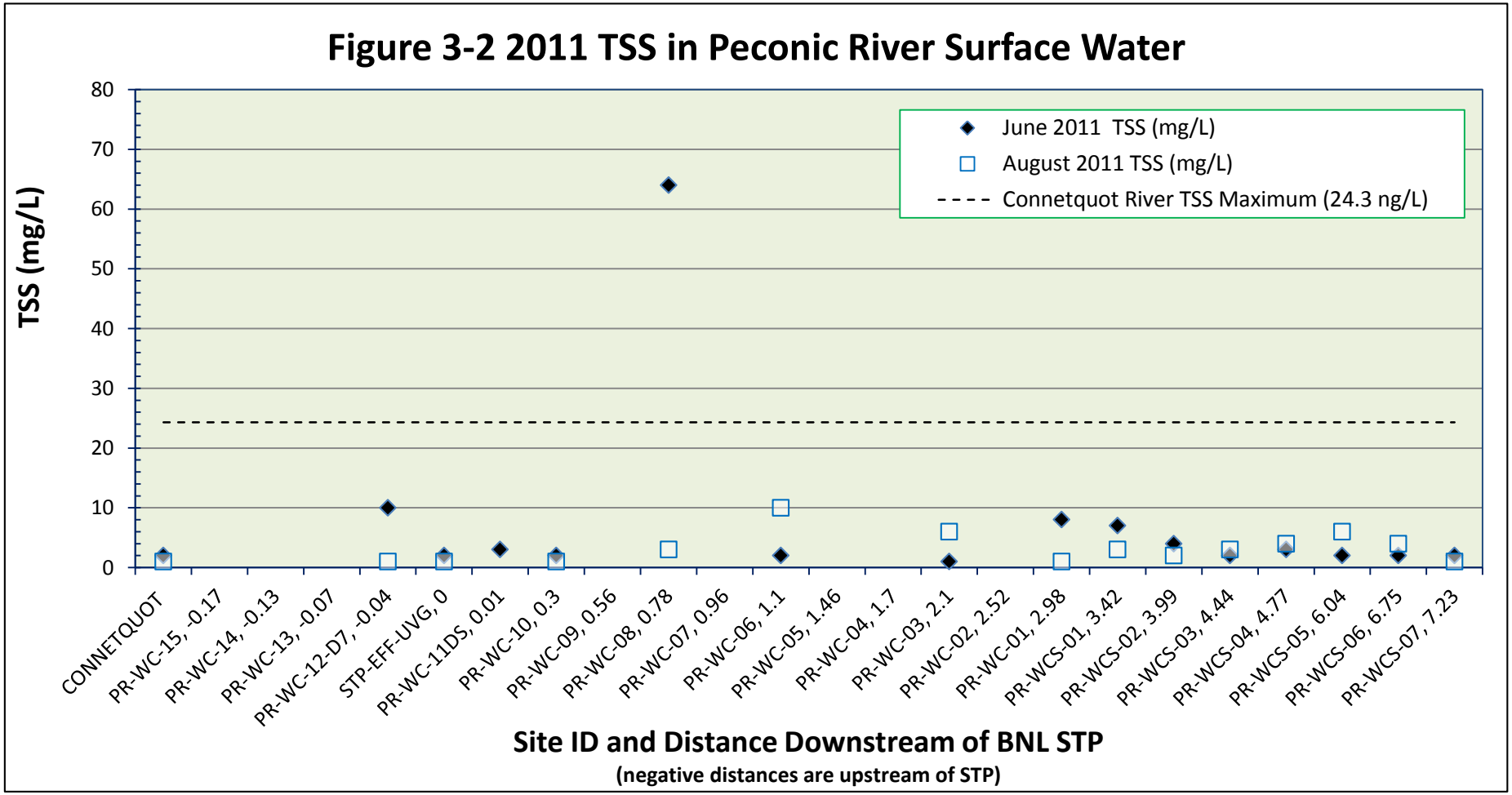


Figure 3-2 2011 TSS in Peconic River Surface Water
TSS (mg/L)
80
70
60
50
40
30
20
10
0
June 2011 TSS (mg/L)
August 2011 TSS (mg/L)
Connetquot River TSS Maximum (24.3 ng/L)
CONNETQUOT
PR-WC-15, -0.17
PR-WC-14, -0.13
PR-WC-13, -0.07
PR-WC-12-D7, -0.04
STP-EFF-UVG, 0
PR-WC-11DS, 0.01
PR-WC-10, 0.3
PR-WC-09, 0.56
PR-WC-08, 0.78
PR-WC-07, 0.96
PR-WC-06, 1.1
PR-WC-05, 1.46
PR-WC-04, 1.7
PR-WC-03, 2.1
PR-WC-02, 2.52
PR-WC-01, 2.98
PR-WCS-01, 3.42
PR-WCS-02, 3.99
PR-WCS-03, 4.44
PR-WCS-04, 4.77
PR-WCS-05, 6.04
PR-WCS-06, 6.75
PR-WCS-07, 7.23
Site ID and Distance Downstream of BNL STP
(negative distances are upstream of STP)

Figure 3-3 2011 Methylmercury in Peconic River Surface Water

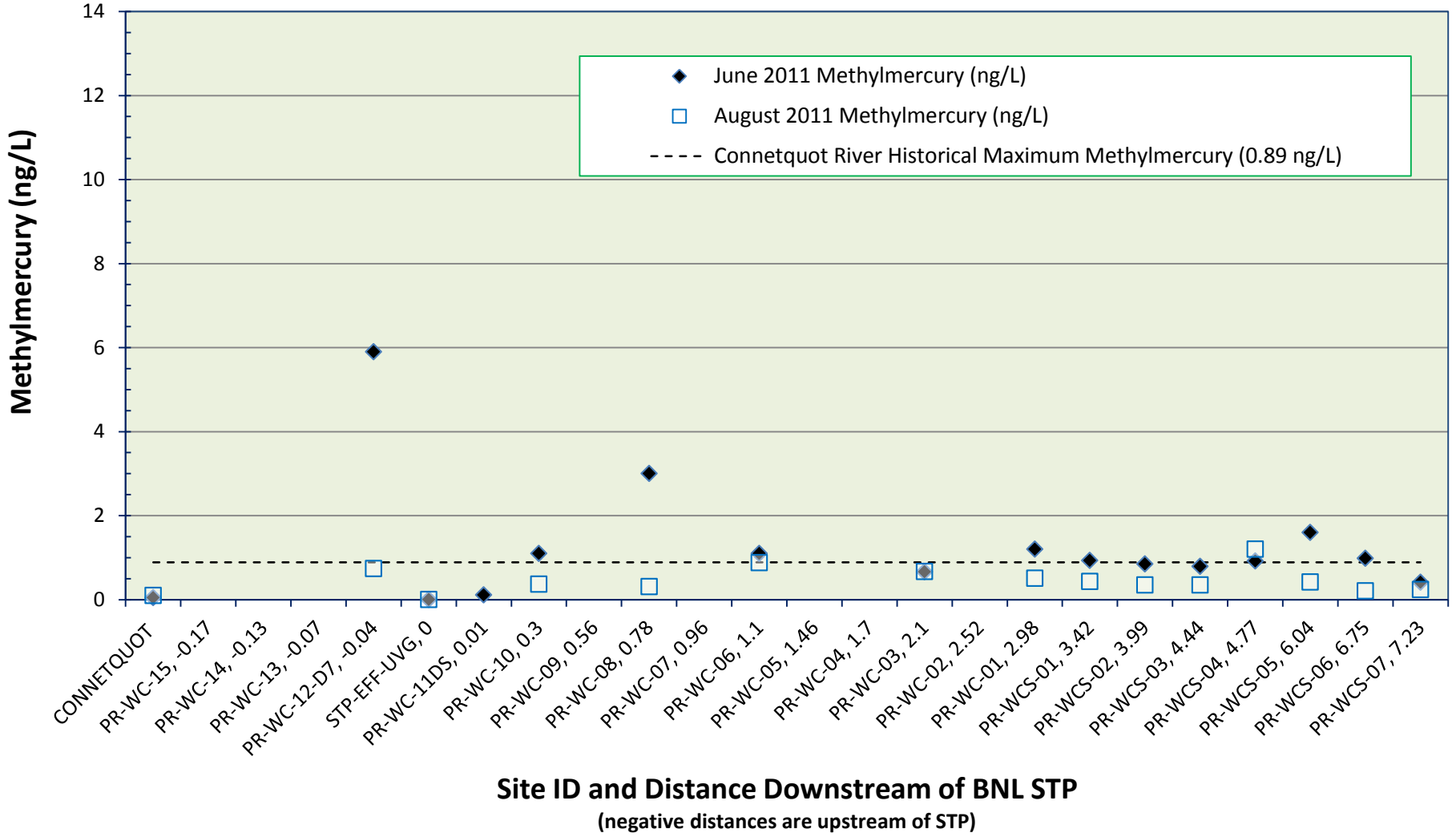
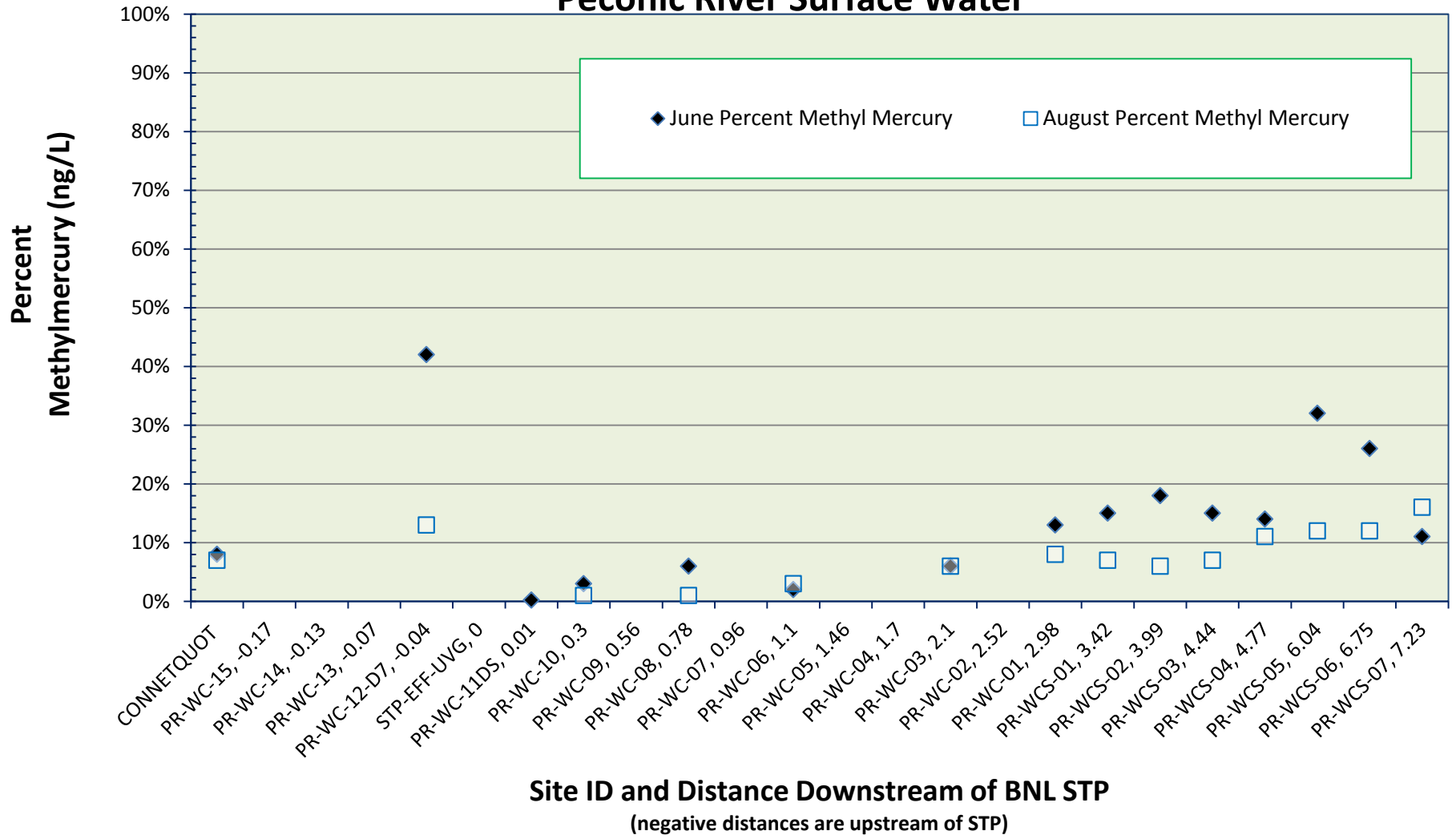
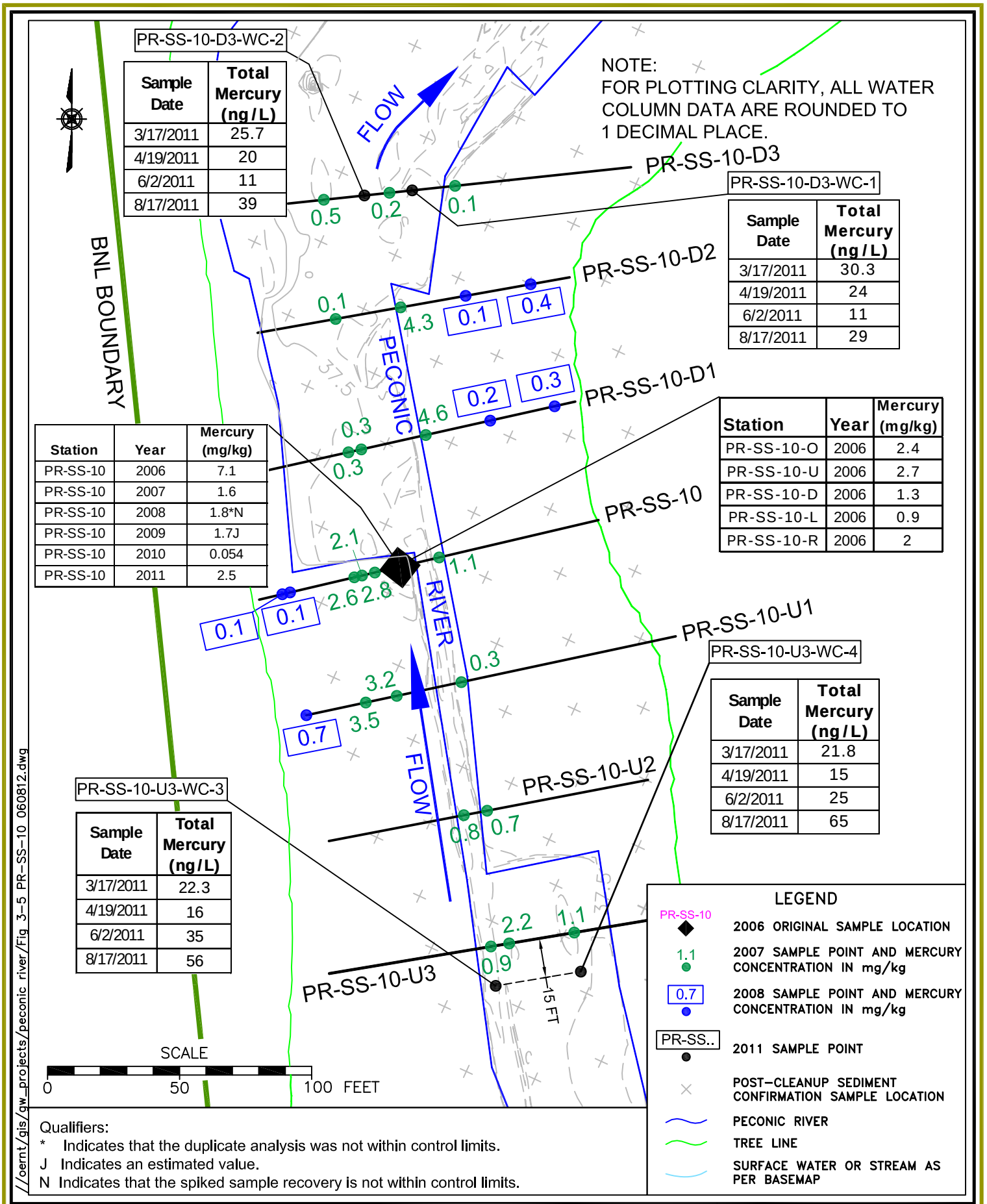


Figure 3-4 2011 Percent Methylmercury in Peconic River Surface Water





Qualifiers:
* Indicates that the duplicate analysis was not within control limits.
J Indicates an estimated value.
N Indicates that the spiked sample recovery is not within control limits.

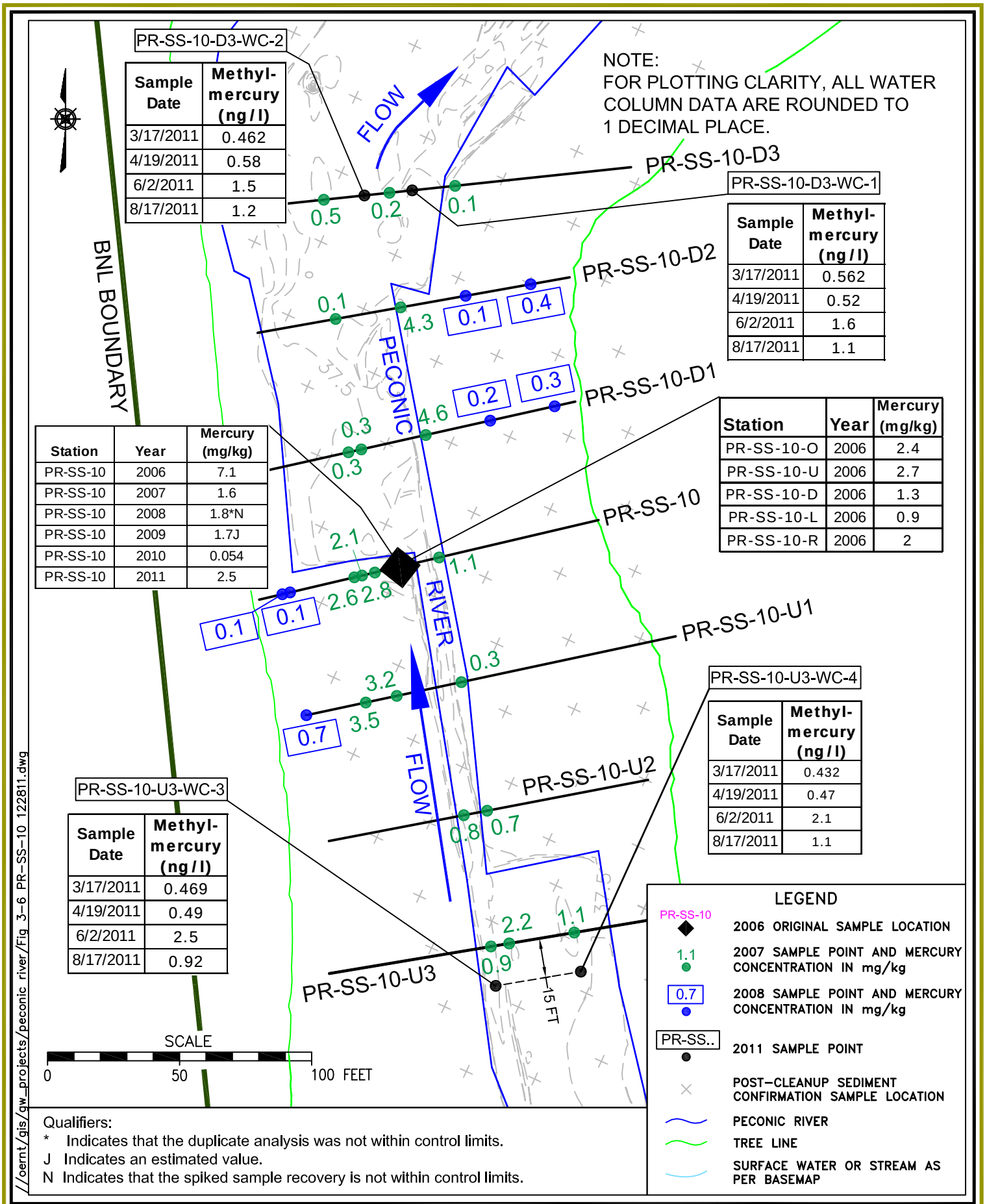
//oernt/gis/gw_projects/peconic river/Fig 3-5 PR-SS-10 060812.dwg

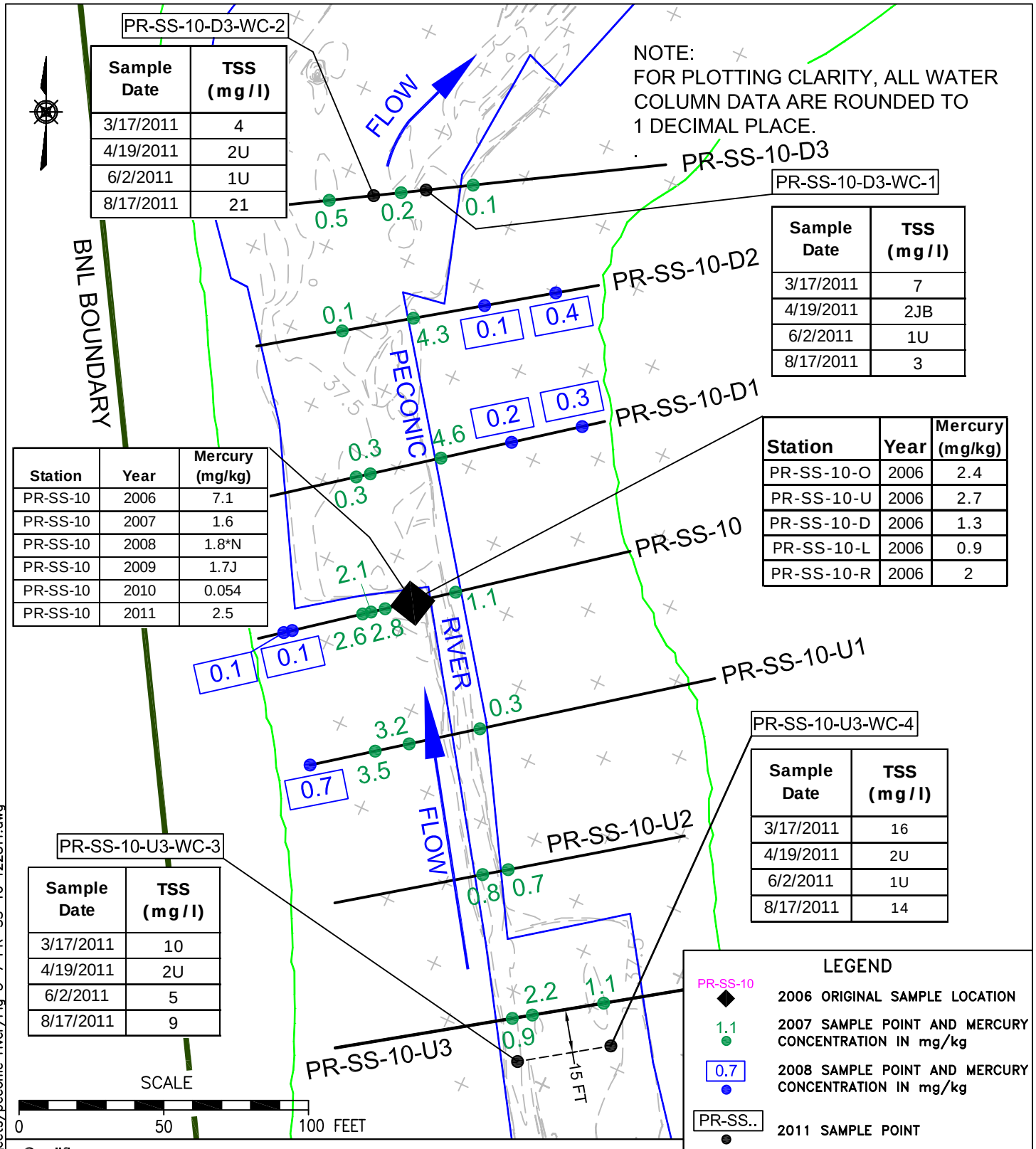
BROOKHAVEN NATIONAL LABORATORY
ENVIRONMENTAL PROTECTION DIVISION

TITLE: 2011 WATER COLUMN TOTAL MERCURY RESULTS AT PR-SS-10-D3-WC-1, D3-WC-2, U3-WC-3 & U3-WC-4
MERCURY SAMPLING PECONIC RIVER

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	12/28/11	–
CHKD:	APPD:	REV.:	NOTES:
WM	–	06/08/12	–

FIGURE NO.: 3-5


PR-SS-10-D3-WC-2
Sample Date | Methyl-mercury (ng/l)
3/17/2011 | 0.462
4/19/2011 | 0.58
6/2/2011 | 1.5
8/17/2011 | 1.2
NOTE:
FOR PLOTTING CLARITY, ALL WATER COLUMN DATA ARE ROUNDED TO 1 DECIMAL PLACE.
FLOW
PR-SS-10-D3
PR-SS-10-D3-WC-1
Sample Date | Methyl-mercury (ng/l)
3/17/2011 | 0.562
4/19/2011 | 0.52
6/2/2011 | 1.6
8/17/2011 | 1.1
PR-SS-10-D2
PR-SS-10-D1
PR-SS-10
PR-SS-10-U1
PR-SS-10-U2
PR-SS-10-U3
BNL BOUNDARY
PECONIC RIVER
FLOW
Station | Year | Mercury (mg/kg)
PR-SS-10 | 2006 | 7.1
PR-SS-10 | 2007 | 1.6
PR-SS-10 | 2008 | 1.8*N
PR-SS-10 | 2009 | 1.7J
PR-SS-10 | 2010 | 0.054
PR-SS-10 | 2011 | 2.5
Station | Year | Mercury (mg/kg)
PR-SS-10-O | 2006 | 2.4
PR-SS-10-U | 2006 | 2.7
PR-SS-10-D | 2006 | 1.3
PR-SS-10-L | 2006 | 0.9
PR-SS-10-R | 2006 | 2
PR-SS-10-U3-WC-4
Sample Date | Methyl-mercury (ng/l)
3/17/2011 | 0.432
4/19/2011 | 0.47
6/2/2011 | 2.1
8/17/2011 | 1.1
PR-SS-10-U3-WC-3
Sample Date | Methyl-mercury (ng/l)
3/17/2011 | 0.469
4/19/2011 | 0.49
6/2/2011 | 2.5
8/17/2011 | 0.92
15 FT
SCALE
0
50
100 FEET
LEGEND
PR-SS-10
2006 ORIGINAL SAMPLE LOCATION
1.1
2007 SAMPLE POINT AND MERCURY CONCENTRATION IN mg/kg
0.7
2008 SAMPLE POINT AND MERCURY CONCENTRATION IN mg/kg
PR-SS..
2011 SAMPLE POINT
POST-CLEANUP SEDIMENT CONFIRMATION SAMPLE LOCATION
PECONIC RIVER
TREE LINE
SURFACE WATER OR STREAM AS PER BASEMAP
Qualifiers:
* Indicates that the duplicate analysis was not within control limits.
J Indicates an estimated value.
N Indicates that the spiked sample recovery is not within control limits.
//oernt/gis/gw_projects/peconic river/Fig 3-6 PR-SS-10 122811.dwg
BROOKHAVEN NATIONAL LABORATORY
ENVIRONMENTAL PROTECTION DIVISION
TITLE:
2011 WATER COLUMN METHYL-MERCURY RESULTS AT PR-SS-10-D3-WC-1, D3-WC-2, U3-WC-3 & U3-WC-4
MERCURY SAMPLING PECONIC RIVER
DWN: AJZ
VT:HZ.: –
DATE: 12/28/11
PROJECT NO.: –
CHKD: WM
APPD: –
REV.: –
NOTES: –
FIGURE NO.: 3-6



Qualifiers:

* Indicates that the duplicate analysis was not within control limits.
J Indicates an estimated value.
B Indicates that the reported value was less than Contract Required Detection Limits but greater than Instrument Detection Limits (IDL).
N Indicates that the spiked sample recovery is not within control limits.
U Indicates that the analyte was analyzed for but not detected.

//oernt/gis/gw_projects/peconic river/Fig 3-7 PR-SS-10 122811.dwg

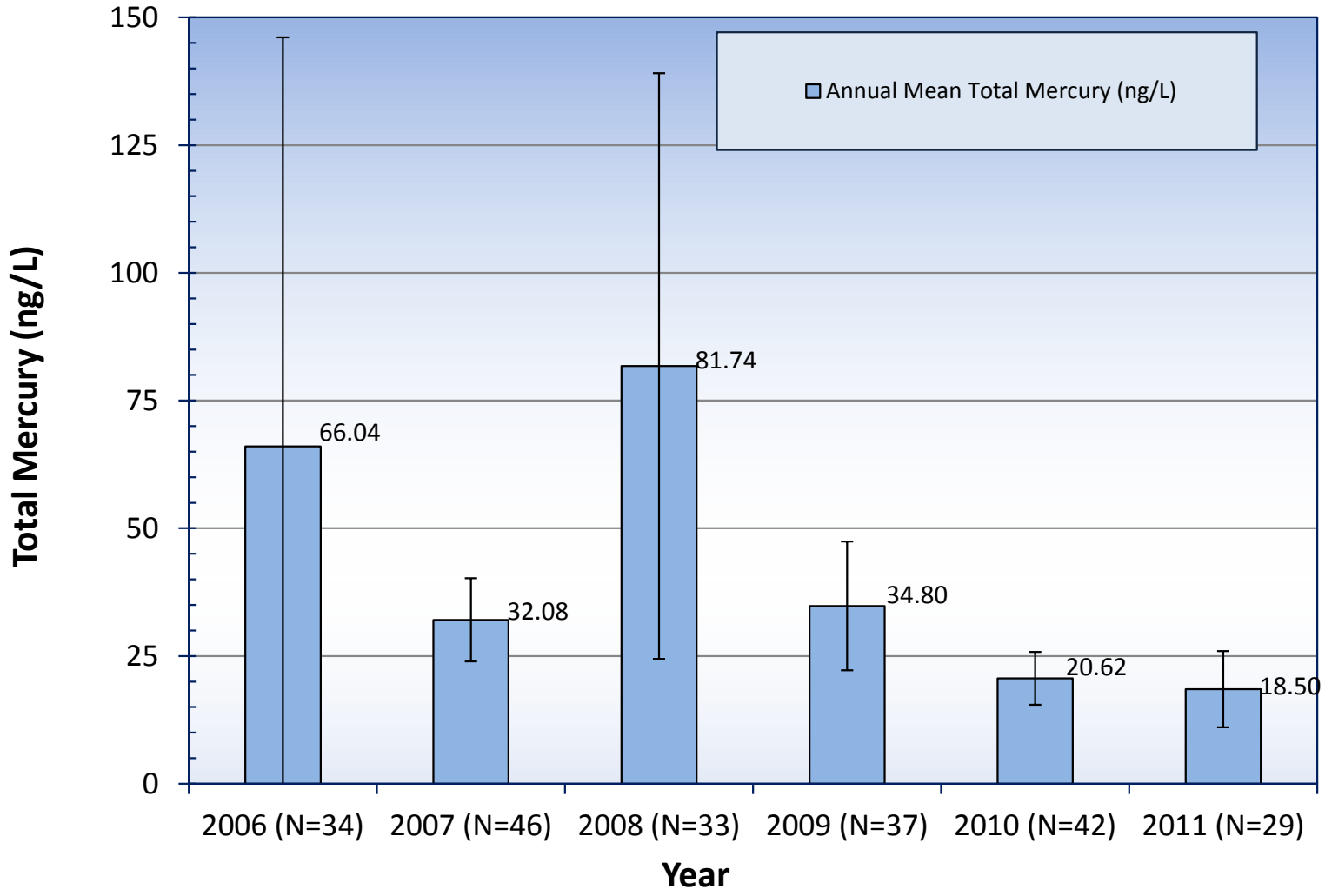
BROOKHAVEN NATIONAL LABORATORY
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
2011 WATER COLUMN TSS RESULTS AT PR-SS-10-D3-WC-1, D3-WC-2, U3-WC-3 & U3-WC-4
MERCURY SAMPLING PECONIC RIVER

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	12/28/11	–
CHKD:	APPD:	REV.:	NOTES:
WM	–	–	–

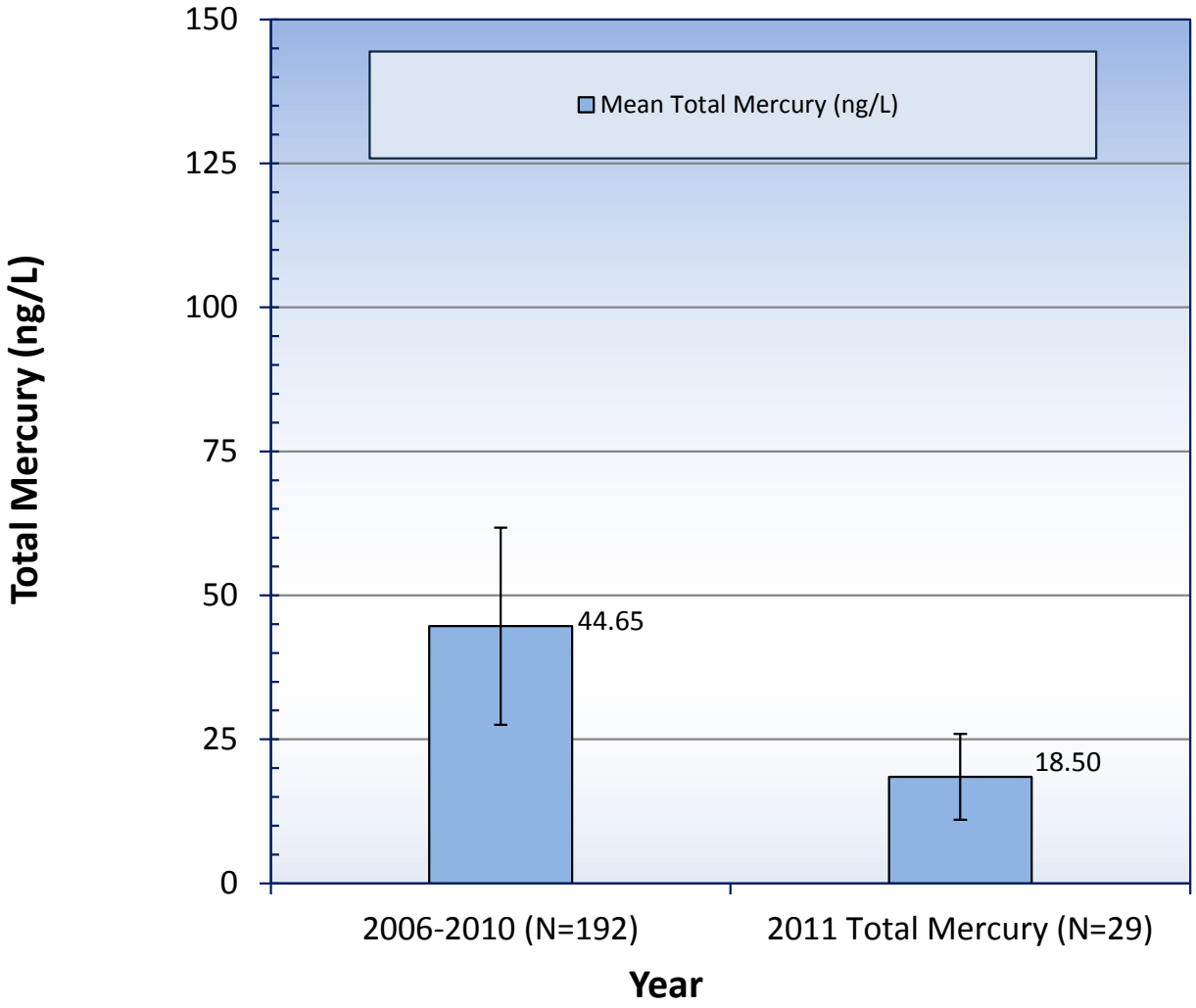
FIGURE NO.: 3-7

Figure 3-8 2006-2011 Peconic River Surface Water Annual Mean Total Mercury



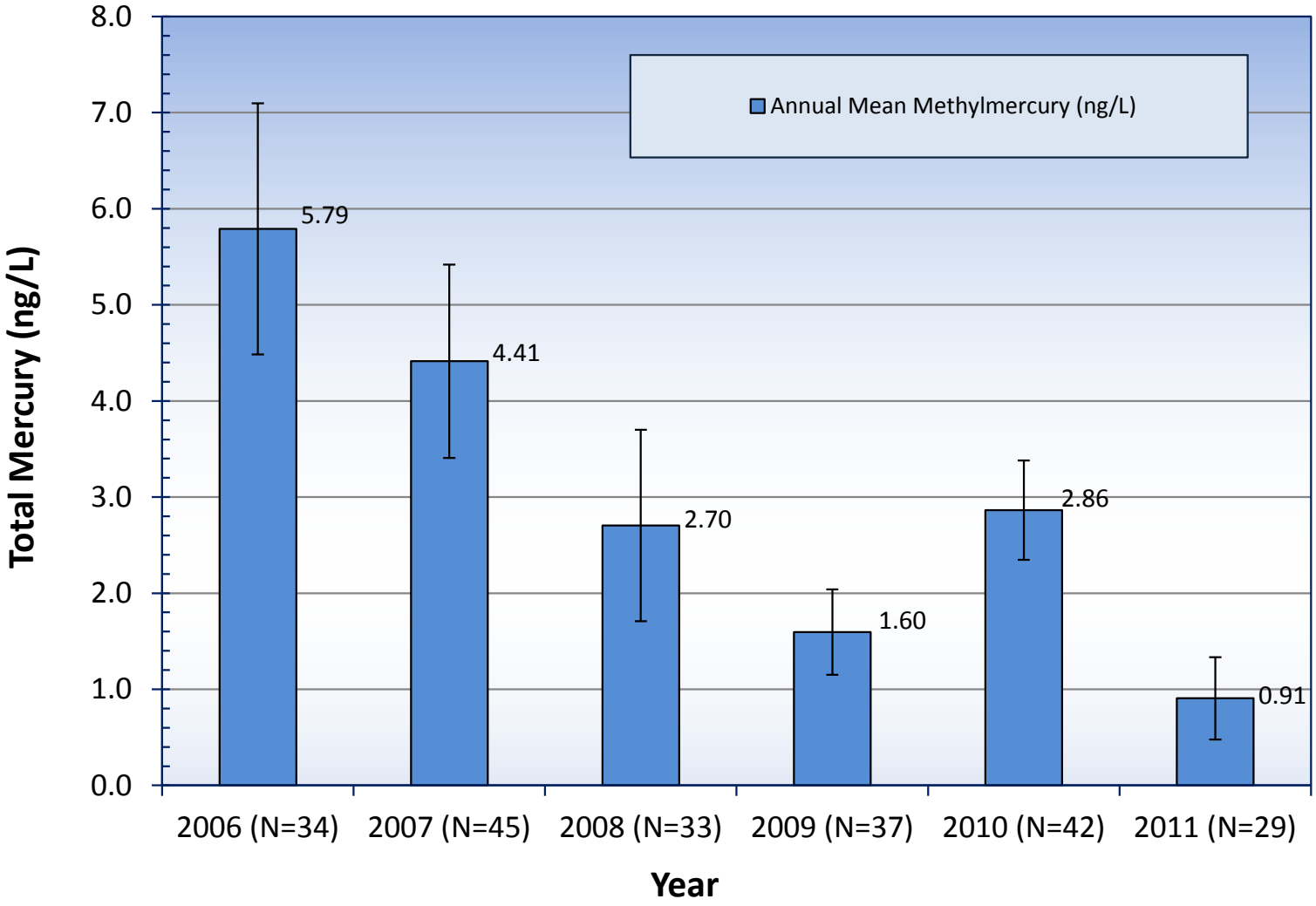
(Note: Error Bars represent the 95 percent confidence limits.)

Figure 3-9 2006-2010 and 2011 Peconic River Surface Water Annual Mean Total Mercury



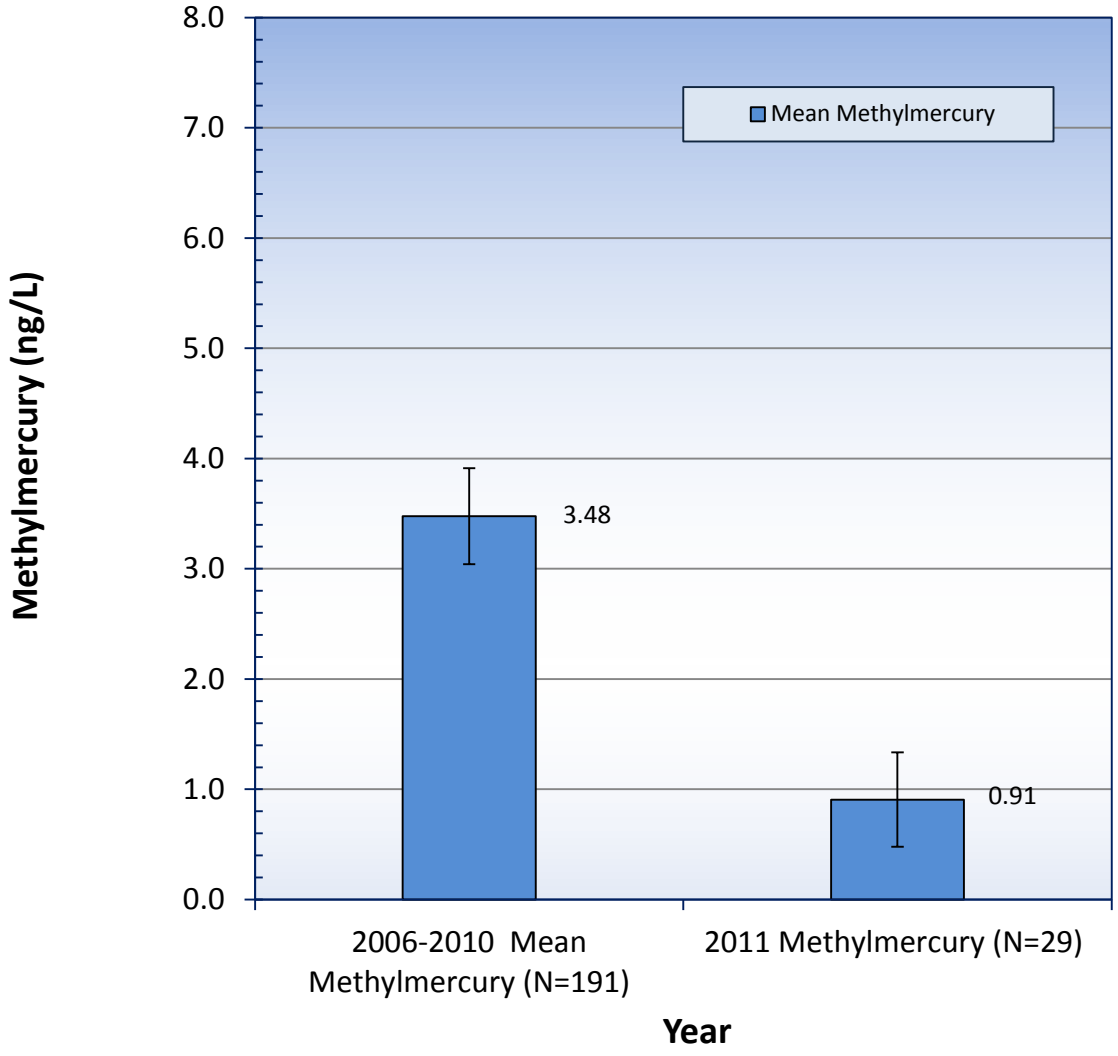
(Note: Error Bars represent the 95 percent confidence limits.)

Figure 3-10 2006-2011 Peconic River Surface Water Annual Mean Methylmercury



(Note: Error Bars represent the 95 percent confidence limits.)

Figure 3-11 2006-2010 and 2011 Peconic River Surface Water Annual Mean Methylmercury



(Note: Error Bars represent the 95 percent confidence limits.)

Figure 4-1a 2011 Peconic River Fish Fillet Mercury - Brown Bullheads (Sorted by Species - Age)

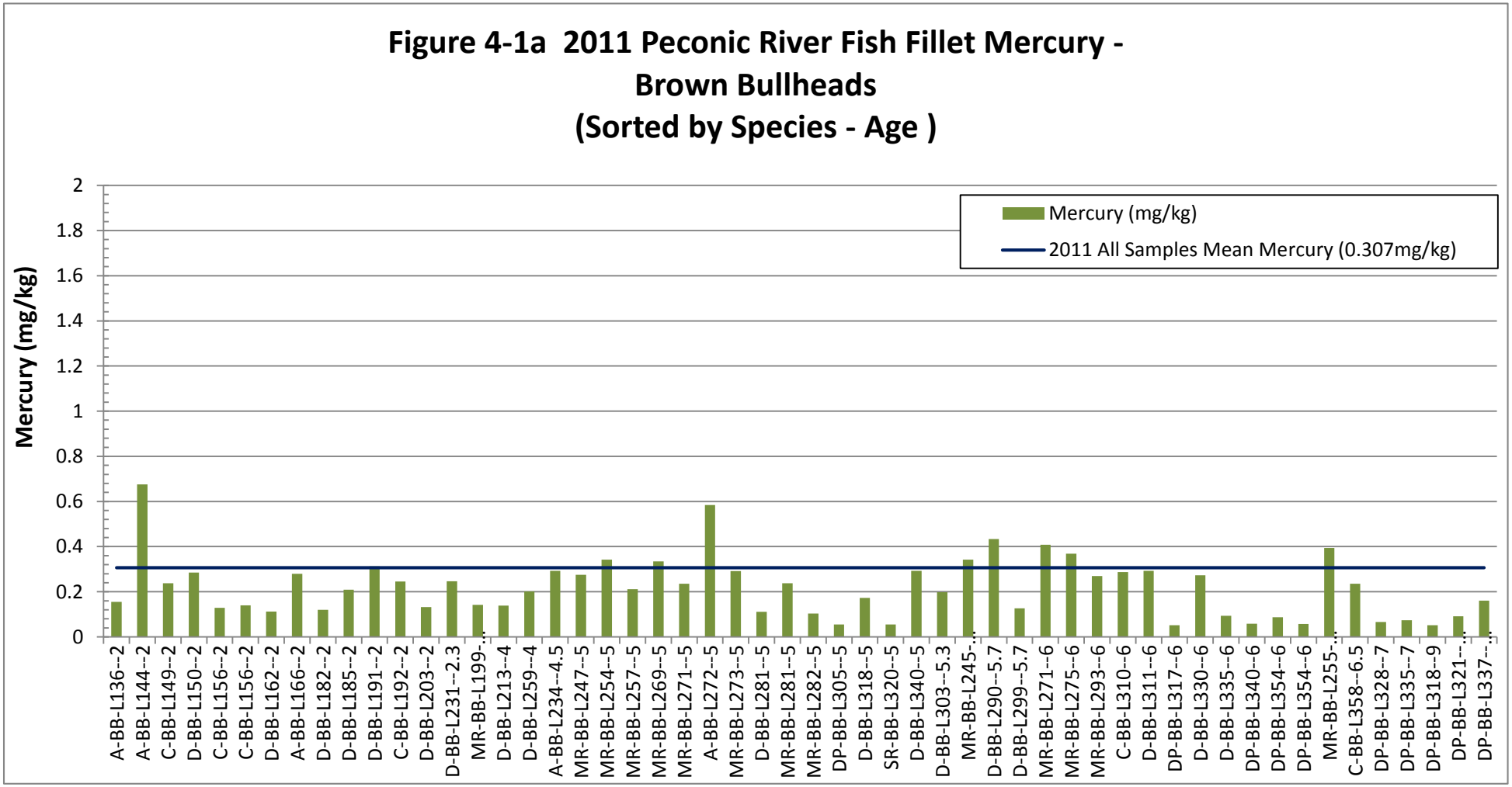


Figure 4-1b 2011 Peconic River Fish Fillet Mercury -
Black Crappies, Bluegills, Chain Pickerel, Largemouth Bass, Pumpkinseeds
(Sorted by Species - Age)

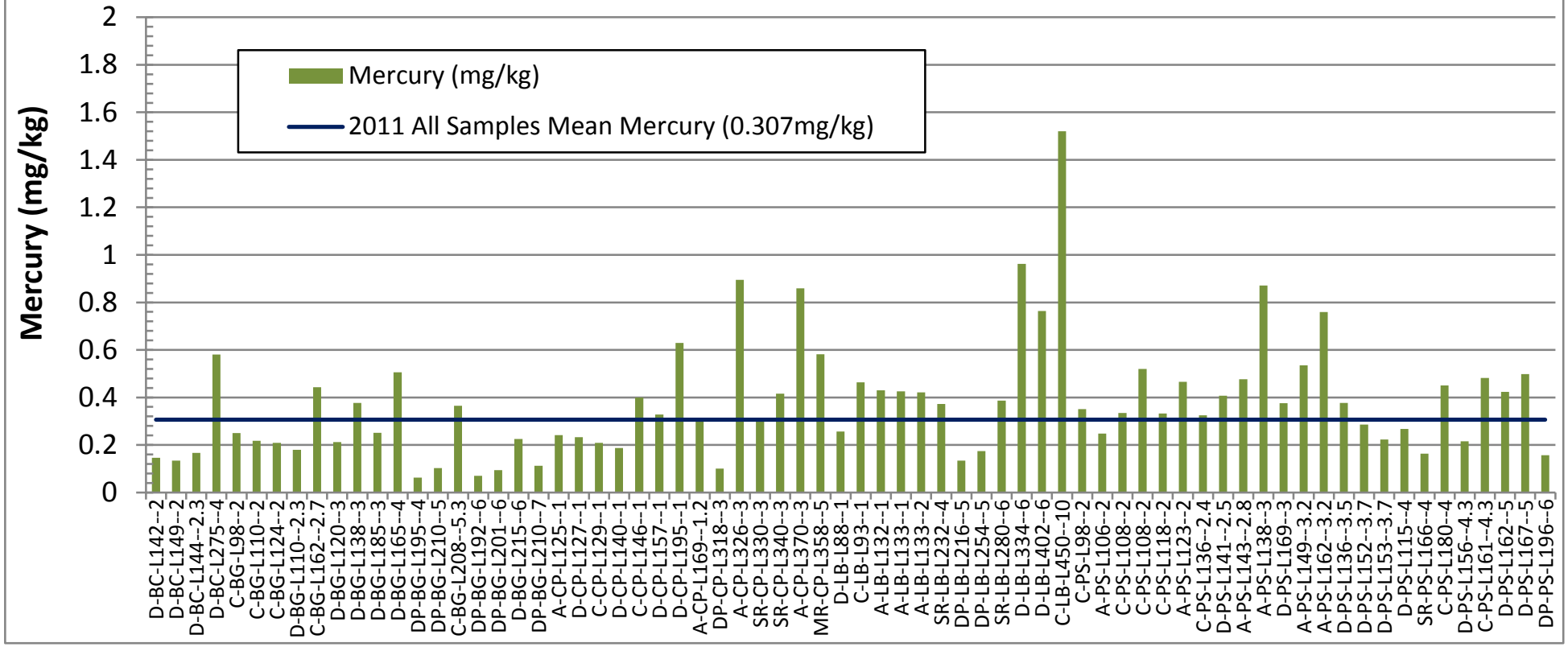
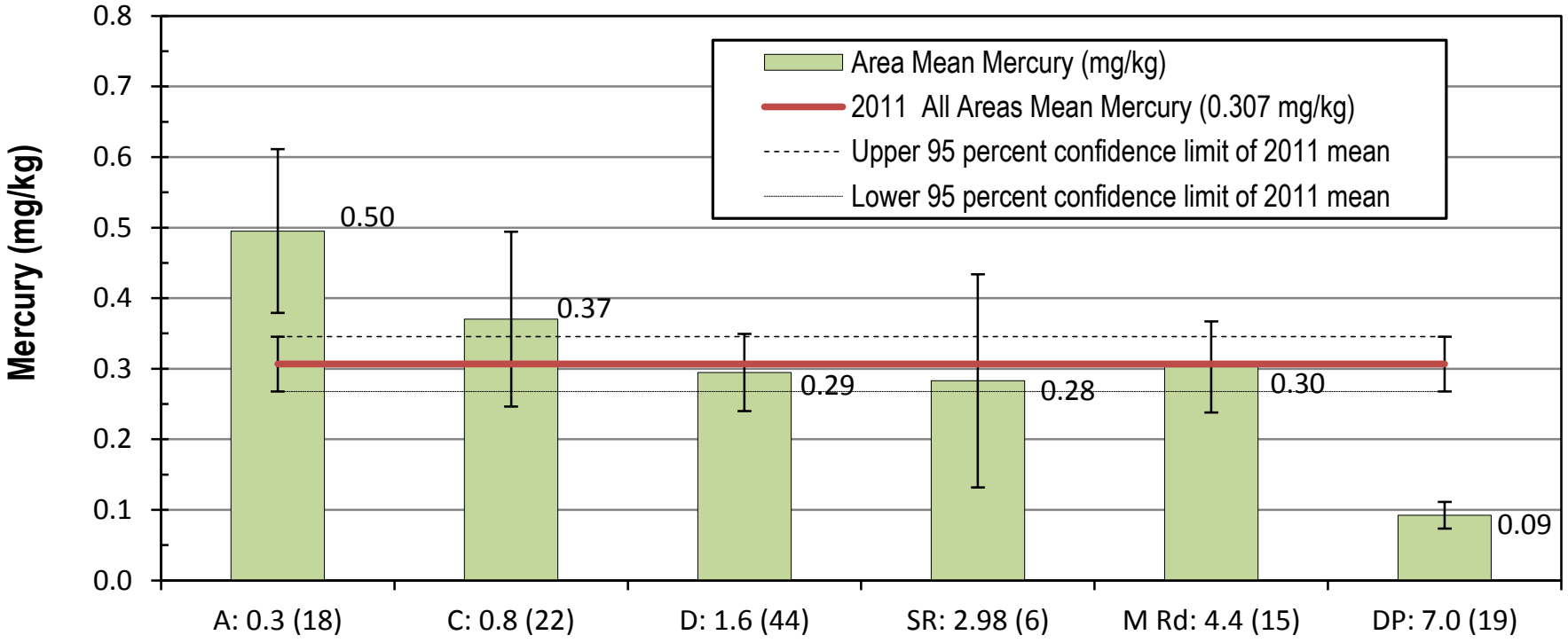


Figure 4-2 2011 Peconic River Mean Fish Mercury by Collection Area



Labels are Fish Collection Area: Distance of area downstream from STP in miles. (Number of samples)
The error bars represent the 95 percent confidence limits.

Fig 4-3 2011 Mercury in Black Crappie Fillets (Sorted by Age, Area, Length)

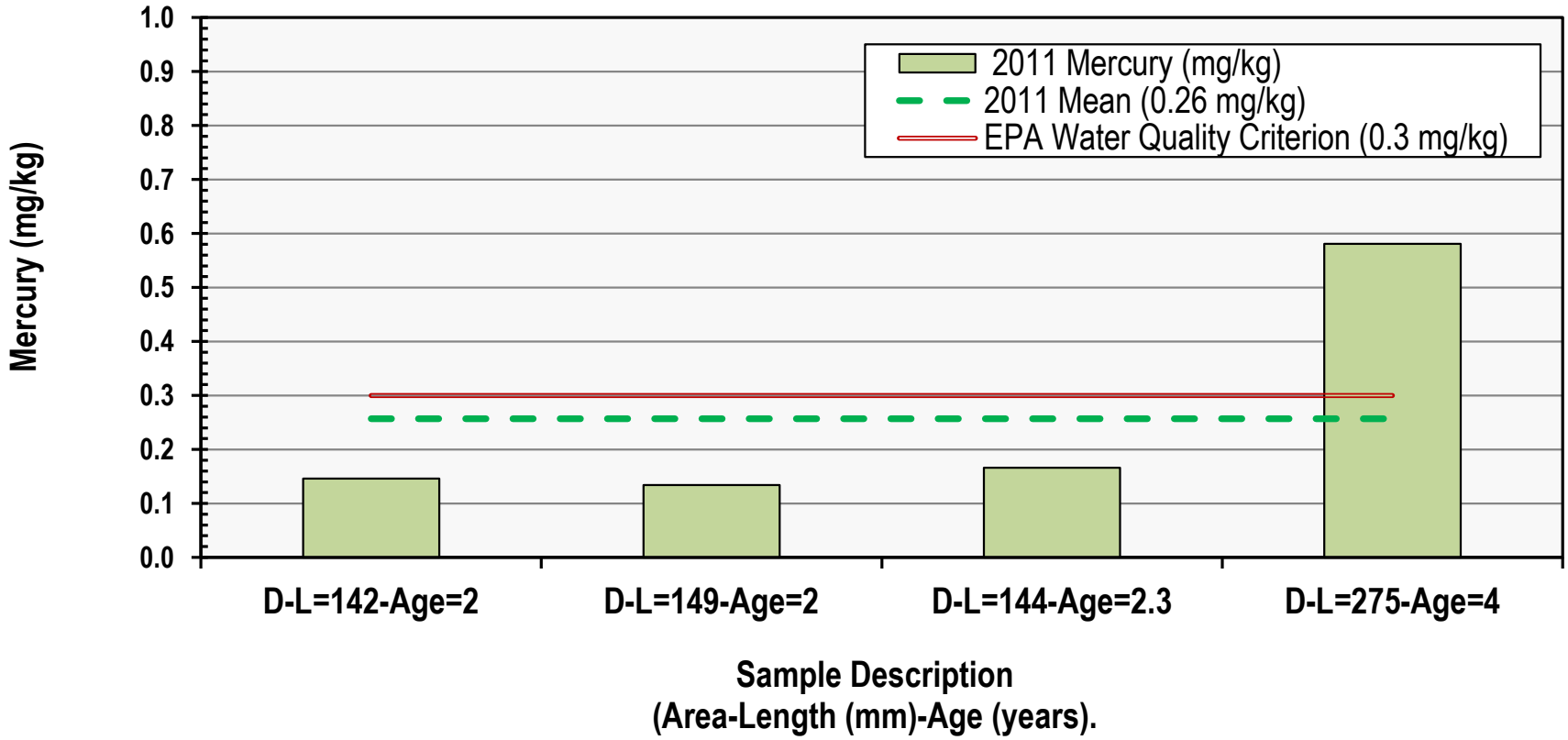


Figure 4-4 2011 Mercury in Bluegill Fillets

(Sorted by Age, Area, Length)

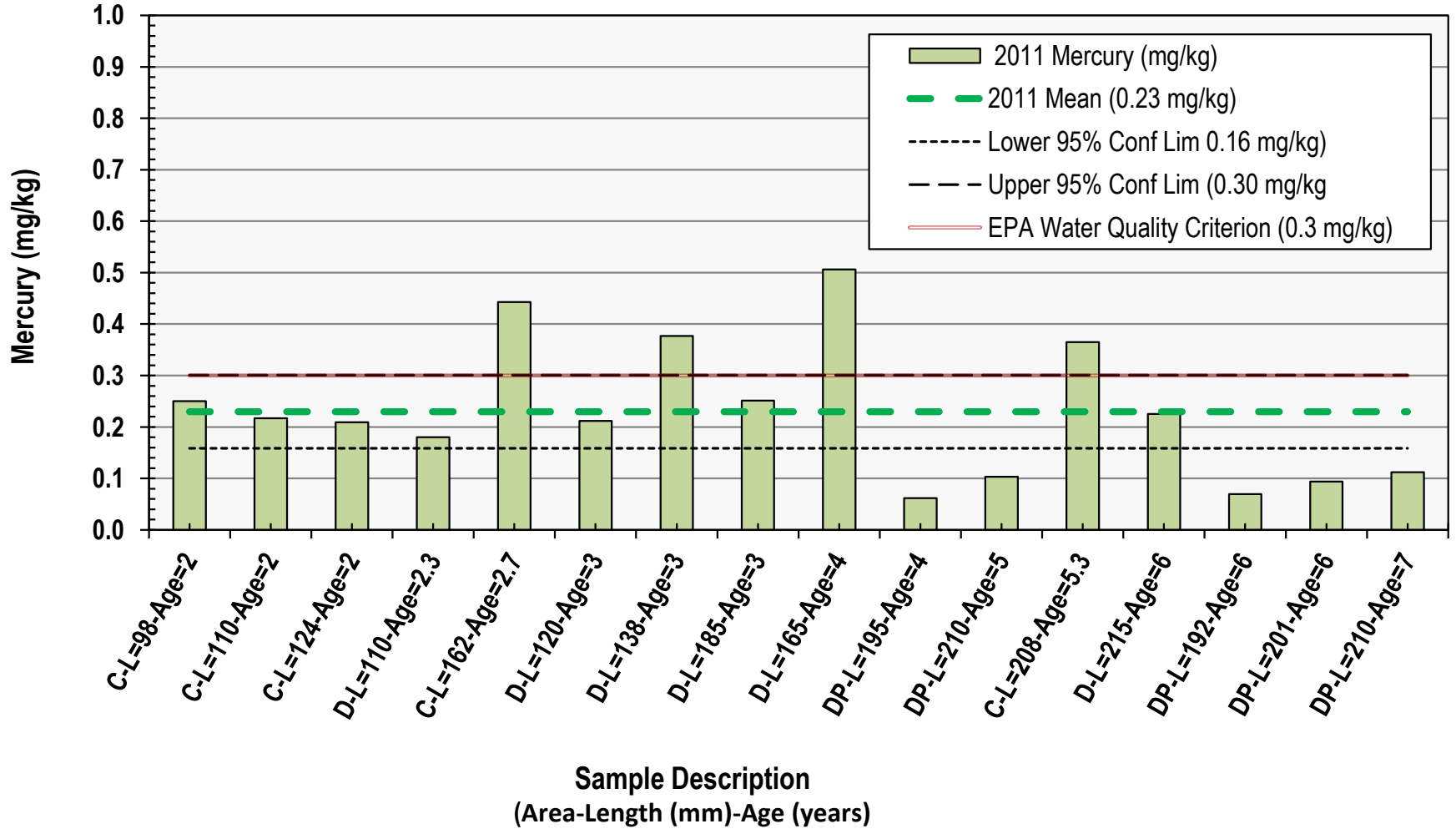


Figure 4-5 2011 Mercury in Brown Bullhead Fillets

(Sorted by Age, Area, Length)

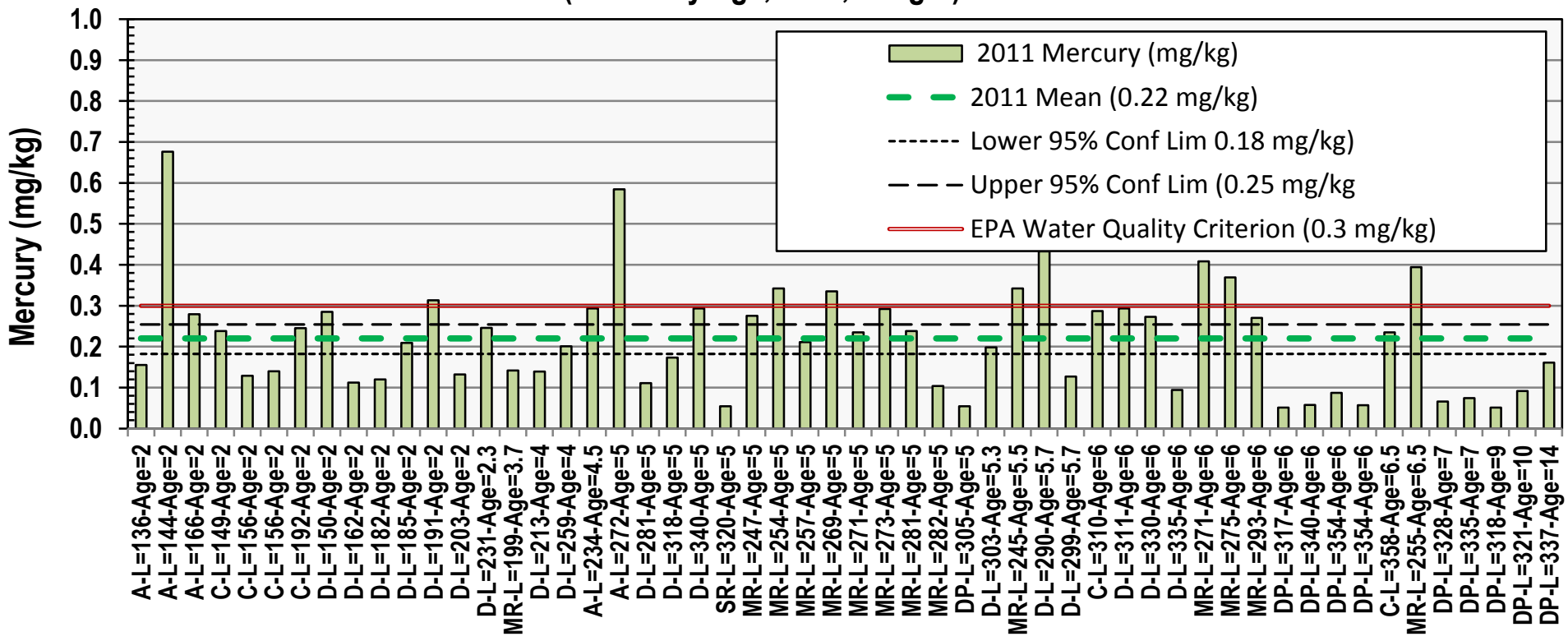


Figure 4-6 2011 Mercury in Chain Pickerel Fillets

(Sorted by Age, Area, Length)

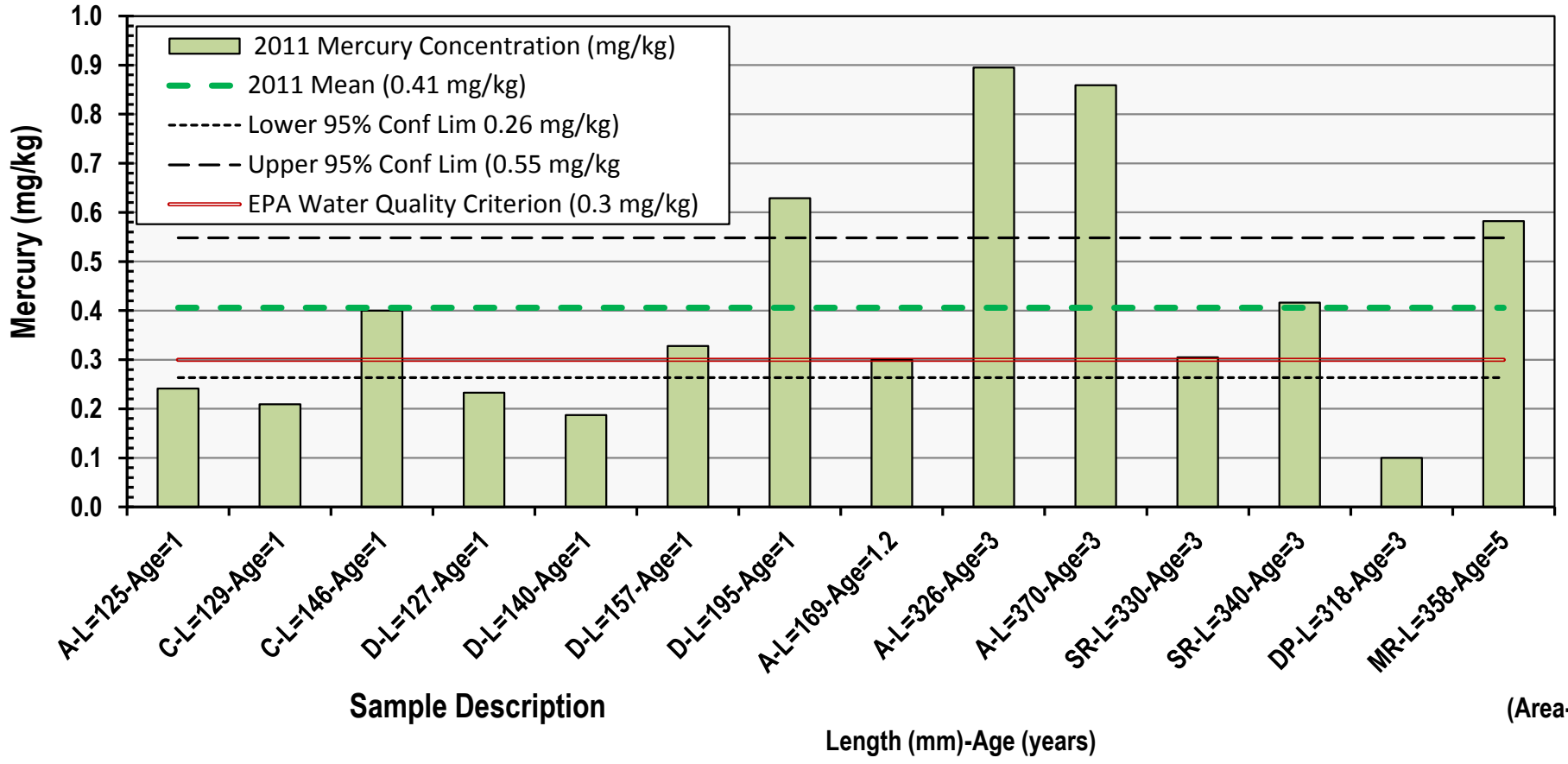


Figure 4-7 2011 Mercury in Largemouth Bass Fillets
(Sorted by Age, Area, Length)

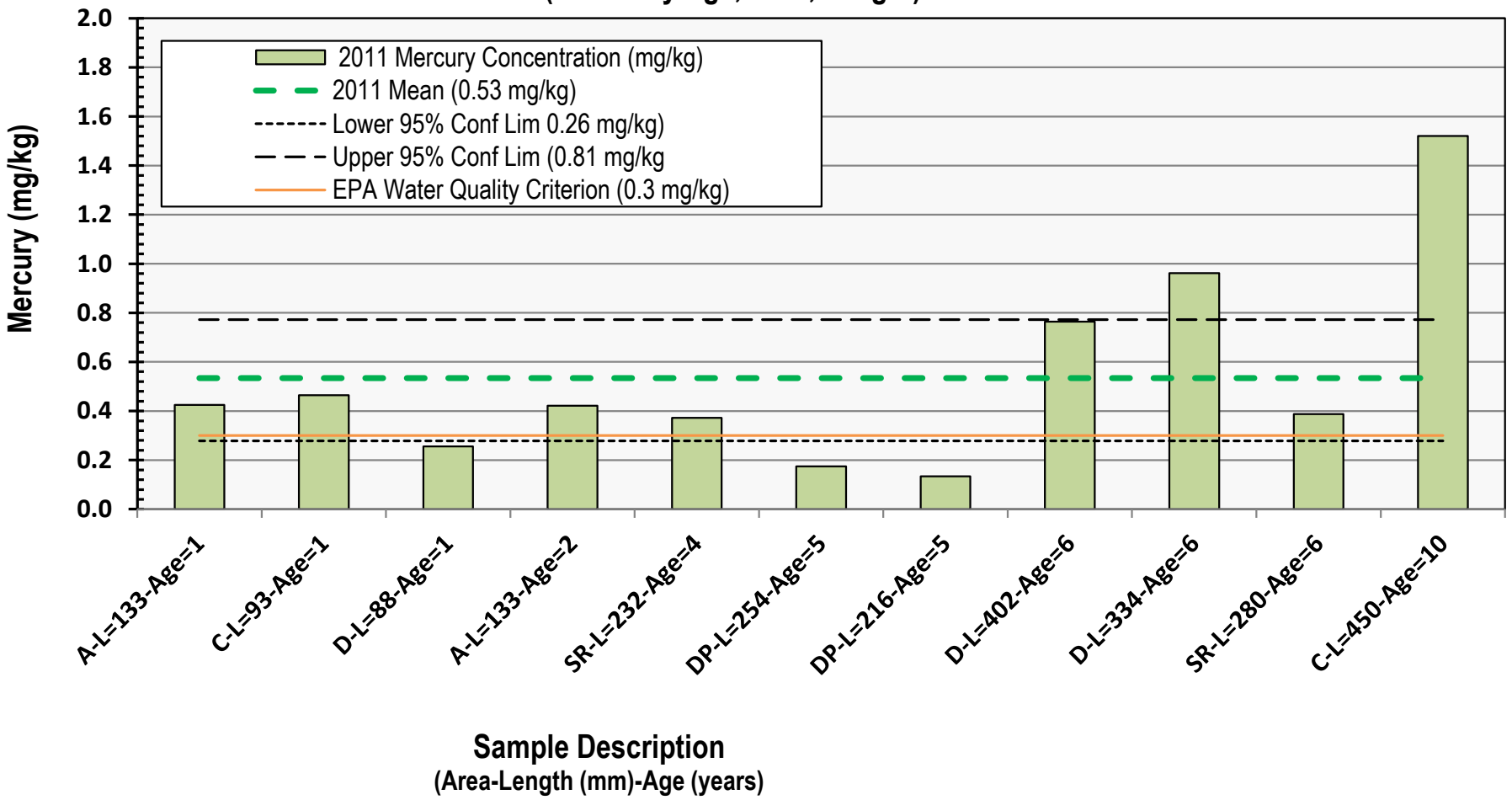
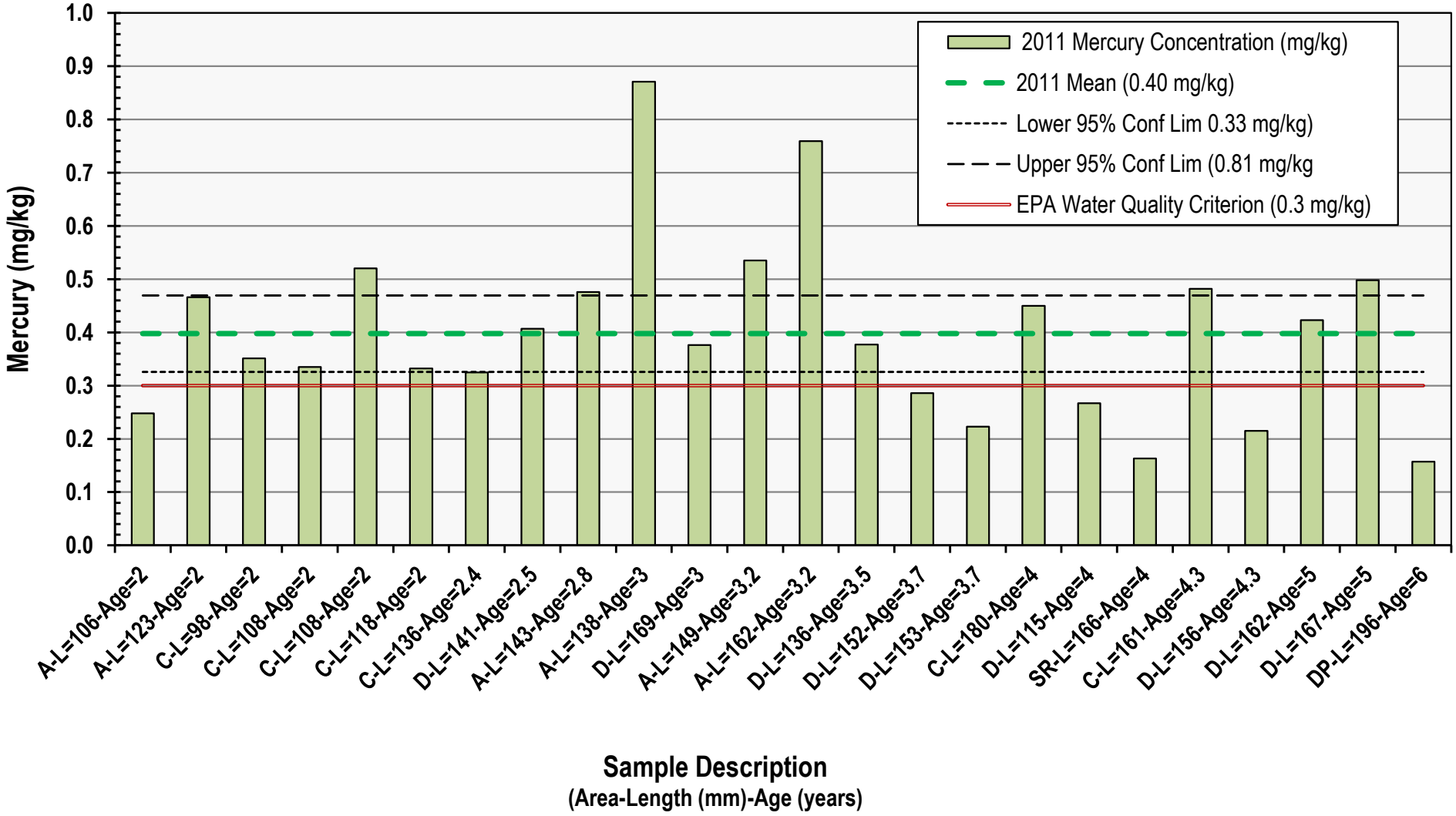


Figure 4-8 2011 Mercury in Pumpkinseed Fillets

(Sorted by Age, Area, Length

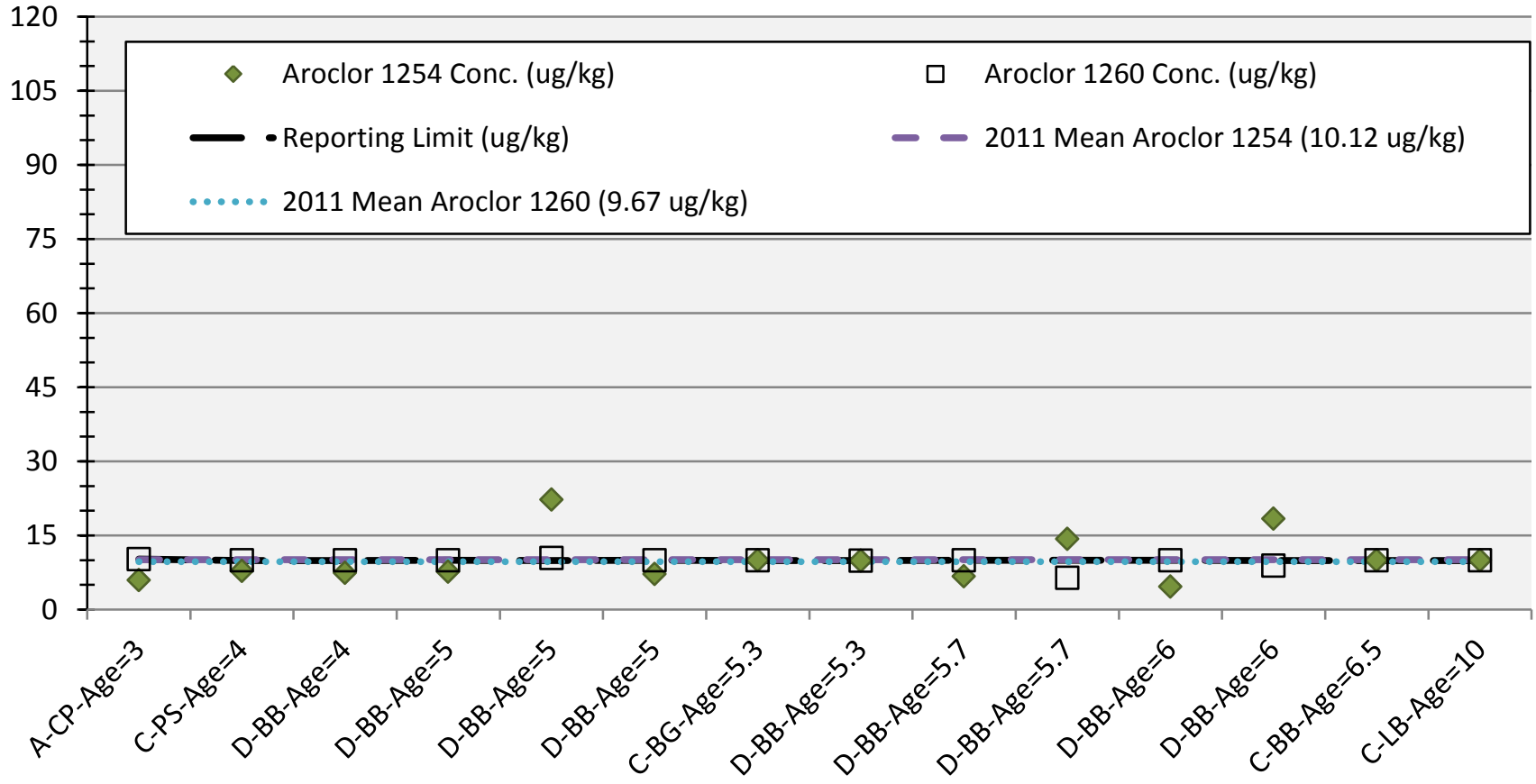


Sample Description

(Area-Length (mm)-Age (years)

Figure 4-9 Aroclor 1254 and Aroclor 1260 in 2011 Peconic River Fish

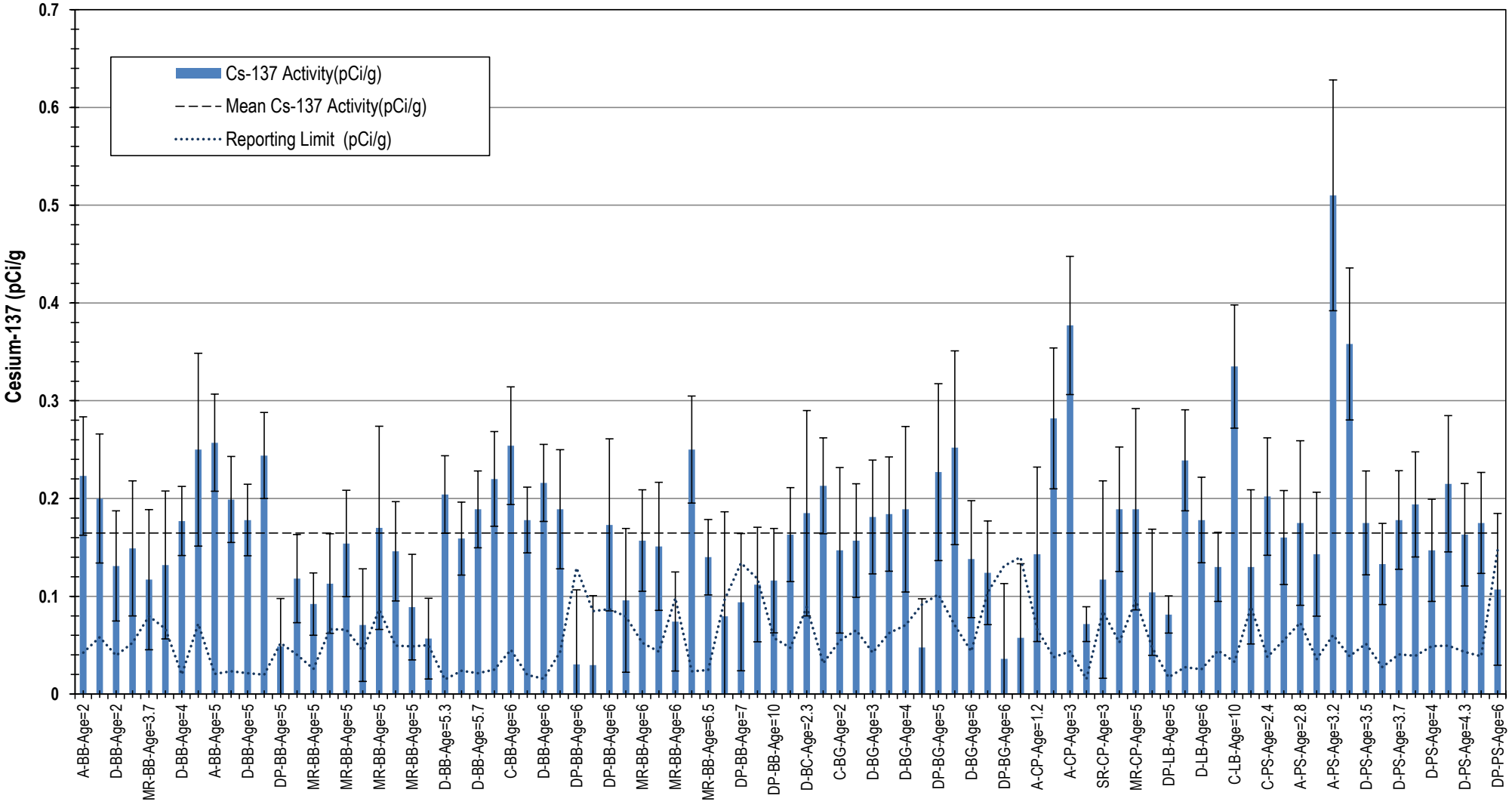
(Sorted by Age-Area-Length)



Note: All values of Aroclor 1254 and Aroclor 1260 values less than the MDL are estimated values. There were no 2011 detections of Aroclor 1016, 1221, 1232, 1242, and 1248.

Figure 4-10 2011 Cesium-137 Activity in Peconic River Fish

(Sorted by Species-Age-Area-Length))

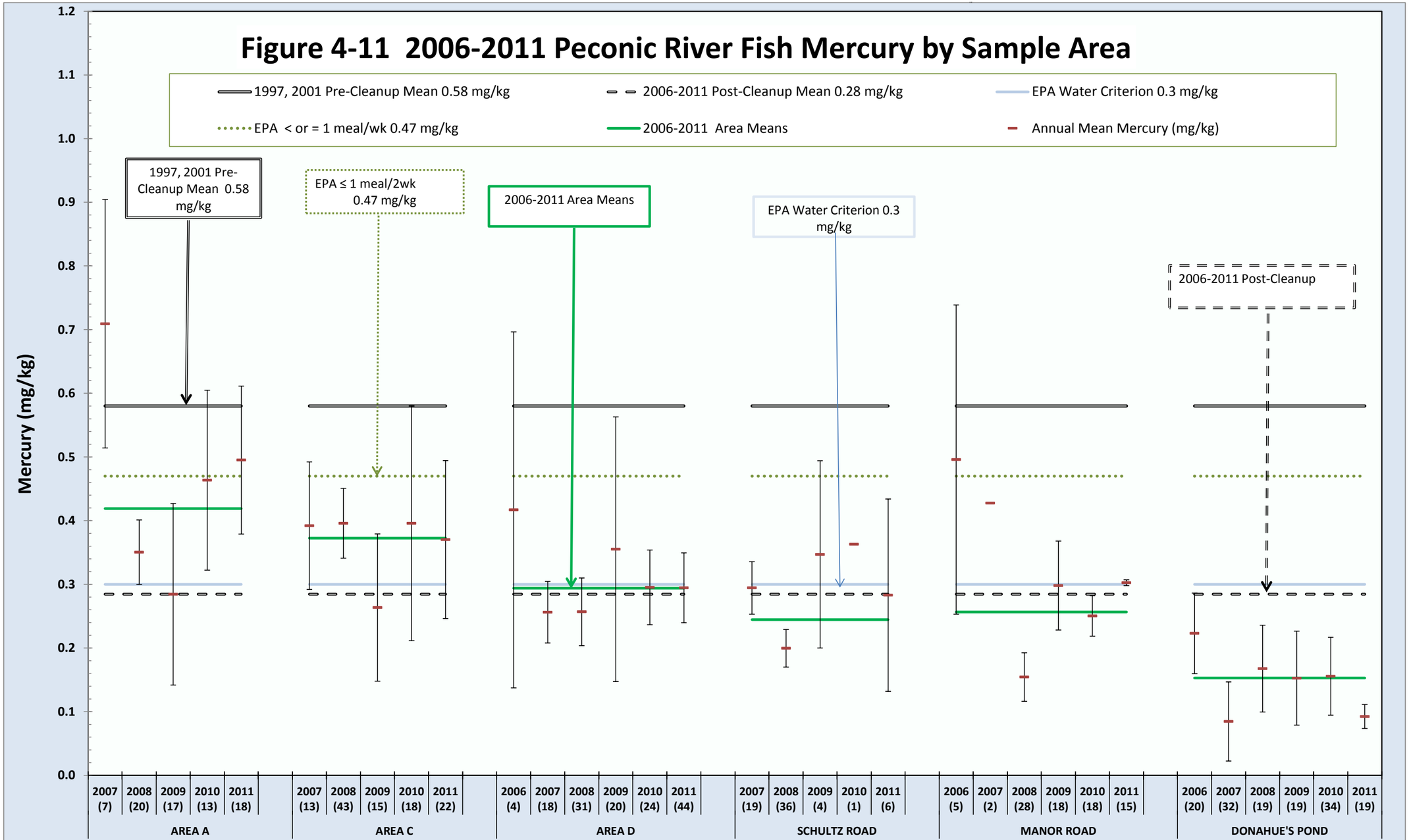


Area-Species-Age (years)

Species key: BC=Black Crappie, BG=Bluegill, CP=Chain Pickerel, LB=Largemouth Bass, PS=Pumpkinseed

(Error bars represent analytical uncertainty)

Figure 4-11 2006-2011 Peconic River Fish Mercury by Sample Area



Fish Collection Area

Sample sizes are in parentheses.

Error bars equal the mercury mean for a given sample area and year plus and minus the 95 percent confidence limit.

Appendix A - 2011 Peconic River Sediment Samples

Metals

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual
29606-008	PR-SS-38	0.36	5/13/2011	1000	7471A	Mercury	2.7	0.059	MG/KG		
29606-007	PR-SS-37	0.47	5/13/2011	950	7471A	Mercury	0.41	0.049	MG/KG		
29606-006	PR-SS-35	0.49	5/13/2011	940	7471A	Mercury	0.11	0.05	MG/KG		
29606-005	PR-SS-33	0.49	5/13/2011	930	7471A	Mercury	1.5	0.053	MG/KG		
29606-004	PR-SS-31	0.67	5/12/2011	1450	7471A	Mercury	0.17	0.052	MG/KG		
29606-004	PR-SS-31	0.67	5/12/2011	1450	6020	Copper	14.8	1.5	MG/KG		
29606-004	PR-SS-31	0.67	5/12/2011	1450	6020	Silver	1.4	0.31	MG/KG		
29606-003	PR-SS-30	0.69	5/12/2011	1445	7471A	Mercury	0.24	0.04	MG/KG		
29606-002	PR-SS-29	0.69	5/12/2011	1440	7471A	Mercury	0.34	0.047	MG/KG		
29606-001	PR-SS-26	0.75	5/12/2011	1425	7471A	Mercury	0.08	0.045	MG/KG		
29600-010	PR-SS-24	0.8	5/12/2011	1410	7471A	Mercury	0.17	0.043	MG/KG		
29600-009	PR-SS-23	0.85	5/12/2011	1400	7471A	Mercury	0.19	0.047	MG/KG		
29600-008	PR-SS-21	0.91	5/12/2011	1125	7471A	Mercury	0.19	0.047	MG/KG		
29604-004	PR-WC-06-D1-L50	1.11	5/12/2011	1100	7471A	Mercury	1.9	0.055	MG/KG		
29600-007	PR-SS-19	1.2	5/11/2011	1615	7471A	Mercury	0.96	0.046	MG/KG		
29600-006	PR-SS-18	1.27	5/11/2011	1600	7471A	Mercury	0.13	0.043	MG/KG		
29600-005	PR-SS-17	1.33	5/11/2011	1520	7471A	Mercury	0.14	0.046	MG/KG		
29600-004	PR-SS-16	1.4	5/11/2011	1500	7471A	Mercury	0.35	0.045	MG/KG		
29600-004	PR-SS-16	1.4	5/11/2011	1500	6020	Copper	12.7	1.3	MG/KG		
29600-004	PR-SS-16	1.4	5/11/2011	1500	6020	Silver	4.1	0.27	MG/KG		
29604-003	ST1-80-U20	1.42	5/12/2011	1020	7471A	Mercury	0.41	0.049	MG/KG		
29604-002	PR-SS-15-U1-L65-O	1.51	5/12/2011	1000	7471A	Mercury	0.049	0.044	MG/KG		
29604-002	PR-SS-15-U1-L65-O	1.51	5/12/2011	1000	6020	Copper	1.5	1.3	MG/KG		
29604-002	PR-SS-15-U1-L65-O	1.51	5/12/2011	1000	6020	Silver	0.48	0.26	MG/KG		
29600-003	PR-SS-15	1.52	5/11/2011	1450	7471A	Mercury	1.8	0.055	MG/KG		
29600-002	PR-SS-14	1.56	5/11/2011	1440	7471A	Mercury	0.43	0.05	MG/KG		
29600-001	PR-SS-12	1.66	5/11/2011	1420	7471A	Mercury	0.16	0.049	MG/KG		
29592-009	PR-SS-10	1.84	5/11/2011	1040	7471A	Mercury	2.5	0.078	MG/KG		

Appendix A - 2011 Peconic River Sediment Samples

Metals

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual
29592-008	PR-SS-09	1.93	5/11/2011	1030	7471A	Mercury	0.082	0.045	MG/KG		
29592-007	PR-SS-07	2.02	5/11/2011	1020	7471A	Mercury	0.023	0.049	MG/KG	B	
29592-006	PR-SS-06	2.08	5/11/2011	1010	7471A	Mercury	0.08	0.048	MG/KG		
29592-005	PR-SS-05	2.32	5/10/2011	1530	7471A	Mercury	0.34	0.065	MG/KG		
29592-004	PR-SS-04	2.52	5/10/2011	1500	7471A	Mercury	0.031	0.057	MG/KG	B	
29592-003	PR-SS-03	2.65	5/10/2011	1445	7471A	Mercury	0.33	0.072	MG/KG		
29592-002	PR-SS-02	2.76	5/10/2011	1430	7471A	Mercury	0.21	0.21	MG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	7471A	Mercury	0.13	0.08	MG/KG		
29592-001	PR-SS-01	2.9	5/10/2011	1120	6020	Copper	11.4	2.4	MG/KG		
29592-001	PR-SS-01	2.9	5/10/2011	1120	6020	Silver	2.2	0.48	MG/KG		
29590-001	PR-MR-01	4.28	5/10/2011	1100	7471A	Mercury	0.15	0.076	MG/KG		
29590-001	PR-MR-01	4.28	5/10/2011	1100	6020	Copper	3.4	2.3	MG/KG		
29590-001	PR-MR-01	4.28	5/10/2011	1100	6020	Silver	0.61	0.46	MG/KG		
29590-002	PR-MR-02	4.5	5/10/2011	1030	7471A	Mercury	0.043	0.048	MG/KG	B	
29539-001	PR-DP-01	6.75	4/26/2011	1100	7471A	Mercury	0.00834	0.00834	MG/KG	UN	
29539-001	PR-DP-01	6.75	4/26/2011	1100	EPA 3050B/6010B	Copper	1.55	0.585	UG/KG	B	
29539-001	PR-DP-01	6.75	4/26/2011	1100	EPA 3050B/6010B	Silver	0.195	0.195	UG/KG	U	

[1] Qualifiers	
* -	Indicates that the duplicate analysis is not within control limits.
N -	Indicates that the spiked sample recovery is not within control limits.
B -	Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or
U -	Indicates that the analyte was analyzed for but not detected.

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1016	59	59	UG/KG	U	
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1221	59	59	UG/KG	U	
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1232	59	59	UG/KG	U	
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1242	59	59	UG/KG	U	
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1248	59	59	UG/KG	U	
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1254	160	59	UG/KG		
29606-008	PR-SS-38	0.36	5/13/2011	1000	8082	Aroclor 1260	59	59	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1016	48	48	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1221	48	48	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1232	48	48	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1242	48	48	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1248	48	48	UG/KG	U	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1254	16	48	UG/KG	J	
29606-007	PR-SS-37	0.47	5/13/2011	950	8082	Aroclor 1260	48	48	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1016	52	52	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1221	52	52	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1232	52	52	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1242	52	52	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1248	52	52	UG/KG	U	
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1254	62	52	UG/KG		
29606-005	PR-SS-33	0.49	5/13/2011	930	8082	Aroclor 1260	52	52	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1016	50	50	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1221	50	50	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1232	50	50	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1242	50	50	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1248	50	50	UG/KG	U	
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1254	50	50	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29606-006	PR-SS-35	0.49	5/13/2011	940	8082	Aroclor 1260	50	50	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1016	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1221	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1232	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1242	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1248	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1254	51	51	UG/KG	U	
29606-004	PR-SS-31	0.67	5/12/2011	1450	8082	Aroclor 1260	51	51	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1016	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1016	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1221	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1221	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1232	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1232	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1242	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1242	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1248	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1248	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1254	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1254	40	40	UG/KG	U	
29606-002	PR-SS-29	0.69	5/12/2011	1440	8082	Aroclor 1260	46	46	UG/KG	U	
29606-003	PR-SS-30	0.69	5/12/2011	1445	8082	Aroclor 1260	40	40	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1016	45	45	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1221	45	45	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1232	45	45	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1242	45	45	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1248	45	45	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1254	45	45	UG/KG	U	
29606-001	PR-SS-26	0.75	5/12/2011	1425	8082	Aroclor 1260	45	45	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1016	43	43	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1221	43	43	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1232	43	43	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1242	43	43	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1248	43	43	UG/KG	U	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1254	12	43	UG/KG	J	
29600-010	PR-SS-24	0.8	5/12/2011	1410	8082	Aroclor 1260	43	43	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1016	46	46	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1221	46	46	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1232	46	46	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1242	46	46	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1248	46	46	UG/KG	U	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1254	13	46	UG/KG	J	
29600-009	PR-SS-23	0.85	5/12/2011	1400	8082	Aroclor 1260	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1016	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1221	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1232	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1242	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1248	46	46	UG/KG	U	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1254	12	46	UG/KG	J	
29600-008	PR-SS-21	0.91	5/12/2011	1125	8082	Aroclor 1260	46	46	UG/KG	U	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1016	45	45	UG/KG	U	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1221	45	45	UG/KG	U	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1232	45	45	UG/KG	U	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1242	45	45	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1248	45	45	UG/KG	U	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1254	22	45	UG/KG	J PG	
29600-007	PR-SS-19	1.2	5/11/2011	1615	8082	Aroclor 1260	45	45	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1016	43	43	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1221	43	43	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1232	43	43	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1242	43	43	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1248	43	43	UG/KG	U	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1254	10	43	UG/KG	J PG	
29600-006	PR-SS-18	1.27	5/11/2011	1600	8082	Aroclor 1260	43	43	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1016	45	45	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1221	45	45	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1232	45	45	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1242	45	45	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1248	45	45	UG/KG	U	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1254	11	45	UG/KG	J	
29600-005	PR-SS-17	1.33	5/11/2011	1520	8082	Aroclor 1260	45	45	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1016	44	44	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1221	44	44	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1232	44	44	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1242	44	44	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1248	44	44	UG/KG	U	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1254	15	44	UG/KG	J	
29600-004	PR-SS-16	1.4	5/11/2011	1500	8082	Aroclor 1260	44	44	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1016	43	43	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1221	43	43	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1232	43	43	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1242	43	43	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1248	43	43	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1254	43	43	UG/KG	U	
29604-002	U1-L65-O	1.51	5/12/2011	1000	8082	Aroclor 1260	43	43	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1016	49	49	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1221	49	49	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1232	49	49	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1242	49	49	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1248	49	49	UG/KG	U	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1254	14	49	UG/KG	J PG	
29600-002	PR-SS-14	1.56	5/11/2011	1440	8082	Aroclor 1260	49	49	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1016	48	48	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1221	48	48	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1232	48	48	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1242	48	48	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1248	48	48	UG/KG	U	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1254	9.4	48	UG/KG	J	
29600-001	PR-SS-12	1.66	5/11/2011	1420	8082	Aroclor 1260	48	48	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1016	78	78	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1221	78	78	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1232	78	78	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1242	78	78	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1248	78	78	UG/KG	U	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1254	45	78	UG/KG	J	
29592-009	PR-SS-10	1.84	5/11/2011	1040	8082	Aroclor 1260	78	78	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1016	44	44	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1221	44	44	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1232	44	44	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1242	44	44	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1248	44	44	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1254	44	44	UG/KG	U	
29592-008	PR-SS-09	1.93	5/11/2011	1030	8082	Aroclor 1260	44	44	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1016	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1221	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1232	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1242	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1248	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1254	48	48	UG/KG	U	
29592-007	PR-SS-07	2.02	5/11/2011	1020	8082	Aroclor 1260	48	48	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1016	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1221	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1232	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1242	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1248	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1254	47	47	UG/KG	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	8082	Aroclor 1260	47	47	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1016	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1221	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1232	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1242	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1248	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1254	65	65	UG/KG	U	
29592-005	PR-SS-05	2.32	5/10/2011	1530	8082	Aroclor 1260	65	65	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1016	56	56	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1221	56	56	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1232	56	56	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1242	56	56	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1248	56	56	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1254	56	56	UG/KG	U	
29592-004	PR-SS-04	2.52	5/10/2011	1500	8082	Aroclor 1260	56	56	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1016	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1221	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1232	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1242	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1248	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1254	71	71	UG/KG	U	
29592-003	PR-SS-03	2.65	5/10/2011	1445	8082	Aroclor 1260	71	71	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1016	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1221	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1232	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1242	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1248	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1254	200	200	UG/KG	U	
29592-002	PR-SS-02	2.76	5/10/2011	1430	8082	Aroclor 1260	200	200	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1016	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1221	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1232	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1242	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1248	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1254	79	79	UG/KG	U	
29592-001	PR-SS-01	2.9	5/10/2011	1120	8082	Aroclor 1260	79	79	UG/KG	U	

Appendix B - 2011 Peconic River Sediment Samples
PCBs

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	MDL	Units	Lab Qual [1]	Rev Qual
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1016	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1221	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1232	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1242	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1248	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1254	75	75	UG/KG	U	
29590-001	PR-MR-01	4.28	5/10/2011	1100	8082	Aroclor 1260	75	75	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1016	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1221	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1232	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1242	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1248	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1254	48	48	UG/KG	U	
29590-002	PR-MR-02	4.5	5/10/2011	1030	8082	Aroclor 1260	48	48	UG/KG	U	

[1] Qualifiers

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than

U - Indicates that the analyte was analyzed for but not detected.

Appendix C - 2011 Peconic River Sediment Samples
Radionuclides

Sample ID	COC Site ID	Distance From STP (miles)	Sample Date	Sample Time	Method	Analyte	Conc.	Error	MDL	Units	Lab Qual[1]	Rev Qual
29606-008	PR-SS-38	0.36	5/13/2011	1000	MOD	Cesium-137	0.87	0.14	0.05	PCI/G		
29606-007	PR-SS-37	0.47	5/13/2011	950	MOD	Cesium-137	0.64	0.13	0.09	PCI/G		
29606-006	PR-SS-35	0.49	5/13/2011	940	MOD	Cesium-137	0.62	0.11	0.07	PCI/G		
29606-005	PR-SS-33	0.49	5/13/2011	930	MOD	Cesium-137	1.91	0.23	0.15	PCI/G		
29606-004	PR-SS-31	0.67	5/12/2011	1450	MOD	Cesium-137	0.159	0.059	0.05	PCI/G		
29606-003	PR-SS-30	0.69	5/12/2011	1445	MOD	Cesium-137	0.58	0.12	0.07	PCI/G		
29606-002	PR-SS-29	0.69	5/12/2011	1440	MOD	Cesium-137	0.323	0.073	0.05	PCI/G		
29606-001	PR-SS-26	0.75	5/12/2011	1425	MOD	Cesium-137	0.197	0.064	0.04	PCI/G		
29600-010	PR-SS-24	0.8	5/12/2011	1410	MOD	Cesium-137	0.62	0.1	0.05	PCI/G		
29600-009	PR-SS-23	0.85	5/12/2011	1400	MOD	Cesium-137	0.52	0.11	0.12	PCI/G		
29600-008	PR-SS-21	0.91	5/12/2011	1125	MOD	Cesium-137	0.66	0.11	0.06	PCI/G		
29600-007	PR-SS-19	1.2	5/11/2011	1615	MOD	Cesium-137	0.79	0.11	0.04	PCI/G		
29600-006	PR-SS-18	1.27	5/11/2011	1600	MOD	Cesium-137	0.4	0.091	0.05	PCI/G		
29600-005	PR-SS-17	1.33	5/11/2011	1520	MOD	Cesium-137	0.51	0.11	0.07	PCI/G		
29600-004	PR-SS-16	1.4	5/11/2011	1500	MOD	Cesium-137	0.556	0.097	0.05	PCI/G		
29604-002	PR-SS-15-U1-L65-O	1.51	5/12/2011	1000	MOD	Cesium-137	0.54	0.11	0.07	PCI/G		
29600-002	PR-SS-14	1.56	5/11/2011	1440	MOD	Cesium-137	2.45	0.24	0.07	PCI/G		
29600-001	PR-SS-12	1.66	5/11/2011	1420	MOD	Cesium-137	0.457	0.078	0.03	PCI/G		
29592-009	PR-SS-10	1.84	5/11/2011	1040	MOD	Cesium-137	1.33	0.18	0.04	PCI/G		
29592-008	PR-SS-09	1.93	5/11/2011	1030	MOD	Cesium-137	0.192	0.064	0.06	PCI/G		
29592-007	PR-SS-07	2.02	5/11/2011	1020	MOD	Cesium-137	0.02	0.038	0.07	PCI/G	U	
29592-006	PR-SS-06	2.08	5/11/2011	1010	MOD	Cesium-137	0.184	0.051	0.03	PCI/G		
29592-005	PR-SS-05	2.32	5/10/2011	1530	MOD	Cesium-137	0.268	0.077	0.06	PCI/G		
29592-004	PR-SS-04	2.52	5/10/2011	1500	MOD	Cesium-137	0.09	0.05	0.07	PCI/G		
29592-003	PR-SS-03	2.65	5/10/2011	1445	MOD	Cesium-137	0.334	0.099	0.06	PCI/G		
29592-002	PR-SS-02	2.76	5/10/2011	1430	MOD	Cesium-137	0.28	0.17	0.23	PCI/G		
29592-001	PR-SS-01	2.9	5/10/2011	1120	MOD	Cesium-137	0.349	0.072	0.03	PCI/G		
29590-002	PR-MR-02	4.5	5/10/2011	1030	MOD	Cesium-137	0.129	0.068	0.12	PCI/G		
29590-001	PR-MR-01	4.28	5/10/2011	1100	MOD	Cesium-137	0.367	0.077	0.04	PCI/G		
29539-001	PR-DP-01	6.75	4/26/2011	1100	300	Cesium-137	-0.003	0.031	0.06	PCI/G	DL	U-DL

[1] Qualifiers

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample

U - Indicates that the analyte was analyzed for but not detected.

Appendix D

2011 Peconic River Water Column Total Mercury, Methyl Mercury and TSS Data

Sample ID	COC Site ID	Sample Date	Lab Code	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29670-004	PR-WC-12-D7	6/1/2011	CAL	EPA 1631E	Mercury	14	0.2	NG/L			-0.04
29748-004	PR-WC-12-D7	8/18/2011	CAL	EPA 1631E	Mercury	5.7	0.2	NG/L			-0.04
29670-002	PR-WC-11DS	6/1/2011	CAL	EPA 1631E	Mercury	46	0.2	NG/L			0.01
29748-001	PR-WC-10	8/18/2011	CAL	EPA 1631E	Mercury	40	0.2	NG/L			0.3
29670-001	PR-WC-10	6/1/2011	CAL	EPA 1631E	Mercury	38	0.2	NG/L			0.3
29668-004	PR-WC-08	6/1/2011	CAL	EPA 1631E	Mercury	53	0.2	NG/L			0.78
29746-003	PR-WC-08	8/18/2011	CAL	EPA 1631E	Mercury	31	0.2	NG/L			0.78
29668-002	PR-WC-06	6/1/2011	CAL	EPA 1631E	Mercury	68	0.2	NG/L			1.1
29746-001	PR-WC-06	8/18/2011	CAL	EPA 1631E	Mercury	33	0.2	NG/L			1.1
29743-002	PR-WC-03	8/17/2011	CAL	EPA 1631E	Mercury	11	0.2	NG/L			2.1
29678-002	PR-WC-03	6/2/2011	CAL	EPA 1631E	Mercury	11	0.2	NG/L			2.1
29741-005	PR-WC-01	8/17/2011	CAL	EPA 1631E	Mercury	6.4	0.2	NG/L			2.98
29666-005	PR-WC-01	6/1/2011	CAL	EPA 1631E	Mercury	9.4	0.2	NG/L			2.98
29741-004	PR-WCS-01	8/17/2011	CAL	EPA 1631E	Mercury	6	0.2	NG/L			3.42
29666-004	PR-WCS-01	6/1/2011	CAL	EPA 1631E	Mercury	6.1	0.2	NG/L			3.42
29741-003	PR-WCS-02	8/17/2011	CAL	EPA 1631E	Mercury	5.9	0.2	NG/L			3.99
29666-003	PR-WCS-02	6/1/2011	CAL	EPA 1631E	Mercury	4.8	0.2	NG/L			3.99
29666-002	PR-WCS-03	6/1/2011	CAL	EPA 1631E	Mercury	5.4	0.2	NG/L			4.44
29741-002	PR-WCS-03	8/17/2011	CAL	EPA 1631E	Mercury	5.1	0.2	NG/L			4.44
29666-001	PR-WCS-04	6/1/2011	CAL	EPA 1631E	Mercury	6.5	0.2	NG/L			4.77
29741-001	PR-WCS-04	8/17/2011	CAL	EPA 1631E	Mercury	11	0.2	NG/L			4.77
29664-003	PR-WCS-05	5/31/2011	CAL	EPA 1631E	Mercury	5	0.2	NG/L			6.04
29136-003	PR-WCS-05	8/16/2011	CAL	EPA 1631E	Mercury	3.5	0.2	NG/L			6.04
29664-002	PR-WCS-06	5/31/2011	CAL	EPA 1631E	Mercury	3.8	0.2	NG/L			6.75
29136-002	PR-WCS-06	8/16/2011	CAL	EPA 1631E	Mercury	1.7	0.2	NG/L			6.75
29664-001	PR-WCS-07	5/31/2011	CAL	EPA 1631E	Mercury	3.6	0.2	NG/L			7.23
29136-001	PR-WCS-07	8/16/2011	CAL	EPA 1631E	Mercury	1.5	0.2	NG/L			7.23
29748-004	PR-WC-12-D7	8/18/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.74	0.02	NG/L			-0.04
29670-004	PR-WC-12-D7	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	5.9	0.02	NG/L			-0.04
29670-002	PR-WC-11DS	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.11	0.02	NG/L			0.01
29670-001	PR-WC-10	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	1.1	0.02	NG/L			0.3
29748-001	PR-WC-10	8/18/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.37	0.02	NG/L			0.3
29668-004	PR-WC-08	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	3	0.02	NG/L			0.78
29746-003	PR-WC-08	8/18/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.31	0.02	NG/L			0.78
29668-002	PR-WC-06	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	1.1	0.02	NG/L			1.1

Appendix D

2011 Peconic River Water Column Total Mercury, Methyl Mercury and TSS Data

Sample ID	COC Site ID	Sample Date	Lab Code	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29746-001	PR-WC-06	8/18/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.88	0.02	NG/L			1.1
29678-002	PR-WC-03	6/2/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.66	0.02	NG/L			2.1
29743-002	PR-WC-03	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.67	0.02	NG/L			2.1
29666-005	PR-WC-01	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	1.2	0.02	NG/L			2.98
29741-005	PR-WC-01	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.51	0.02	NG/L			2.98
29666-004	PR-WCS-01	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.93	0.02	NG/L			3.42
29741-004	PR-WCS-01	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.43	0.02	NG/L			3.42
29666-003	PR-WCS-02	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.85	0.02	NG/L			3.99
29741-003	PR-WCS-02	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.35	0.02	NG/L			3.99
29666-002	PR-WCS-03	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.79	0.02	NG/L			4.44
29741-002	PR-WCS-03	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.35	0.02	NG/L			4.44
29666-001	PR-WCS-04	6/1/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.92	0.02	NG/L			4.77
29741-001	PR-WCS-04	8/17/2011	CAL	DRAFT EPA 1630	Methyl Mercury	1.2	0.02	NG/L			4.77
29664-003	PR-WCS-05	5/31/2011	CAL	DRAFT EPA 1630	Methyl Mercury	1.6	0.02	NG/L			6.04
29136-003	PR-WCS-05	8/16/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.42	0.02	NG/L			6.04
29664-002	PR-WCS-06	5/31/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.98	0.02	NG/L			6.75
29136-002	PR-WCS-06	8/16/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.21	0.02	NG/L			6.75
29136-001	PR-WCS-07	8/16/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.24	0.02	NG/L			7.23
29664-001	PR-WCS-07	5/31/2011	CAL	DRAFT EPA 1630	Methyl Mercury	0.41	0.02	NG/L			7.23
29748-004	PR-WC-12-D7	8/18/2011	CAL	SM20-2540 D	TSS	1	1	MG/L	JB		-0.04
29670-004	PR-WC-12-D7	6/1/2011	CAL	SM20-2540 D	TSS	10	2	MG/L			-0.04
29670-002	PR-WC-11DS	6/1/2011	CAL	SM20-2540 D	TSS	3	2	MG/L			0.01
29748-001	PR-WC-10	8/18/2011	CAL	SM20-2540 D	TSS	1	1	MG/L	U		0.3
29670-001	PR-WC-10	6/1/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	JB		0.3
29746-003	PR-WC-08	8/18/2011	CAL	SM20-2540 D	TSS	3	1	MG/L			0.78
29668-004	PR-WC-08	6/1/2011	CAL	SM20-2540 D	TSS	64	2	MG/L			0.78
29746-001	PR-WC-06	8/18/2011	CAL	SM20-2540 D	TSS	10	1	MG/L			1.1
29668-002	PR-WC-06	6/1/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	JB		1.1
29743-002	PR-WC-03	8/17/2011	CAL	SM20-2540 D	TSS	6	1	MG/L			2.1
29678-002	PR-WC-03	6/2/2011	CAL	SM20-2540 D	TSS	1	1	MG/L	U		2.1
29666-005	PR-WC-01	6/1/2011	CAL	SM20-2540 D	TSS	8	2	MG/L			2.98
29741-005	PR-WC-01	8/17/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		2.98
29741-004	PR-WCS-01	8/17/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		3.42
29666-004	PR-WCS-01	6/1/2011	CAL	SM20-2540 D	TSS	7	2	MG/L			3.42
29741-003	PR-WCS-02	8/17/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		3.99

Appendix D

2011 Peconic River Water Column Total Mercury, Methyl Mercury and TSS Data

Sample ID	COC Site ID	Sample Date	Lab Code	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29666-003	PR-WCS-02	6/1/2011	CAL	SM20-2540 D	TSS	4	2	MG/L			3.99
29741-002	PR-WCS-03	8/17/2011	CAL	SM20-2540 D	TSS	1	1	MG/L	U		4.44
29666-002	PR-WCS-03	6/1/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	JB		4.44
29741-001	PR-WCS-04	8/17/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		4.77
29666-001	PR-WCS-04	6/1/2011	CAL	SM20-2540 D	TSS	3	2	MG/L			4.77
29136-003	PR-WCS-05	8/16/2011	CAL	SM20-2540 D	TSS	6	1	MG/L			6.04
29664-003	PR-WCS-05	5/31/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		6.04
29136-002	PR-WCS-06	8/16/2011	CAL	SM20-2540 D	TSS	4	1	MG/L			6.75
29664-002	PR-WCS-06	5/31/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		6.75
29136-001	PR-WCS-07	8/16/2011	CAL	SM20-2540 D	TSS	1	1	MG/L	JB		7.23
29664-001	PR-WCS-07	5/31/2011	CAL	SM20-2540 D	TSS	2	2	MG/L	U		7.23

[1] Qualifiers

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

B - Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than

U - Indicates that the analyte was analyzed for but not detected.

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
Round 1 : 5/18/2011 to 5/19/2011												
29631-004	PR-WC-10	5/19/2011	0	U	10200 H	Chlorophyll a	3.4	10	UG/L	B		0.3
29631-004	PR-WC-10	5/19/2011	0	U	300.0A	Nitrate (as N)	1.7	0.1	MG/L			0.3
29631-004	PR-WC-10	5/19/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		0.3
29631-004	PR-WC-10	5/19/2011	0	U	300	Nitrogen	2.4	0.15	MG/L			0.3
29631-004	PR-WC-10	5/19/2011	0	U	365.2	Phosphorus	907	500	UG/L			0.3
29631-004	PR-WC-10	5/19/2011	0	U	9060	TOC	6.5	1	MG/L			0.3
29631-004	PR-WC-10	5/19/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.68	0.5	MG/L			0.3
29631-004	PR-WC-10	5/19/2011	0	U	160.2	TSS	4	1	MG/L	J		0.3
29631-003	PR-WC-09	5/19/2011	0	U	10200 H	Chlorophyll a	2	10	UG/L	B		0.56
29631-003	PR-WC-09	5/19/2011	0	U	300.0A	Nitrate (as N)	1.1	0.1	MG/L			0.56
29631-003	PR-WC-09	5/19/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		0.56
29631-003	PR-WC-09	5/19/2011	0	U	300	Nitrogen	1.5	0.15	MG/L			0.56
29631-003	PR-WC-09	5/19/2011	0	U	365.2	Phosphorus	1100	500	UG/L			0.56
29631-003	PR-WC-09	5/19/2011	0	U	9060	TOC	5.9	1	MG/L			0.56
29631-003	PR-WC-09	5/19/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.43	0.5	MG/L	B		0.56
29631-003	PR-WC-09	5/19/2011	0	U	160.2	TSS	5	1	MG/L	J		0.56
29631-002	PR-WC-08	5/19/2011	0	U	10200 H	Chlorophyll a	4.2	10	UG/L	B		0.78
29631-002	PR-WC-08	5/19/2011	0	U	300.0A	Nitrate (as N)	1.1	0.1	MG/L			0.78
29631-002	PR-WC-08	5/19/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		0.78
29631-002	PR-WC-08	5/19/2011	0	U	300	Nitrogen	1.8	0.15	MG/L			0.78
29631-002	PR-WC-08	5/19/2011	0	U	365.2	Phosphorus	1120	500	UG/L			0.78
29631-002	PR-WC-08	5/19/2011	0	U	9060	TOC	6.2	1	MG/L			0.78
29631-002	PR-WC-08	5/19/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.65	0.5	MG/L			0.78
29631-002	PR-WC-08	5/19/2011	0	U	160.2	TSS	16	1	MG/L	J		0.78
29631-001	PR-WC-06	5/19/2011	0	U	10200 H	Chlorophyll a	4.2	10	UG/L	B		1.1
29631-001	PR-WC-06	5/19/2011	0	U	300.0A	Nitrate (as N)	0.15	0.02	MG/L			1.1
29631-001	PR-WC-06	5/19/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		1.1
29631-001	PR-WC-06	5/19/2011	0	U	300	Nitrogen	1.1	0.15	MG/L			1.1
29631-001	PR-WC-06	5/19/2011	0	U	365.2	Phosphorus	978	500	UG/L			1.1
29631-001	PR-WC-06	5/19/2011	0	U	9060	TOC	6.2	1	MG/L			1.1
29631-001	PR-WC-06	5/19/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.99	0.5	MG/L			1.1
29631-001	PR-WC-06	5/19/2011	0	U	160.2	TSS	8	1	MG/L	J		1.1
29621-004	PR-WC-04	5/18/2011	0	U	10200 H	Chlorophyll a	3.2	10	UG/L	B		1.7
29621-004	PR-WC-04	5/18/2011	0	U	300.0A	Nitrate (as N)	0.014	0.02	MG/L	B		1.7
29621-004	PR-WC-04	5/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		1.7

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29621-004	PR-WC-04	5/18/2011	0	U	300	Nitrogen	0.94	0.15	MG/L			1.7
29621-004	PR-WC-04	5/18/2011	0	U	365.2	Phosphorus	757	100	UG/L			1.7
29621-004	PR-WC-04	5/18/2011	0	U	9060	TOC	8.4	1	MG/L			1.7
29621-004	PR-WC-04	5/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.93	0.5	MG/L			1.7
29621-004	PR-WC-04	5/18/2011	0	U	160.2	TSS	11	1	MG/L	J		1.7
29621-003	PR-WC-03	5/18/2011	0	U	10200 H	Chlorophyll a	1.8	10	UG/L	B		2.1
29621-003	PR-WC-03	5/18/2011	0	U	300.0A	Nitrate (as N)	0.017	0.02	MG/L	B		2.1
29621-003	PR-WC-03	5/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.1
29621-003	PR-WC-03	5/18/2011	0	U	300	Nitrogen	0.55	0.15	MG/L			2.1
29621-003	PR-WC-03	5/18/2011	0	U	365.2	Phosphorus	170	50	UG/L			2.1
29621-003	PR-WC-03	5/18/2011	0	U	9060	TOC	5.8	1	MG/L			2.1
29621-003	PR-WC-03	5/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.53	0.5	MG/L			2.1
29621-003	PR-WC-03	5/18/2011	0	U	160.2	TSS	7	1	MG/L	J		2.1
29621-002	PR-WC-01	5/18/2011	0	U	10200 H	Chlorophyll a	1.3	10	UG/L	B		2.98
29621-002	PR-WC-01	5/18/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		2.98
29621-002	PR-WC-01	5/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.98
29621-002	PR-WC-01	5/18/2011	0	U	300	Nitrogen	0.69	0.15	MG/L			2.98
29621-002	PR-WC-01	5/18/2011	0	U	365.2	Phosphorus	75.9	50	UG/L			2.98
29621-002	PR-WC-01	5/18/2011	0	U	9060	TOC	9.8	1	MG/L			2.98
29621-002	PR-WC-01	5/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.69	0.5	MG/L			2.98
29621-002	PR-WC-01	5/18/2011	0	U	160.2	TSS	5	1	MG/L	J		2.98
29621-001	PR-WCS-04	5/18/2011	0	U	10200 H	Chlorophyll a	2.2	10	UG/L	B		4.77
29621-001	PR-WCS-04	5/18/2011	0	U	300.0A	Nitrate (as N)	0.018	0.02	MG/L	B		4.77
29621-001	PR-WCS-04	5/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.77
29621-001	PR-WCS-04	5/18/2011	0	U	300	Nitrogen	0.9	0.15	MG/L			4.77
29621-001	PR-WCS-04	5/18/2011	0	U	365.2	Phosphorus	92.4	50	UG/L			4.77
29621-001	PR-WCS-04	5/18/2011	0	U	9060	TOC	7.7	1	MG/L			4.77
29621-001	PR-WCS-04	5/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.88	0.5	MG/L			4.77
29621-001	PR-WCS-04	5/18/2011	0	U	160.2	TSS	7	1	MG/L	J		4.77
Round 2 : 5/31/2011 to 6/2/2011												
29671-003	PR-WC-12-D7	6/1/2011	0	U	10200 H	Chlorophyll a	3.8	10	UG/L	B		-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	300.0A	Nitrate (as N)	0.039	0.02	MG/L			-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	300	Nitrogen	1.2	0.15	MG/L			-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	365.2	Phosphorus	35.3	50	UG/L	B		-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	9060	TOC	13.5	1	MG/L			-0.04

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29671-003	PR-WC-12-D7	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.2	0.5	MG/L			-0.04
29671-003	PR-WC-12-D7	6/1/2011	0	U	160.2	TSS	38	1	MG/L	J		-0.04
29671-008	STP-EFF-UVG	6/1/2011	0	U	10200 H	Chlorophyll a	0.48	10	UG/L	B		0
29671-008	STP-EFF-UVG	6/1/2011	0	U	300.0A	Nitrate (as N)	1.6	0.2	MG/L			0
29671-008	STP-EFF-UVG	6/1/2011	0	U	300.0A	Nitrite (as N)	0.2	0.2	MG/L	U		0
29671-008	STP-EFF-UVG	6/1/2011	0	U	300	Nitrogen	2.1	0.15	MG/L			0
29671-008	STP-EFF-UVG	6/1/2011	0	U	365.2	Phosphorus	1490	250	UG/L			0
29671-008	STP-EFF-UVG	6/1/2011	0	U	9060	TOC	3.2	1	MG/L			0
29671-008	STP-EFF-UVG	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.48	0.5	MG/L	B		0
29671-008	STP-EFF-UVG	6/1/2011	0	U	160.2	TSS	2	1	MG/L	J		0
29671-002	PR-WC-11DS	6/1/2011	0	U	10200 H	Chlorophyll a	10	10	UG/L	U		0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	300.0A	Nitrate (as N)	1.6	0.2	MG/L			0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	300.0A	Nitrite (as N)	0.2	0.2	MG/L	U		0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	300	Nitrogen	2.1	0.15	MG/L			0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	365.2	Phosphorus	1470	250	UG/L			0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	9060	TOC	2.7	1	MG/L			0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.48	0.5	MG/L	B		0.01
29671-002	PR-WC-11DS	6/1/2011	0	U	160.2	TSS	3	1	MG/L	J		0.01
29671-001	PR-WC-10	6/1/2011	0	U	10200 H	Chlorophyll a	0.57	10	UG/L	B		0.3
29671-001	PR-WC-10	6/1/2011	0	U	300.0A	Nitrate (as N)	2	0.2	MG/L			0.3
29671-001	PR-WC-10	6/1/2011	0	U	300.0A	Nitrite (as N)	0.051	0.2	MG/L	B		0.3
29671-001	PR-WC-10	6/1/2011	0	U	300	Nitrogen	2.3	0.15	MG/L			0.3
29671-001	PR-WC-10	6/1/2011	0	U	365.2	Phosphorus	1410	250	UG/L			0.3
29671-001	PR-WC-10	6/1/2011	0	U	9060	TOC	3.3	1	MG/L			0.3
29671-001	PR-WC-10	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.29	0.5	MG/L	B		0.3
29671-001	PR-WC-10	6/1/2011	0	U	160.2	TSS	5	1	MG/L	J		0.3
29669-004	PR-WC-08	6/1/2011	0	U	10200 H	Chlorophyll a	0.45	10	UG/L	B		0.78
29669-004	PR-WC-08	6/1/2011	0	U	300.0A	Nitrate (as N)	0.093	0.02	MG/L			0.78
29669-004	PR-WC-08	6/1/2011	0	U	300.0A	Nitrite (as N)	0.2	0.2	MG/L	U		0.78
29669-004	PR-WC-08	6/1/2011	0	U	300	Nitrogen	1	0.15	MG/L			0.78
29669-004	PR-WC-08	6/1/2011	0	U	365.2	Phosphorus	1460	250	UG/L			0.78
29669-004	PR-WC-08	6/1/2011	0	U	9060	TOC	9	1	MG/L			0.78
29669-004	PR-WC-08	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.93	0.5	MG/L			0.78
29669-004	PR-WC-08	6/1/2011	0	U	160.2	TSS	4	1	MG/L	J		0.78
29669-002	PR-WC-06	6/1/2011	0	U	10200 H	Chlorophyll a	8.6	10	UG/L	B		1.1
29669-002	PR-WC-06	6/1/2011	0	U	300.0A	Nitrate (as N)	0.24	0.02	MG/L			1.1

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29669-002	PR-WC-06	6/1/2011	0	U	300.0A	Nitrite (as N)	0.2	0.2	MG/L	U		1.1
29669-002	PR-WC-06	6/1/2011	0	U	300	Nitrogen	1.4	0.15	MG/L			1.1
29669-002	PR-WC-06	6/1/2011	0	U	365.2	Phosphorus	1240	250	UG/L			1.1
29669-002	PR-WC-06	6/1/2011	0	U	9060	TOC	9.2	1	MG/L			1.1
29669-002	PR-WC-06	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.2	0.5	MG/L			1.1
29669-002	PR-WC-06	6/1/2011	0	U	160.2	TSS	7	1	MG/L	J		1.1
29679-002	PR-WC-03	6/2/2011	0	U	10200 H	Chlorophyll a	3.6	10	UG/L	B		2.1
29679-002	PR-WC-03	6/2/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		2.1
29679-002	PR-WC-03	6/2/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.1
29679-002	PR-WC-03	6/2/2011	0	U	300	Nitrogen	1.6	0.15	MG/L			2.1
29679-002	PR-WC-03	6/2/2011	0	U	365.2	Phosphorus	97.6	50	UG/L			2.1
29679-002	PR-WC-03	6/2/2011	0	U	9060	TOC	7.4	1	MG/L			2.1
29679-002	PR-WC-03	6/2/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.6	0.5	MG/L			2.1
29679-002	PR-WC-03	6/2/2011	0	U	160.2	TSS	6	1	MG/L	J		2.1
29667-005	PR-WC-01	6/1/2011	0	U	10200 H	Chlorophyll a	0.96	10	UG/L	B		2.98
29667-005	PR-WC-01	6/1/2011	0	U	300.0A	Nitrate (as N)	0.017	0.02	MG/L	B		2.98
29667-005	PR-WC-01	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.98
29667-005	PR-WC-01	6/1/2011	0	U	300	Nitrogen	0.74	0.15	MG/L			2.98
29667-005	PR-WC-01	6/1/2011	0	U	365.2	Phosphorus	124	50	UG/L			2.98
29667-005	PR-WC-01	6/1/2011	0	U	9060	TOC	8.4	1	MG/L			2.98
29667-005	PR-WC-01	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.72	0.5	MG/L			2.98
29667-005	PR-WC-01	6/1/2011	0	U	160.2	TSS	10	1	MG/L	J		2.98
29667-004	PR-WCS-01	6/1/2011	0	U	10200 H	Chlorophyll a	0.96	10	UG/L	B		3.42
29667-004	PR-WCS-01	6/1/2011	0	U	300.0A	Nitrate (as N)	0.013	0.02	MG/L	B		3.42
29667-004	PR-WCS-01	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		3.42
29667-004	PR-WCS-01	6/1/2011	0	U	300	Nitrogen	1.4	0.15	MG/L			3.42
29667-004	PR-WCS-01	6/1/2011	0	U	365.2	Phosphorus	95.2	50	UG/L			3.42
29667-004	PR-WCS-01	6/1/2011	0	U	9060	TOC	8.1	1	MG/L			3.42
29667-004	PR-WCS-01	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.4	0.5	MG/L			3.42
29667-004	PR-WCS-01	6/1/2011	0	U	160.2	TSS	10	1	MG/L	J		3.42
29667-003	PR-WCS-02	6/1/2011	0	U	10200 H	Chlorophyll a	3.7	10	UG/L	B		3.99
29667-003	PR-WCS-02	6/1/2011	0	U	300.0A	Nitrate (as N)	0.026	0.02	MG/L			3.99
29667-003	PR-WCS-02	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		3.99
29667-003	PR-WCS-02	6/1/2011	0	U	300	Nitrogen	0.83	0.15	MG/L			3.99
29667-003	PR-WCS-02	6/1/2011	0	U	365.2	Phosphorus	136	50	UG/L			3.99
29667-003	PR-WCS-02	6/1/2011	0	U	9060	TOC	8.8	1	MG/L			3.99

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29667-003	PR-WCS-02	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.8	0.5	MG/L			3.99
29667-003	PR-WCS-02	6/1/2011	0	U	160.2	TSS	5	1	MG/L	J		3.99
29667-002	PR-WCS-03	6/1/2011	0	U	10200 H	Chlorophyll a	2.5	10	UG/L	B		4.44
29667-002	PR-WCS-03	6/1/2011	0	U	300.0A	Nitrate (as N)	0.033	0.02	MG/L			4.44
29667-002	PR-WCS-03	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.44
29667-002	PR-WCS-03	6/1/2011	0	U	300	Nitrogen	0.66	0.15	MG/L			4.44
29667-002	PR-WCS-03	6/1/2011	0	U	365.2	Phosphorus	124	50	UG/L			4.44
29667-002	PR-WCS-03	6/1/2011	0	U	9060	TOC	8.1	1	MG/L			4.44
29667-002	PR-WCS-03	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.63	0.5	MG/L			4.44
29667-002	PR-WCS-03	6/1/2011	0	U	160.2	TSS	5	1	MG/L	J		4.44
29667-001	PR-WCS-04	6/1/2011	0	U	10200 H	Chlorophyll a	3.5	10	UG/L	B		4.77
29667-001	PR-WCS-04	6/1/2011	0	U	300.0A	Nitrate (as N)	0.034	0.02	MG/L			4.77
29667-001	PR-WCS-04	6/1/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.77
29667-001	PR-WCS-04	6/1/2011	0	U	300	Nitrogen	0.68	0.15	MG/L			4.77
29667-001	PR-WCS-04	6/1/2011	0	U	365.2	Phosphorus	129	50	UG/L			4.77
29667-001	PR-WCS-04	6/1/2011	0	U	9060	TOC	7.8	1	MG/L			4.77
29667-001	PR-WCS-04	6/1/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.65	0.5	MG/L			4.77
29667-001	PR-WCS-04	6/1/2011	0	U	160.2	TSS	7	1	MG/L	J		4.77
29665-003	PR-WCS-05	5/31/2011	0	U	10200 H	Chlorophyll a	1.4	10	UG/L	B		6.04
29665-003	PR-WCS-05	5/31/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		6.04
29665-003	PR-WCS-05	5/31/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		6.04
29665-003	PR-WCS-05	5/31/2011	0	U	300	Nitrogen	1	0.15	MG/L			6.04
29665-003	PR-WCS-05	5/31/2011	0	U	365.2	Phosphorus	110	50	UG/L			6.04
29665-003	PR-WCS-05	5/31/2011	0	U	9060	TOC	9.5	1	MG/L			6.04
29665-003	PR-WCS-05	5/31/2011	0	U	351.2	Total Kjeldahl Nitrogen	1	0.5	MG/L			6.04
29665-003	PR-WCS-05	5/31/2011	0	U	160.2	TSS	7	1	MG/L			6.04
29665-002	PR-WCS-06	5/31/2011	0	U	10200 H	Chlorophyll a	2.6	10	UG/L	B		6.75
29665-002	PR-WCS-06	5/31/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		6.75
29665-002	PR-WCS-06	5/31/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		6.75
29665-002	PR-WCS-06	5/31/2011	0	U	300	Nitrogen	0.59	0.15	MG/L			6.75
29665-002	PR-WCS-06	5/31/2011	0	U	365.2	Phosphorus	92.8	50	UG/L			6.75
29665-002	PR-WCS-06	5/31/2011	0	U	9060	TOC	8.8	1	MG/L			6.75
29665-002	PR-WCS-06	5/31/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.59	0.5	MG/L			6.75
29665-002	PR-WCS-06	5/31/2011	0	U	160.2	TSS	1	1	MG/L			6.75
29665-001	PR-WCS-07	5/31/2011	0	U	10200 H	Chlorophyll a	1.2	10	UG/L	B		7.23
29665-001	PR-WCS-07	5/31/2011	0	U	300.0A	Nitrate (as N)	0.019	0.02	MG/L	B		7.23

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29665-001	PR-WCS-07	5/31/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		7.23
29665-001	PR-WCS-07	5/31/2011	0	U	300	Nitrogen	0.66	0.15	MG/L			7.23
29665-001	PR-WCS-07	5/31/2011	0	U	365.2	Phosphorus	64	50	UG/L			7.23
29665-001	PR-WCS-07	5/31/2011	0	U	9060	TOC	7.4	1	MG/L			7.23
29665-001	PR-WCS-07	5/31/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.64	0.5	MG/L			7.23
29665-001	PR-WCS-07	5/31/2011	0	U	160.2	TSS	1	1	MG/L			7.23
29665-004	CONNETQUOT	5/31/2011	0	U	10200 H	Chlorophyll a	3.1	10	UG/L	B		
29665-004	CONNETQUOT	5/31/2011	0	U	300.0A	Nitrate (as N)	3.8	0.2	MG/L			
29665-004	CONNETQUOT	5/31/2011	0	U	300.0A	Nitrite (as N)	0.021	0.02	MG/L			
29665-004	CONNETQUOT	5/31/2011	0	U	300	Nitrogen	5	0.15	MG/L			
29665-004	CONNETQUOT	5/31/2011	0	U	365.2	Phosphorus	13.8	50	UG/L	B		
29665-004	CONNETQUOT	5/31/2011	0	U	9060	TOC	2.4	1	MG/L			
29665-004	CONNETQUOT	5/31/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.2	0.5	MG/L			
29665-004	CONNETQUOT	5/31/2011	0	U	160.2	TSS	2	1	MG/L			
Round 3 : 6/28/2011 to 6/28/2011												
29531-004	PR-WC-10	6/28/2011	0	U	10200 H	Chlorophyll a	0.48	10	UG/L	B		0.3
29531-004	PR-WC-10	6/28/2011	0	U	300.0A	Nitrate (as N)	2	0.1	MG/L			0.3
29531-004	PR-WC-10	6/28/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		0.3
29531-004	PR-WC-10	6/28/2011	0	U	300	Nitrogen	2.3	0.15	MG/L			0.3
29531-004	PR-WC-10	6/28/2011	0	U	365.2	Phosphorus	1340	250	UG/L			0.3
29531-004	PR-WC-10	6/28/2011	0	U	9060	TOC	3.5	1	MG/L			0.3
29531-004	PR-WC-10	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.31	0.5	MG/L	B		0.3
29531-004	PR-WC-10	6/28/2011	0	U	160.2	TSS	1	1	MG/L			0.3
29531-002	PR-WC-08	6/28/2011	0	U	10200 H	Chlorophyll a	0.99	10	UG/L	B		0.78
29531-002	PR-WC-08	6/28/2011	0	U	300.0A	Nitrate (as N)	0.51	0.02	MG/L			0.78
29531-002	PR-WC-08	6/28/2011	0	U	300.0A	Nitrite (as N)	0.014	0.02	MG/L	B		0.78
29531-002	PR-WC-08	6/28/2011	0	U	300	Nitrogen	1.6	0.15	MG/L			0.78
29531-002	PR-WC-08	6/28/2011	0	U	365.2	Phosphorus	1420	250	UG/L			0.78
29531-002	PR-WC-08	6/28/2011	0	U	9060	TOC	8	1	MG/L			0.78
29531-002	PR-WC-08	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.1	0.5	MG/L			0.78
29531-002	PR-WC-08	6/28/2011	0	U	160.2	TSS	28	1	MG/L			0.78
29531-001	PR-WC-06	6/28/2011	0	U	10200 H	Chlorophyll a	14.2	10	UG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	300.0A	Nitrate (as N)	0.44	0.02	MG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	300.0A	Nitrite (as N)	0.029	0.02	MG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	300	Nitrogen	1.6	0.15	MG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	365.2	Phosphorus	1150	250	UG/L			1.1

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29531-001	PR-WC-06	6/28/2011	0	U	9060	TOC	7.9	1	MG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.1	0.5	MG/L			1.1
29531-001	PR-WC-06	6/28/2011	0	U	160.2	TSS	25	1	MG/L			1.1
29530-003	PR-WC-03	6/28/2011	0	U	10200 H	Chlorophyll a	29.1	10	UG/L			2.1
29530-003	PR-WC-03	6/28/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		2.1
29530-003	PR-WC-03	6/28/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.1
29530-003	PR-WC-03	6/28/2011	0	U	300	Nitrogen	1.3	0.15	MG/L			2.1
29530-003	PR-WC-03	6/28/2011	0	U	365.2	Phosphorus	228	50	UG/L			2.1
29530-003	PR-WC-03	6/28/2011	0	U	9060	TOC	8.5	1	MG/L			2.1
29530-003	PR-WC-03	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.3	0.5	MG/L			2.1
29530-003	PR-WC-03	6/28/2011	0	U	160.2	TSS	11	1	MG/L			2.1
29530-002	PR-WC-01	6/28/2011	0	U	10200 H	Chlorophyll a	1.3	10	UG/L	B		2.98
29530-002	PR-WC-01	6/28/2011	0	U	300.0A	Nitrate (as N)	0.016	0.02	MG/L	B		2.98
29530-002	PR-WC-01	6/28/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.98
29530-002	PR-WC-01	6/28/2011	0	U	300	Nitrogen	1.9	0.15	MG/L			2.98
29530-002	PR-WC-01	6/28/2011	0	U	365.2	Phosphorus	92.6	50	UG/L			2.98
29530-002	PR-WC-01	6/28/2011	0	U	9060	TOC	9.3	1	MG/L			2.98
29530-002	PR-WC-01	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.9	0.5	MG/L			2.98
29530-002	PR-WC-01	6/28/2011	0	U	160.2	TSS	3	1	MG/L			2.98
29530-001	PR-WCS-04	6/28/2011	0	U	10200 H	Chlorophyll a	0.49	10	UG/L	B		4.77
29530-001	PR-WCS-04	6/28/2011	0	U	300.0A	Nitrate (as N)	0.027	0.02	MG/L			4.77
29530-001	PR-WCS-04	6/28/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.77
29530-001	PR-WCS-04	6/28/2011	0	U	300	Nitrogen	0.76	0.15	MG/L			4.77
29530-001	PR-WCS-04	6/28/2011	0	U	365.2	Phosphorus	136	50	UG/L			4.77
29530-001	PR-WCS-04	6/28/2011	0	U	9060	TOC	9.1	1	MG/L			4.77
29530-001	PR-WCS-04	6/28/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.73	0.5	MG/L			4.77
29530-001	PR-WCS-04	6/28/2011	0	U	160.2	TSS	5	1	MG/L			4.77
Round 4 : 8/16/2011 to 8/20/2011												
29749-003	PR-WC-12-D7	8/18/2011	0	U	10200 H	Chlorophyll a	2.3	10	UG/L	B		-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	300.0A	Nitrate (as N)	0.015	0.02	MG/L	B		-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	300	Nitrogen	0.86	0.15	MG/L			-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	365.2	Phosphorus	52	50	UG/L	J		-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	9060	TOC	8.5	1	MG/L			-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.84	0.5	MG/L			-0.04
29749-003	PR-WC-12-D7	8/18/2011	0	U	160.2	TSS	5	1	MG/L			-0.04

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29749-008	STP-EFF-UVG	8/18/2011	0	U	10200 H	Chlorophyll a	10	10	UG/L	U		0
29749-008	STP-EFF-UVG	8/18/2011	0	U	300.0A	Nitrate (as N)	4.9	0.2	MG/L			0
29749-008	STP-EFF-UVG	8/18/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		0
29749-008	STP-EFF-UVG	8/18/2011	0	U	300	Nitrogen	4.9	0.15	MG/L			0
29749-008	STP-EFF-UVG	8/18/2011	0	U	365.2	Phosphorus	983	250	UG/L	J		0
29749-008	STP-EFF-UVG	8/18/2011	0	U	9060	TOC	2.7	1	MG/L			0
29749-008	STP-EFF-UVG	8/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.5	0.5	MG/L	U		0
29749-008	STP-EFF-UVG	8/18/2011	0	U	160.2	TSS	1	1	MG/L			0
29749-001	PR-WC-10	8/18/2011	0	U	10200 H	Chlorophyll a	0.53	10	UG/L	B		0.3
29749-001	PR-WC-10	8/18/2011	0	U	300.0A	Nitrate (as N)	3.6	0.1	MG/L			0.3
29749-001	PR-WC-10	8/18/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		0.3
29749-001	PR-WC-10	8/18/2011	0	U	300	Nitrogen	3.6	0.15	MG/L			0.3
29749-001	PR-WC-10	8/18/2011	0	U	365.2	Phosphorus	948	250	UG/L	J		0.3
29749-001	PR-WC-10	8/18/2011	0	U	9060	TOC	3.1	1	MG/L			0.3
29749-001	PR-WC-10	8/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.5	0.5	MG/L	U		0.3
29749-001	PR-WC-10	8/18/2011	0	U	160.2	TSS	1	1	MG/L	U		0.3
29747-003	PR-WC-08	8/18/2011	0	U	10200 H	Chlorophyll a	2.7	10	UG/L	B		0.78
29747-003	PR-WC-08	8/18/2011	0	U	300.0A	Nitrate (as N)	1.8	0.1	MG/L			0.78
29747-003	PR-WC-08	8/18/2011	0	U	300.0A	Nitrite (as N)	0.0089	0.02	MG/L	B		0.78
29747-003	PR-WC-08	8/18/2011	0	U	300	Nitrogen	2.2	0.15	MG/L			0.78
29747-003	PR-WC-08	8/18/2011	0	U	365.2	Phosphorus	578	100	UG/L	J		0.78
29747-003	PR-WC-08	8/18/2011	0	U	9060	TOC	5.7	1	MG/L			0.78
29747-003	PR-WC-08	8/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.43	0.5	MG/L	B		0.78
29747-003	PR-WC-08	8/18/2011	0	U	160.2	TSS	6	1	MG/L			0.78
29747-001	PR-WC-06	8/18/2011	0	U	10200 H	Chlorophyll a	46.5	10	UG/L			1.1
29747-001	PR-WC-06	8/18/2011	0	U	300.0A	Nitrate (as N)	0.0063	0.02	MG/L	B		1.1
29747-001	PR-WC-06	8/18/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		1.1
29747-001	PR-WC-06	8/18/2011	0	U	300	Nitrogen	1.2	0.15	MG/L			1.1
29747-001	PR-WC-06	8/18/2011	0	U	365.2	Phosphorus	325	50	UG/L	J		1.1
29747-001	PR-WC-06	8/18/2011	0	U	9060	TOC	5.6	1	MG/L			1.1
29747-001	PR-WC-06	8/18/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.2	0.5	MG/L			1.1
29747-001	PR-WC-06	8/18/2011	0	U	160.2	TSS	5	1	MG/L			1.1
29744-002	PR-WC-03	8/17/2011	0	U	10200 H	Chlorophyll a	19.2	10	UG/L			2.1
29744-002	PR-WC-03	8/17/2011	0	U	300.0A	Nitrate (as N)	0.0048	0.02	MG/L	B		2.1
29744-002	PR-WC-03	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.1
29744-002	PR-WC-03	8/17/2011	0	U	300	Nitrogen	0.95	0.15	MG/L			2.1

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29744-002	PR-WC-03	8/17/2011	0	U	365.2	Phosphorus	121	50	UG/L	J		2.1
29744-002	PR-WC-03	8/17/2011	0	U	9060	TOC	10	1	MG/L			2.1
29744-002	PR-WC-03	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.95	0.5	MG/L			2.1
29744-002	PR-WC-03	8/17/2011	0	U	160.2	TSS	14	1	MG/L			2.1
29740-005	PR-WC-01	8/17/2011	0	U	10200 H	Chlorophyll a	1	10	UG/L	B		2.98
29740-005	PR-WC-01	8/17/2011	0	U	300.0A	Nitrate (as N)	0.017	0.02	MG/L	B		2.98
29740-005	PR-WC-01	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.98
29740-005	PR-WC-01	8/17/2011	0	U	300	Nitrogen	1	0.15	MG/L			2.98
29740-005	PR-WC-01	8/17/2011	0	U	365.2	Phosphorus	85.2	50	UG/L	J		2.98
29740-005	PR-WC-01	8/17/2011	0	U	9060	TOC	11.7	1	MG/L			2.98
29740-005	PR-WC-01	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	1	0.5	MG/L			2.98
29740-005	PR-WC-01	8/17/2011	0	U	160.2	TSS	1	1	MG/L			2.98
29740-004	PR-WCS-01	8/17/2011	0	U	10200 H	Chlorophyll a	2.1	10	UG/L	B		3.42
29740-004	PR-WCS-01	8/17/2011	0	U	300.0A	Nitrate (as N)	0.017	0.02	MG/L	B		3.42
29740-004	PR-WCS-01	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		3.42
29740-004	PR-WCS-01	8/17/2011	0	U	300	Nitrogen	1.1	0.15	MG/L			3.42
29740-004	PR-WCS-01	8/17/2011	0	U	365.2	Phosphorus	92.3	50	UG/L	J		3.42
29740-004	PR-WCS-01	8/17/2011	0	U	9060	TOC	11.5	1	MG/L			3.42
29740-004	PR-WCS-01	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.1	0.5	MG/L			3.42
29740-004	PR-WCS-01	8/17/2011	0	U	160.2	TSS	3	1	MG/L			3.42
29740-003	PR-WCS-02	8/17/2011	0	U	10200 H	Chlorophyll a	1.1	10	UG/L	B		3.99
29740-003	PR-WCS-02	8/17/2011	0	U	300.0A	Nitrate (as N)	0.013	0.02	MG/L	B		3.99
29740-003	PR-WCS-02	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		3.99
29740-003	PR-WCS-02	8/17/2011	0	U	300	Nitrogen	0.86	0.15	MG/L			3.99
29740-003	PR-WCS-02	8/17/2011	0	U	365.2	Phosphorus	75.7	50	UG/L	J		3.99
29740-003	PR-WCS-02	8/17/2011	0	U	9060	TOC	10.8	1	MG/L			3.99
29740-003	PR-WCS-02	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.85	0.5	MG/L			3.99
29740-003	PR-WCS-02	8/17/2011	0	U	160.2	TSS	2	1	MG/L			3.99
29740-002	PR-WCS-03	8/17/2011	0	U	10200 H	Chlorophyll a	1	10	UG/L	B		4.44
29740-002	PR-WCS-03	8/17/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L			4.44
29740-002	PR-WCS-03	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.44
29740-002	PR-WCS-03	8/17/2011	0	U	300	Nitrogen	0.83	0.15	MG/L			4.44
29740-002	PR-WCS-03	8/17/2011	0	U	365.2	Phosphorus	75.7	50	UG/L	J		4.44
29740-002	PR-WCS-03	8/17/2011	0	U	9060	TOC	11.1	1	MG/L			4.44
29740-002	PR-WCS-03	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.81	0.5	MG/L			4.44
29740-002	PR-WCS-03	8/17/2011	0	U	160.2	TSS	3	1	MG/L			4.44

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29740-001	PR-WCS-04	8/17/2011	0	U	10200 H	Chlorophyll a	0.93	10	UG/L	B		4.77
29740-001	PR-WCS-04	8/17/2011	0	U	300.0A	Nitrate (as N)	0.0071	0.02	MG/L	B		4.77
29740-001	PR-WCS-04	8/17/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.77
29740-001	PR-WCS-04	8/17/2011	0	U	300	Nitrogen	0.82	0.15	MG/L			4.77
29740-001	PR-WCS-04	8/17/2011	0	U	365.2	Phosphorus	92.3	50	UG/L	J		4.77
29740-001	PR-WCS-04	8/17/2011	0	U	9060	TOC	10.6	1	MG/L			4.77
29740-001	PR-WCS-04	8/17/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.81	0.5	MG/L			4.77
29740-001	PR-WCS-04	8/17/2011	0	U	160.2	TSS	4	1	MG/L			4.77
29137-003	PR-WCS-05	8/16/2011	0	U	10200 H	Chlorophyll a	10	10	UG/L	U		6.04
29137-003	PR-WCS-05	8/16/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		6.04
29137-003	PR-WCS-05	8/16/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		6.04
29137-003	PR-WCS-05	8/16/2011	0	U	300	Nitrogen	0.81	0.15	MG/L			6.04
29137-003	PR-WCS-05	8/16/2011	0	U	365.2	Phosphorus	154	50	UG/L	J		6.04
29137-003	PR-WCS-05	8/16/2011	0	U	9060	TOC	10.9	1	MG/L			6.04
29137-003	PR-WCS-05	8/16/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.81	0.5	MG/L			6.04
29137-003	PR-WCS-05	8/16/2011	0	U	160.2	TSS	5	1	MG/L			6.04
29137-002	PR-WCS-06	8/16/2011	0	U	10200 H	Chlorophyll a	10	10	UG/L	U		6.75
29137-002	PR-WCS-06	8/16/2011	0	U	300.0A	Nitrate (as N)	0.033	0.02	MG/L			6.75
29137-002	PR-WCS-06	8/16/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		6.75
29137-002	PR-WCS-06	8/16/2011	0	U	300	Nitrogen	0.5	0.15	MG/L			6.75
29137-002	PR-WCS-06	8/16/2011	0	U	365.2	Phosphorus	104	50	UG/L	J		6.75
29137-002	PR-WCS-06	8/16/2011	0	U	9060	TOC	7	1	MG/L			6.75
29137-002	PR-WCS-06	8/16/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.47	0.5	MG/L	B		6.75
29137-002	PR-WCS-06	8/16/2011	0	U	160.2	TSS	4	1	MG/L			6.75
29137-001	PR-WCS-07	8/16/2011	0	U	10200 H	Chlorophyll a	10	10	UG/L	U		7.23
29137-001	PR-WCS-07	8/16/2011	0	U	300.0A	Nitrate (as N)	0.016	0.02	MG/L	B		7.23
29137-001	PR-WCS-07	8/16/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		7.23
29137-001	PR-WCS-07	8/16/2011	0	U	300	Nitrogen	0.75	0.15	MG/L			7.23
29137-001	PR-WCS-07	8/16/2011	0	U	365.2	Phosphorus	97.1	50	UG/L	J		7.23
29137-001	PR-WCS-07	8/16/2011	0	U	9060	TOC	6.5	1	MG/L			7.23
29137-001	PR-WCS-07	8/16/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.73	0.5	MG/L			7.23
29137-001	PR-WCS-07	8/16/2011	0	U	160.2	TSS	6	1	MG/L			7.23
29137-004	CONNETQUOT	8/16/2011	0	U	10200 H	Chlorophyll a	0.52	10	UG/L	B		
29137-004	CONNETQUOT	8/16/2011	0	U	300.0A	Nitrate (as N)	1.2	0.1	MG/L			
29137-004	CONNETQUOT	8/16/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		
29137-004	CONNETQUOT	8/16/2011	0	U	300	Nitrogen	1.9	0.15	MG/L			

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29137-004	CONNETQUOT	8/16/2011	0	U	365.2	Phosphorus	14.1	50	UG/L	B J		
29137-004	CONNETQUOT	8/16/2011	0	U	9060	TOC	4.5	1	MG/L			
29137-004	CONNETQUOT	8/16/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.66	0.5	MG/L			
29137-004	CONNETQUOT	8/16/2011	0	U	160.2	TSS	3	1	MG/L			
Round 5 : 9/7/2011 to 9/7/2011												
29168-004	PR-WC-10	9/7/2011	0	U	10200 H	Chlorophyll a	34.6	10	UG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	300.0A	Nitrate (as N)	2.3	0.1	MG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		0.3
29168-004	PR-WC-10	9/7/2011	0	U	300	Nitrogen	2.9	0.15	MG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	365.2	Phosphorus	1020	250	UG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	9060	TOC	4.6	1	MG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.57	0.5	MG/L			0.3
29168-004	PR-WC-10	9/7/2011	0	U	160.2	TSS	61	1	MG/L			0.3
29168-002	PR-WC-08	9/7/2011	0	U	10200 H	Chlorophyll a	160	10	UG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	300.0A	Nitrate (as N)	0.71	0.02	MG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		0.78
29168-002	PR-WC-08	9/7/2011	0	U	300	Nitrogen	2.1	0.15	MG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	365.2	Phosphorus	794	250	UG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	9060	TOC	5	1	MG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.4	0.5	MG/L			0.78
29168-002	PR-WC-08	9/7/2011	0	U	160.2	TSS	70	1	MG/L			0.78
29168-001	PR-WC-06	9/7/2011	0	U	10200 H	Chlorophyll a	23.7	10	UG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	300.0A	Nitrate (as N)	0.059	0.02	MG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	300.0A	Nitrite (as N)	0.1	0.1	MG/L	U		1.1
29168-001	PR-WC-06	9/7/2011	0	U	300	Nitrogen	1.3	0.15	MG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	365.2	Phosphorus	566	250	UG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	9060	TOC	5.9	1	MG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	1.2	0.5	MG/L			1.1
29168-001	PR-WC-06	9/7/2011	0	U	160.2	TSS	29	1	MG/L			1.1
29167-003	PR-WC-03	9/7/2011	0	U	10200 H	Chlorophyll a	14.4	10	UG/L			2.1
29167-003	PR-WC-03	9/7/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		2.1
29167-003	PR-WC-03	9/7/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.1
29167-003	PR-WC-03	9/7/2011	0	U	300	Nitrogen	2.3	0.15	MG/L			2.1
29167-003	PR-WC-03	9/7/2011	0	U	365.2	Phosphorus	111	50	UG/L			2.1
29167-003	PR-WC-03	9/7/2011	0	U	9060	TOC	8.3	1	MG/L			2.1
29167-003	PR-WC-03	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	2.3	0.5	MG/L			2.1

Appendix E

2011 Water Quality Analytical Data

Sample ID	COC Site ID	Sample Date	Depth (ft.)	Filt.	Method	Analyte	Conc.	MDL	Units	Lab Qual[1]	Rev Qual	Distance From STP
29167-003	PR-WC-03	9/7/2011	0	U	160.2	TSS	4	1	MG/L			2.1
29167-002	PR-WC-01	9/7/2011	0	U	10200 H	Chlorophyll a	3.1	10	UG/L	B		2.98
29167-002	PR-WC-01	9/7/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		2.98
29167-002	PR-WC-01	9/7/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		2.98
29167-002	PR-WC-01	9/7/2011	0	U	300	Nitrogen	0.66	0.15	MG/L			2.98
29167-002	PR-WC-01	9/7/2011	0	U	365.2	Phosphorus	84.5	50	UG/L			2.98
29167-002	PR-WC-01	9/7/2011	0	U	9060	TOC	12.1	1	MG/L			2.98
29167-002	PR-WC-01	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.66	0.5	MG/L			2.98
29167-002	PR-WC-01	9/7/2011	0	U	160.2	TSS	2	1	MG/L			2.98
29167-001	PR-WCS-04	9/7/2011	0	U	10200 H	Chlorophyll a	1.8	10	UG/L	B		4.77
29167-001	PR-WCS-04	9/7/2011	0	U	300.0A	Nitrate (as N)	0.02	0.02	MG/L	U		4.77
29167-001	PR-WCS-04	9/7/2011	0	U	300.0A	Nitrite (as N)	0.02	0.02	MG/L	U		4.77
29167-001	PR-WCS-04	9/7/2011	0	U	300	Nitrogen	0.67	0.15	MG/L			4.77
29167-001	PR-WCS-04	9/7/2011	0	U	365.2	Phosphorus	140	50	UG/L			4.77
29167-001	PR-WCS-04	9/7/2011	0	U	9060	TOC	11	1	MG/L			4.77
29167-001	PR-WCS-04	9/7/2011	0	U	351.2	Total Kjeldahl Nitrogen	0.67	0.5	MG/L			4.77
29167-001	PR-WCS-04	9/7/2011	0	U	160.2	TSS	7	1	MG/L			4.77

[1] Qualifiers

B - Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

U - Indicates that the analyte was analyzed for but not detected.

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31108-001	31109-001	11-001	Chain Pickerel	MANOR ROAD	358	227.2	5M	5M	5M	
31122-001	31120-001	11-002	Brown Bullhead	AREA A	305	464	6M	6M	6M	
31122-001	31120-002	11-003	Brown Bullhead	AREA A	260	268	4M	5M	4M	
31122-001	31120-003	11-004	Brown Bullhead	AREA A	250	268	5M	5M	5M	
31122-002	31120-004	11-005	Brown Bullhead	AREA A	245	224	5M	6M	6M	
31122-002	31120-005	11-006	Brown Bullhead	AREA A	223	160	3M	3M	3M	
31122-003	31120-006	11-007	Brown Bullhead	AREA A	172	66	2M	2M	2M	
31122-003	31120-007	11-008	Brown Bullhead	AREA A	172	66	2M	3M	2M	
31122-003	31120-008	11-009	Brown Bullhead	AREA A	166	62	2M	2M	2M	
31122-003	31120-009	11-010	Brown Bullhead	AREA A	165	54	2M	2M	2M	
31122-003	31120-010	11-011	Brown Bullhead	AREA A	164	60	2M	2M	2M	
31122-003	31120-011	11-012	Brown Bullhead	AREA A	158	50	2M	2M	2M	
31122-004	31120-012	11-013	Brown Bullhead	AREA A	147	40	2M	2M	2M	
31122-004	31120-013	11-014	Brown Bullhead	AREA A	140	32	2M	2M	2M	
31122-005	31120-014	11-015	Brown Bullhead	AREA A	138	32	1M	2M	2M	
31122-005	31120-015	11-016	Brown Bullhead	AREA A	138	32	2M	2M	2M	
31122-005	31120-016	11-017	Brown Bullhead	AREA A	133	28	2M	2M	2M	
31122-006	31121-001	11-018	Largemouth Bass	AREA A	133	26	1M	2M	2M	
31122-007	31121-002	11-019	Largemouth Bass	AREA A	133	26	1M	1M	1M	
31122-008	31121-003	11-020	Largemouth Bass	AREA A	132	26	1M	2M	1M	
31122-009	31121-004	11-021	Chain Pickerel	AREA A	385	318	3M	3M	3M	
31122-009	31121-005	11-022	Chain Pickerel	AREA A	354	252	3M	3M	3M	
31122-010	31121-006	11-023	Chain Pickerel	AREA A	342	220	3+	3+	3+	
31122-010	31121-007	11-024	Chain Pickerel	AREA A	330	206	2+	3+	3+	
31122-010	31121-008	11-025	Chain Pickerel	AREA A	305	154	3+	3+	3+	
31122-011	31121-009	11-026	Chain Pickerel	AREA A	194	42	2M	2M	2M	
31122-011	31121-010	11-027	Chain Pickerel	AREA A	176	32	1+	1+	1+	
31122-011	31121-011	11-028	Chain Pickerel	AREA A	165	24	1+	1+	1+	
31122-011	31121-012	11-029	Chain Pickerel	AREA A	160	24	1+	1M	1+	
31122-011	31121-013	11-030	Chain Pickerel	AREA A	150	18	1+	1M	1+	
31122-012	31121-014	11-031	Chain Pickerel	AREA A	133	12	1+	1+	1+	
31122-012	31121-015	11-032	Chain Pickerel	AREA A	124	10	1+	1+	1+	
31122-012	31121-016	11-033	Chain Pickerel	AREA A	117	8	1M	1M	1M	
31122-013	31121-017	11-034	Pumpkinseed	AREA A	158	96	3M	3M	3M	
31122-013	31121-018	11-035	Pumpkinseed	AREA A	175	120	2+	3M	3M	
31122-013	31121-019	11-036	Pumpkinseed	AREA A	175	130	2+	3M	3M	
31122-013	31121-020	11-037	Pumpkinseed	AREA A	156	90	3+	3+	3+	
31122-013	31121-021	11-038	Pumpkinseed	AREA A	155	88	3M	3M	3M	
31122-013	31121-022	11-039	Pumpkinseed	AREA A	155	84	3+	4M	4M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31122-014	31121-023	11-040	Pumpkinseed	AREA A	153	90	3M	3M	3M	
31122-014	31121-024	11-041	Pumpkinseed	AREA A	151	86	3+	4M	4M	
31122-014	31121-025	11-042	Pumpkinseed	AREA A	150	78	3M	3M	3M	
31122-014	31121-026	11-043	Pumpkinseed	AREA A	148	76	3M	3M	3M	
31122-014	31121-027	11-044	Pumpkinseed	AREA A	147	68	2M	4M	3M	
31122-014	31121-028	11-045	Pumpkinseed	AREA A	144	68	3M	3M	3M	
31122-015	31121-029	11-046	Pumpkinseed	AREA A	144	64	3M	3M	3M	
31122-015	31121-030	11-047	Pumpkinseed	AREA A	143	62	2M	2M	2M	
31122-015	31121-031	11-048	Pumpkinseed	AREA A	143	60	2M	3M	2M	
31122-015	31121-032	11-049	Pumpkinseed	AREA A	142	62	4M	4M	4M	
31122-016	31121-033	11-050	Pumpkinseed	AREA A	140	54	3	3M	3	
31122-016	31121-034	11-051	Pumpkinseed	AREA A	135	50	3M	3M	3M	
31122-017	31121-035	11-052	Pumpkinseed	AREA A	127	40	2M	3M	2M	
31122-017	31121-036	11-053	Pumpkinseed	AREA A	119	34	2M	3M	2M	
31122-018	31121-037	11-054	Pumpkinseed	AREA A	114	28	2M	2M	2M	
31122-018	31121-038	11-055	Pumpkinseed	AREA A	98	16	1M	2M	2M	
31124-001	31125-001	11-056	Brown Bullhead	MANOR ROAD	293	334	6M	6M	6M	
31124-002	31125-002	11-057	Brown Bullhead	MANOR ROAD	282	296	5M	5M	5M	
31124-003	31125-003	11-058	Brown Bullhead	MANOR ROAD	281	276	5M	5M	5M	
31124-004	31125-004	11-059	Brown Bullhead	MANOR ROAD	275	276	6M	6M	6M	
31124-005	31125-005	11-060	Brown Bullhead	MANOR ROAD	273	222	5M	5M	5M	
31124-006	31125-006	11-061	Brown Bullhead	MANOR ROAD	271	246	6M	7M	6M	
31124-007	31125-007	11-062	Brown Bullhead	MANOR ROAD	271	236	5M	6M	5M	
31124-008	31125-008	11-063	Brown Bullhead	MANOR ROAD	269	254	6M	5M	5M	
31124-009	31125-009	11-064	Brown Bullhead	MANOR ROAD	257	222	4M	5M	5M	
31124-010	31125-010	11-065	Brown Bullhead	MANOR ROAD	256	222	6M	6M	6M	
31124-010	31125-011	11-066	Brown Bullhead	MANOR ROAD	254	222	7M	6M	7M	
31124-011	31125-012	11-067	Brown Bullhead	MANOR ROAD	254	196	5M	5M	5M	
31124-011	31125-013	11-068	Brown Bullhead	MANOR ROAD	254	184	5M	5M	5M	
31124-012	31125-014	11-069	Brown Bullhead	MANOR ROAD	250	208	5M	5M	5M	
31124-012	31125-015	11-070	Brown Bullhead	MANOR ROAD	243	160	5M	5M	5M	
31124-013	31125-016	11-071	Brown Bullhead	MANOR ROAD	240	172	5M	5M	5M	
31124-013	31125-017	11-072	Brown Bullhead	MANOR ROAD	249	218	5M	6M	6M	
31124-014	31125-018	11-073	Brown Bullhead	MANOR ROAD	217	108	4M	4M	4M	
31124-014	31125-019	11-074	Brown Bullhead	MANOR ROAD	191	80	3M	3M	3M	
31124-014	31125-020	11-075	Brown Bullhead	MANOR ROAD	190	84	4M	5M	4M	
31130-001	31131-001	11-076	Brown Bullhead	AREA C	360	638	6M	6M	6M	
31130-001	31131-002	11-077	Brown Bullhead	AREA C	356	686	6M	7M	7M	
31130-002	31131-003	11-078	Brown Bullhead	AREA C	310	384	6M	6M	6M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31130-003	31131-004	11-079	Brown Bullhead	AREA C	225	150	2M	2M	2M	
31130-003	31131-005	11-080	Brown Bullhead	AREA C	189	84	2M	2M	2M	
31130-003	31131-006	11-081	Brown Bullhead	AREA C	177	74	2M	2M	2M	
31130-003	31131-007	11-082	Brown Bullhead	AREA C	175	72	2M	2M	2M	
31130-004	31131-008	11-083	Brown Bullhead	AREA C	156	52	2M	2M	2M	
31130-005	31131-009	11-084	Brown Bullhead	AREA C	156	50	2M	2M	2M	
31130-006	31131-010	11-085	Brown Bullhead	AREA C	149	40	2M	2M	2M	
31130-007	31132-001	11-086	Largemouth Bass	AREA C	450	1562	11M	10M	10M	
31130-008	31132-002	11-087	Largemouth Bass	AREA C	105	12	1M	1M	1M	
31130-008	31132-003	11-088	Largemouth Bass	AREA C	100	10	1M	1M	1M	
31130-008	31132-004	11-089	Largemouth Bass	AREA C	92	8	1M	1M	1M	
31130-008	31132-005	11-090	Largemouth Bass	AREA C	91	8	1M	1M	1M	
31130-008	31132-006	11-091	Largemouth Bass	AREA C	87	8	1M	1M	1M	
31130-008	31132-007	11-092	Largemouth Bass	AREA C	81	6	1M	1M	1M	
31130-009	31132-008	11-093	Chain Pickerel	AREA C	166	22	1+	1+	1+	
31130-009	31132-009	11-094	Chain Pickerel	AREA C	156	22	1+	1+	1+	
31130-009	31132-010	11-095	Chain Pickerel	AREA C	148	16	1+	1+	1+	
31130-009	31132-011	11-096	Chain Pickerel	AREA C	135	14	1+	1+	1+	
31130-009	31132-012	11-097	Chain Pickerel	AREA C	135	14	1+	1+	1+	
31130-009	31132-013	11-098	Chain Pickerel	AREA C	134	12	1+	1+	1+	
31130-010	31132-014	11-099	Chain Pickerel	AREA C	134	12	1+	1+	1+	
31130-010	31132-015	11-100	Chain Pickerel	AREA C	128	10	1+	1+	1+	
31130-010	31132-016	11-101	Chain Pickerel	AREA C	124	10	1+	1+	1+	
31130-011	31132-017	11-102	Bluegill	AREA C	230	324	5+	7+	7+	
31130-011	31132-018	11-103	Bluegill	AREA C	201	196	4M	5M	5M	
31130-011	31132-019	11-104	Bluegill	AREA C	194	200	3M	5M	4M	
31130-012	31132-020	11-105	Bluegill	AREA C	178	104	3M	4M	4M	
31130-012	31132-021	11-106	Bluegill	AREA C	173	120	2M	3M	2M	
31130-012	31132-022	11-107	Bluegill	AREA C	134	46	2M	3M	2M	
31130-013	31132-023	11-108	Bluegill	AREA C	132	50	2M	3M	2M	
31130-013	31132-024	11-109	Bluegill	AREA C	127	42	2M	3M	2M	
31130-013	31132-025	11-110	Bluegill	AREA C	124	36	2M	2M	2M	
31130-013	31132-026	11-111	Bluegill	AREA C	122	34	2M	2M	2M	
31130-013	31132-027	11-112	Bluegill	AREA C	121	36	2M	3M	2M	
31130-013	31132-028	11-113	Bluegill	AREA C	119	34	2M	2M	2M	
31130-014	31132-029	11-114	Bluegill	AREA C	110	24	2M	2M	2M	
31130-015	31132-030	11-115	Bluegill	AREA C	104	20	1M	2M	2M	
31130-015	31132-031	11-116	Bluegill	AREA C	92	14	2M	2M	2M	
31130-016	31132-032	11-117	Pumpkinseed	AREA C	186	156	4M	5M	4M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31130-016	31132-033	11-118	Pumpkinseed	AREA C	186	142	3M	4M	4M	
31130-016	31132-034	11-119	Pumpkinseed	AREA C	180	122	4M	5M	4M	
31130-016	31132-035	11-120	Pumpkinseed	AREA C	177	128	3+	4+	4+	
31130-016	31132-036	11-121	Pumpkinseed	AREA C	169	112	3+	4M	4M	
31130-017	31132-037	11-122	Pumpkinseed	AREA C	172	108	4M	6M	5M	
31130-017	31132-038	11-123	Pumpkinseed	AREA C	159	92	4M	6M	5M	
31130-017	31132-039	11-124	Pumpkinseed	AREA C	152	76	3M	3M	3M	
31130-018	31132-040	11-125	Pumpkinseed	AREA C	147	66	2M	3M	2M	
31130-018	31132-041	11-126	Pumpkinseed	AREA C	146	70	3M	4M	3M	
31130-018	31132-042	11-127	Pumpkinseed	AREA C	130	40	2M	3M	2M	
31130-018	31132-043	11-128	Pumpkinseed	AREA C	128	42	2+	3M	3M	
31130-018	31132-044	11-129	Pumpkinseed	AREA C	128	42	2M	3M	2M	
31130-019	31132-045	11-130	Pumpkinseed	AREA C	126	32	2M	3M	2M	
31130-019	31132-046	11-131	Pumpkinseed	AREA C	123	40	2M	2M	2M	
31130-019	31132-047	11-132	Pumpkinseed	AREA C	121	36	2M	2M	2M	
31130-019	31132-048	11-133	Pumpkinseed	AREA C	113	28	3M	2M	2M	
31130-019	31132-049	11-134	Pumpkinseed	AREA C	113	26	2M	2M	2M	
31130-019	31132-050	11-135	Pumpkinseed	AREA C	111	28	2+	2M	2+	
31130-020	31132-051	11-136	Pumpkinseed	AREA C	108	22	2M	3M	2M	
31130-021	31132-052	11-137	Pumpkinseed	AREA C	108	24	2M	2M	2M	
31130-022	31132-053	11-138	Pumpkinseed	AREA C	103	20	2M	2M	2M	
31130-022	31132-054	11-139	Pumpkinseed	AREA C	100	18	2M	3M	2M	
31130-022	31132-055	11-140	Pumpkinseed	AREA C	91	12	1M	2M	2M	
31153-001	31151-001	11-141	Brown Bullhead	AREA D - Upstream of HQ	340	572	6M	6M	6M	
31153-001	31151-002	11-142	Brown Bullhead	AREA D - Upstream of HQ	339	522	5M	4M	4M	
31153-002	31151-003	11-143	Brown Bullhead	AREA D - Upstream of HQ	335	530	6M	7M	6M	
31153-002	31151-004	11-144	Brown Bullhead	AREA D - Upstream of HQ	325	546	6M	6M	6M	
31153-003	31151-005	11-145	Brown Bullhead	AREA D - Upstream of HQ	321	452	5M	5M	5M	
31153-003	31151-006	11-146	Brown Bullhead	AREA D - Upstream of HQ	315	434	5M	5M	5M	
31153-004	31151-007	11-147	Brown Bullhead	AREA D - Upstream of HQ	315	424	6M	6M	6M	
31153-004	31151-008	11-148	Brown Bullhead	AREA D - Upstream of HQ	311	392	6M	6M	6M	
31153-004	31151-009	11-149	Brown Bullhead	AREA D - Upstream of HQ	306	390	6M	6M	6M	
31153-005	31151-010	11-150	Brown Bullhead	AREA D - Upstream of HQ	306	366	6M	6M	6M	
31153-005	31151-011	11-151	Brown Bullhead	AREA D - Upstream of HQ	302	356	5M	5M	5M	
31153-005	31151-012	11-152	Brown Bullhead	AREA D - Upstream of HQ	300	382	5M	5M	5M	
31153-006	31151-013	11-153	Brown Bullhead	AREA D - Upstream of HQ	300	338	6M	6M	6M	
31153-006	31151-014	11-154	Brown Bullhead	AREA D - Upstream of HQ	296	324	6M	6M	6M	
31153-006	31151-015	11-155	Brown Bullhead	AREA D - Upstream of HQ	300	340	5M	6M	5M	
31153-007	31151-016	11-156	Brown Bullhead	AREA D - Upstream of HQ	293	294	5M	5M	5M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31153-007	31151-017	11-157	Brown Bullhead	AREA D - Upstream of HQ	290	370	6M	6M	6M	
31153-007	31151-018	11-158	Brown Bullhead	AREA D - Upstream of HQ	288	328	6M	7M	6M	
31153-008	31151-019	11-159	Brown Bullhead	AREA D - Upstream of HQ	285	298	6M	6M	6M	
31153-008	31151-020	11-160	Brown Bullhead	AREA D - Upstream of HQ	282	304	5M	5M	5M	
31153-008	31151-021	11-161	Brown Bullhead	AREA D - Upstream of HQ	275	270	3M	4M	4M	
31153-009	31151-022	11-162	Brown Bullhead	AREA D - Upstream of HQ	264	216	4M	5M	5M	
31153-009	31151-023	11-163	Brown Bullhead	AREA D - Upstream of HQ	262	222	3M	3M	3M	
31153-009	31151-024	11-164	Brown Bullhead	AREA D - Upstream of HQ	259	234	3M	3M	3M	
31153-009	31151-025	11-165	Brown Bullhead	AREA D - Upstream of HQ	250	182	5M	5M	5M	
31153-010	31151-026	11-166	Brown Bullhead	AREA D - Upstream of HQ	241	156	2M	2M	2M	
31153-010	31151-027	11-167	Brown Bullhead	AREA D - Upstream of HQ	236	168	3M	2M	3M	
31153-010	31151-028	11-168	Brown Bullhead	AREA D - Upstream of HQ	216	132	2M	2M	2M	
31153-011	31151-029	11-169	Brown Bullhead	AREA D - Upstream of HQ	210	118	2M	2M	2M	
31153-011	31151-030	11-170	Brown Bullhead	AREA D - Upstream of HQ	205	108	2M	2M	2M	
31153-011	31151-031	11-171	Brown Bullhead	AREA D - Upstream of HQ	193	88	2M	2M	2M	
31153-012	31151-032	11-172	Brown Bullhead	AREA D - Upstream of HQ	191	82	2M	2M	2M	
31153-013	31151-033	11-173	Brown Bullhead	AREA D - Upstream of HQ	185	72	2M	3M	2M	
31153-014	31151-034	11-174	Brown Bullhead	AREA D - Upstream of HQ	182	70	2M	2M	2M	
31153-015	31152-001	11-175	Chain Pickerel	AREA D - Upstream of HQ	195	40	1M	1M	1M	
31153-016	31152-002	11-176	Black Crappie	AREA D - Upstream of HQ	275	318	4M	5M	4M	
31153-017	31152-003	11-177	Black Crappie	AREA D - Upstream of HQ	155	48	2+	3M	3M	
31153-017	31152-004	11-178	Black Crappie	AREA D - Upstream of HQ	148	46	2M	2M	2M	
31153-017	31152-005	11-179	Black Crappie	AREA D - Upstream of HQ	141	34	2M	2M	2M	
31153-017	31152-006	11-180	Black Crappie	AREA D - Upstream of HQ	130	30	2M	2M	2M	
31153-018	31152-007	11-181	Bluegill	AREA D - Upstream of HQ	185	162	2M	3M	3M	
31153-019	31152-008	11-182	Bluegill	AREA D - Upstream of HQ	132	48	2M	3M	2M	
31153-019	31152-009	11-183	Bluegill	AREA D - Upstream of HQ	105	20	3M	2M	3M	
31153-019	31152-010	11-184	Bluegill	AREA D - Upstream of HQ	104	20	2M	2M	2M	
31153-019	31152-011	11-185	Bluegill	AREA D - Upstream of HQ	100	20	2M	2M	2M	
31153-020	31152-012	11-186	Pumpkinseed	AREA D - Upstream of HQ	171	128	3M	4M	3M	
31153-020	31152-013	11-187	Pumpkinseed	AREA D - Upstream of HQ	167	112	3M	4M	3M	
31153-021	31152-014	11-188	Pumpkinseed	AREA D - Upstream of HQ	163	116	3M	4M	3M	
31153-021	31152-015	11-189	Pumpkinseed	AREA D - Upstream of HQ	118	42	2M	3M	2M	
31153-022	31152-016	11-190	Largemouth Bass	AREA D - Upstream of HQ	88	8	1M	1M	1M	
31156-001	31287-001	11-191	Brown Bullhead	AREA D - Upstream of HQ	335	568	6M	6M	6M	
31156-002	31287-002	11-192	Brown Bullhead	AREA D - Upstream of HQ	225	152	5M	6M	5M	
31156-002	31287-003	11-193	Brown Bullhead	AREA D - Upstream of HQ	200	106	3M	3M	3M	
31156-003	31287-004	11-194	Brown Bullhead	AREA D - Upstream of HQ	162	56	2M	2M	2M	
31156-004	31287-005	11-195	Brown Bullhead	AREA D - Upstream of HQ	150	42	2M	5M	2M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
31156-005	31155-001	11-196	Chain Pickerel	AREA D - Upstream of HQ	159	20	1M	1M	1M	
31156-005	31155-002	11-197	Chain Pickerel	AREA D - Upstream of HQ	155	16	1M	1M	1M	
31156-006	31155-003	11-198	Chain Pickerel	AREA D - Upstream of HQ	150	14	1M	1M	1M	
31156-006	31155-004	11-199	Chain Pickerel	AREA D - Upstream of HQ	130	10	1+	1+	1+	
31156-007	31155-005	11-200	Chain Pickerel	AREA D - Upstream of HQ	129	12	1+	1+	1+	
31156-007	31155-006	11-201	Chain Pickerel	AREA D - Upstream of HQ	125	10	1+	1+	1+	
31156-008	31155-007	11-202	Largemouth Bass	AREA D - Upstream of HQ	402	772	6M	6M	6M	
31156-009	31155-008	11-203	Largemouth Bass	AREA D - Upstream of HQ	334	462	6M	5M	6M	
31156-010	31155-009	11-204	Black Crappie	AREA D - Upstream of HQ	149	46	2M	2M	2M	
31156-011	31155-010	11-205	Black Crappie	AREA D - Upstream of HQ	142	38	2M	2M	2M	
31156-012	31155-011	11-206	Bluegill	AREA D - Upstream of HQ	215	224	5+	6+	6+	
31156-013	31155-012	11-207	Bluegill	AREA D - Upstream of HQ	174	140	3+	4M	4M	
31156-013	31155-013	11-208	Bluegill	AREA D - Upstream of HQ	156	80	3+	4M	4M	
31156-014	31155-014	11-209	Bluegill	AREA D - Upstream of HQ	140	62	3	4M	4M	
31156-014	31155-015	11-210	Bluegill	AREA D - Upstream of HQ	140	62	3	3M	3M	
31156-014	31155-016	11-211	Bluegill	AREA D - Upstream of HQ	135	50	2+	3M	2+	
31156-015	31155-017	11-212	Bluegill	AREA D - Upstream of HQ	120	34	2+	3M	3M	
31156-016	31155-018	11-213	Pumpkinseed	AREA D - Upstream of HQ	170	112	5M	6M	5M	
31156-016	31155-019	11-214	Pumpkinseed	AREA D - Upstream of HQ	164	110	5M	5M	5M	
31156-017	31155-020	11-215	Pumpkinseed	AREA D - Upstream of HQ	162	106	5M	4M	5M	
31156-018	31155-021	11-216	Pumpkinseed	AREA D - Upstream of HQ	157	88	4M	4M	4M	
31156-018	31155-022	11-217	Pumpkinseed	AREA D - Upstream of HQ	156	98	5	5M	5M	
31156-018	31155-023	11-218	Pumpkinseed	AREA D - Upstream of HQ	154	88	4	4M	4	
31156-019	31155-024	11-219	Pumpkinseed	AREA D - Upstream of HQ	154	82	4M	4M	4M	
31156-019	31155-025	11-220	Pumpkinseed	AREA D - Upstream of HQ	154	90	3+	4M	3+	
31156-019	31155-026	11-221	Pumpkinseed	AREA D - Upstream of HQ	150	78	4M	4M	4M	
31156-020	31155-027	11-222	Pumpkinseed	AREA D - Upstream of HQ	155	88	3+	4M	3+	
31156-020	31155-028	11-223	Pumpkinseed	AREA D - Upstream of HQ	150	82	4M	4M	4M	
31156-020	31155-029	11-224	Pumpkinseed	AREA D - Upstream of HQ	150	74	4M	4M	4M	
31156-021	31155-030	11-225	Pumpkinseed	AREA D - Upstream of HQ	143	76	4	4M	4M	
31156-021	31155-031	11-226	Pumpkinseed	AREA D - Upstream of HQ	137	52	3+	4M	3+	
31156-021	31155-032	11-227	Pumpkinseed	AREA D - Upstream of HQ	136	56	3+	4M	3+	
31156-021	31155-033	11-228	Pumpkinseed	AREA D - Upstream of HQ	126	48	4	4M	4M	
31156-022	31155-034	11-229	Pumpkinseed	AREA D - Upstream of HQ	126	40	3+	4M	4M	
31156-022	31155-035	11-230	Pumpkinseed	AREA D - Upstream of HQ	122	40	2+	4M	4M	
31156-022	31155-036	11-231	Pumpkinseed	AREA D - Upstream of HQ	115	30	3+	4M	4M	
31156-022	31155-037	11-232	Pumpkinseed	AREA D - Upstream of HQ	113	30	2+	4M	4M	
31156-022	31155-038	11-233	Pumpkinseed	AREA D - Upstream of HQ	111	28	2+	3M	4M	
31156-022	31155-039	11-234	Pumpkinseed	AREA D - Upstream of HQ	105	24	3+	4M	4M	

Appendix F - 2011 Peconic River Fish Scale and Otolith Age Interpretation

Sample ID	Scale COC ID	Fish Number	Species	Area	Length (mm)	Wet Weight Whole (grams)	Interpretor 1 Age	Interpretor 2 Age	Final Age	Comments
29544-001	29542-001	11-235	Brown Bullhead	DONAHUE'S POND	354	700	6M	7M	6M	
29544-002	29542-002	11-236	Brown Bullhead	DONAHUE'S POND	354	632	6M	6M	6M	
29544-003	29542-003	11-237	Brown Bullhead	DONAHUE'S POND	340	584	5M	6M	6M	
29544-004	29542-004	11-238	Brown Bullhead	DONAHUE'S POND	337	546	13M	14M	14M	
29544-005	29542-005	11-239	Brown Bullhead	DONAHUE'S POND	335	478	7M	7M	7M	
29544-006	29542-006	11-240	Brown Bullhead	DONAHUE'S POND	328	498	7M	7M	7M	
29544-007	29542-007	11-241	Brown Bullhead	DONAHUE'S POND	321	538	9M	10M	10M	
29544-008	29542-008	11-242	Brown Bullhead	DONAHUE'S POND	318	512	9M	9M	9M	
29544-009	29542-009	11-243	Brown Bullhead	DONAHUE'S POND	317	500	6M	6M	6M	
29544-010	29542-010	11-244	Brown Bullhead	DONAHUE'S POND	305	434	5M	5M	5M	
29544-011	29543-001	11-245	Bluegill	DONAHUE'S POND	210	236	6	7M	7M	
29544-011	29543-002	11-246	Bluegill	DONAHUE'S POND	210	208	5+	7M	7M	
29544-012	29543-003	11-247	Bluegill	DONAHUE'S POND	210	206	4+	5M	6M	
29544-012	29543-004	11-248	Bluegill	DONAHUE'S POND	209	198	4	4M	4M	
29544-013	29543-005	11-249	Bluegill	DONAHUE'S POND	204	198	5+	7M	6M	
29544-013	29543-006	11-250	Bluegill	DONAHUE'S POND	197	210	5+	6M	6M	
29544-014	29543-007	11-251	Bluegill	DONAHUE'S POND	195	162	3+	5M	4M	
29544-014	29543-008	11-252	Bluegill	DONAHUE'S POND	194	190	4M	5M	4M	
29544-015	29543-009	11-253	Bluegill	DONAHUE'S POND	193	160	5M	7M	6M	
29544-015	29543-010	11-254	Bluegill	DONAHUE'S POND	191	190	6+	7M	6+	
29544-016	29543-011	11-255	Pumpkinseed	DONAHUE'S POND	196	162	5M	7M	6+	
29585-001	29584-001	11-256	Brown Bullhead	SCHULTZ ROAD	320	490	5M	5M	5M	
29585-002	29583-001	11-257	Largemouth Bass	SCHULTZ ROAD	280	308	6M	6M	6M	
29585-003	29583-002	11-258	Largemouth Bass	SCHULTZ ROAD	232	176	4M	3M	4M	
29585-004	29583-003	11-259	Chain Pickerel	SCHULTZ ROAD	340	264	2M	3M	3M	
29585-005	29583-004	11-260	Chain Pickerel	SCHULTZ ROAD	330	184	2+	3+	3+	
29585-006	29583-005	11-261	Pumpkinseed	SCHULTZ ROAD	166	104	4+	4+	4+	
29608-001	29622-001	11-262	Chain Pickerel	DONAHUE'S POND	318	198	2+	3+	3+	
29608-002	29622-002	11-263	Largemouth Bass	DONAHUE'S POND	254	228	5M	5M	5M	
29608-003	29622-003	11-264	Largemouth Bass	DONAHUE'S POND	216	128	5M	5M	5M	

Appendix G - 2011 Peconic River Fish Samples

Mercury

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (yrs)	SDG	Sample Date	Sample Time	Method	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual[1]	Rev Qual
A	31122-001	31122-bc1	Brown Bullhead	272	1000	225.6	5	276058	4/12/2011	1200	EPA 7471A	0.584	0.0395		
A	31122-002	31122-bc2	Brown Bullhead	234	384	81.6	4.5	276058	4/12/2011	1200	EPA 7471A	0.293	0.00383		
A	31122-003	31122-bc3	Brown Bullhead	166	358	67.6	2	276058	4/12/2011	1200	EPA 7471A	0.279	0.00395		
A	31122-004	31122-bc4	Brown Bullhead	144	72	13.4	2	276058	4/12/2011	1200	EPA 7471A	0.676	0.0386		
A	31122-005	31122-bc5	Brown Bullhead	136	92	15.8	2	276058	4/12/2011	1200	EPA 7471A	0.155	0.0034		
A	31122-006	11-018	Largemouth Bass	133	26	9.8	2	276058	4/12/2011	1200	EPA 7471A	0.421	0.00408		
A	31122-007	11-019	Largemouth Bass	133	26	9.1	1	276058	4/12/2011	1200	EPA 7471A	0.425	0.00372		
A	31122-008	11-020	Largemouth Bass	132	26	9.1	1	276058	4/12/2011	1200	EPA 7471A	0.43	0.00366		
A	31122-009	31122-bc9	Chain Pickerel	370	570	206.5	3	276058	4/12/2011	1200	EPA 7471A	0.859	0.0383		
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 7471A	0.895	0.0381		
A	31122-011	31122-bc11	Chain Pickerel	169	140	58.4	1.2	276058	4/12/2011	1200	EPA 7471A	0.3	0.00408		
A	31122-012	31122-bc12	Chain Pickerel	125	30	13.1	1	276058	4/12/2011	1200	EPA 7471A	0.241	0.00389		
A	31122-013	31122-bc13	Pumpkinseed	162	608	195.7	3.2	276058	4/12/2011	1200	EPA 7471A	0.759	0.0376		
A	31122-014	31122-bc14	Pumpkinseed	149	466	159.9	3.2	276058	4/12/2011	1200	EPA 7471A	0.535	0.00383		
A	31122-015	31122-bc15	Pumpkinseed	143	248	79.2	2.8	276058	4/12/2011	1200	EPA 7471A	0.476	0.00341		
A	31122-016	31122-bc16	Pumpkinseed	138	104	38	3	276058	4/12/2011	1200	EPA 7471A	0.871	0.0392		
A	31122-017	31122-bc17	Pumpkinseed	123	74	25.3	2	276058	4/12/2011	1200	EPA 7471A	0.466	0.00353		
A	31122-018	31122-bc18	Pumpkinseed	106	44	15	2	276058	4/12/2011	1200	EPA 7471A	0.248	0.00371		
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 7471A	0.235	0.00399	N	
C	31130-002	11-078	Brown Bullhead	310	384	80.2	6	276239	4/14/2011	1200	EPA 7471A	0.287	0.00351	N	
C	31130-003	31130-bc3	Brown Bullhead	192	380	76.7	2	276239	4/14/2011	1200	EPA 7471A	0.245	0.00374	N	
C	31130-004	11-083	Brown Bullhead	156	52	11.6	2	276239	4/14/2011	1200	EPA 7471A	0.129	0.00368	N	
C	31130-005	11-084	Brown Bullhead	156	50	11.2	2	276239	4/14/2011	1200	EPA 7471A	0.14	0.00401	N	
C	31130-006	11-085	Brown Bullhead	149	40	7.7	2	276239	4/14/2011	1200	EPA 7471A	0.238	0.00357	N	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 7471A	1.52	0.0774	N	
C	31130-008	31130-bc8	Largemouth Bass	93	52	14.8	1	276239	4/14/2011	1200	EPA 7471A	0.464	0.00368	N	
C	31130-009	31130-bc9	Chain Pickerel	146	100	42.2	1	276239	4/14/2011	1200	EPA 7471A	0.4	0.00362	N	
C	31130-010	31130-bc10	Chain Pickerel	129	32	15	1	276239	4/14/2011	1200	EPA 7471A	0.209	0.00368	N	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 7471A	0.365	0.0034	N	
C	31130-012	31130-bc12	Bluegill	162	270	79.9	2.7	276239	4/14/2011	1200	EPA 7471A	0.443	0.00353	N	
C	31130-013	31130-bc13	Bluegill	124	232	67.9	2	276239	4/14/2011	1200	EPA 7471A	0.209	0.00386	N	
C	31130-014	11-114	Bluegill	110	24	8.2	2	276239	4/14/2011	1200	EPA 7471A	0.217	0.00341	N	
C	31130-015	31130-bc15	Bluegill	98	34	10.8	2	276239	4/14/2011	1200	EPA 7471A	0.25	0.00341	N	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 7471A	0.45	0.00395	N	
C	31130-017	31130-bc17	Pumpkinseed	161	276	91.2	4.3	276239	4/14/2011	1200	EPA 7471A	0.482	0.00381	N	
C	31130-018	31130-bc18	Pumpkinseed	136	260	79.6	2.4	276239	4/14/2011	1200	EPA 7471A	0.325	0.00346	N	
C	31130-019	31130-bc19	Pumpkinseed	118	190	67.6	2	276239	4/14/2011	1200	EPA 7471A	0.332	0.00376	N	
C	31130-020	11-136	Pumpkinseed	108	22	7.8	2	276239	4/14/2011	1200	EPA 7471A	0.335	0.00367	N	
C	31130-021	11-137	Pumpkinseed	108	24	7.3	2	276239	4/14/2011	1200	EPA 7471A	0.52	0.00381	N	
C	31130-022	31130-bc22	Pumpkinseed	98	50	16.9	2	276239	4/14/2011	1200	EPA 7471A	0.351	0.00408	N	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 7471A	0.293	0.00368		
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 7471A	0.273	0.00359		
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 7471A	0.173	0.0037		
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 7471A	0.293	0.00408		
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 7471A	0.198	0.00364		
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 7471A	0.127	0.00351		
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 7471A	0.433	0.00408		
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 7471A	0.111	0.00394		
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 7471A	0.201	0.00374		
D	31153-010	31153-bc10	Brown Bullhead	231	456	100.8	2.3	276677	4/20/2011	1200	EPA 7471A	0.246	0.00365		

Appendix G - 2011 Peconic River Fish Samples

Mercury

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (yrs)	SDG	Sample Date	Sample Time	Method	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual[1]	Rev Qual
D	31153-011	31153-bc11	Brown Bullhead	203	314	68.4	2	276677	4/20/2011	1200	EPA 7471A	0.132	0.00383		
D	31153-012	11-172	Brown Bullhead	191	82	18	2	276677	4/20/2011	1200	EPA 7471A	0.313	0.0035		
D	31153-013	11-173	Brown Bullhead	185	72	14.7	2	276677	4/20/2011	1200	EPA 7471A	0.209	0.00358		
D	31153-014	11-174	Brown Bullhead	182	70	15.2	2	276677	4/20/2011	1200	EPA 7471A	0.12	0.00352		
D	31153-015	11-175	Chain Pickerel	195	40	16.4	1	276677	4/20/2011	1200	EPA 7471A	0.629	0.0392		
D	31153-016	11-176	Black Crappie	275	318	112.4	4	276677	4/20/2011	1200	EPA 7471A	0.581	0.034		
D	31153-017	31153-bc17	Black Crappie	144	158	61.1	2.3	276677	4/20/2011	1200	EPA 7471A	0.166	0.00378		
D	31153-018	11-181	Bluegill	185	162	63.5	3	276677	4/20/2011	1200	EPA 7471A	0.251	0.00383		
D	31153-019	31153-bc19	Bluegill	110	108	42.3	2.3	276677	4/20/2011	1200	EPA 7471A	0.18	0.00375		
D	31153-020	31153-bc20	Pumpkinseed	169	240	78.4	3	276677	4/20/2011	1200	EPA 7471A	0.376	0.00341		
D	31153-021	31153-bc21	Pumpkinseed	141	158	56.7	2.5	276677	4/20/2011	1200	EPA 7471A	0.407	0.00381		
D	31153-022	11-190	Largemouth Bass	88	8	7.2	1	276677	4/20/2011	1200	EPA 7471A	0.256	0.00388		
D	31156-001	11-191	Brown Bullhead	335	568	144.5	6	276765	4/21/2011	1300	EPA 7471A	0.0941	0.00358		
D	31156-002	31156-bc2	Brown Bullhead	213	258	69.6	4	276765	4/21/2011	1300	EPA 7471A	0.139	0.00381		
D	31156-003	11-194	Brown Bullhead	162	56	15.2	2	276765	4/21/2011	1300	EPA 7471A	0.112	0.00342		
D	31156-004	11-195	Brown Bullhead	150	42	9.8	2	276765	4/21/2011	1300	EPA 7471A	0.285	0.00382		
D	31156-005	31156-bc5	Chain Pickerel	157	36	15.3	1	276765	4/21/2011	1300	EPA 7471A	0.328	0.00405		
D	31156-006	31156-bc6	Chain Pickerel	140	24	11	1	276765	4/21/2011	1300	EPA 7471A	0.187	0.00402		
D	31156-007	31156-bc7	Chain Pickerel	127	22	10.5	1	276765	4/21/2011	1300	EPA 7471A	0.233	0.00374		
D	31156-008	11-202	Largemouth Bass	402	772	233.6	6	276765	4/21/2011	1300	EPA 7471A	0.764	0.0351		
D	31156-009	11-203	Largemouth Bass	334	462	161.1	6	276765	4/21/2011	1300	EPA 7471A	0.962	0.0347		
D	31156-010	11-204	Black Crappie	149	46	18	2	276765	4/21/2011	1300	EPA 7471A	0.134	0.00357		
D	31156-011	11-205	Black Crappie	142	38	13.9	2	276765	4/21/2011	1300	EPA 7471A	0.146	0.00364		
D	31156-012	11-206	Bluegill	215	224	80.7	6	276765	4/21/2011	1300	EPA 7471A	0.225	0.00401		
D	31156-013	31156-bc13	Bluegill	165	220	84	4	276765	4/21/2011	1300	EPA 7471A	0.506	0.00392		
D	31156-014	31156-bc14	Bluegill	138	174	70.5	3	276765	4/21/2011	1300	EPA 7471A	0.377	0.0034		
D	31156-015	11-212	Bluegill	120	34	13.6	3	276765	4/21/2011	1300	EPA 7471A	0.212	0.0038		
D	31156-016	31156-bc16	Pumpkinseed	167	222	77.4	5	276765	4/21/2011	1300	EPA 7471A	0.498	0.00399		
D	31156-017	11-215,216	Pumpkinseed	162	106	38.6	5	276765	4/21/2011	1300	EPA 7471A	0.423	0.00359		
D	31156-018	31156-bc18	Pumpkinseed	156	274	98.3	4.3	276765	4/21/2011	1300	EPA 7471A	0.215	0.00372		
D	31156-019	31156-bc19	Pumpkinseed	153	250	84.7	3.7	276765	4/21/2011	1300	EPA 7471A	0.223	0.00381		
D	31156-020	31156-bc20	Pumpkinseed	152	244	92.8	3.7	276765	4/21/2011	1300	EPA 7471A	0.286	0.00367		
D	31156-021	31156-bc21	Pumpkinseed	136	232	82.5	3.5	276765	4/21/2011	1300	EPA 7471A	0.377	0.00384		
D	31156-022	31156-bc22	Pumpkinseed	115	192	75.2	4	276765	4/21/2011	1300	EPA 7471A	0.267	0.00366		
SR	29585-001	11-256	Brown Bullhead	320	490	146	5	277666	5/6/2011	1200	EPA 7471A	0.0545	0.00374	*	
SR	29585-002	11-257	Largemouth Bass	280	308	76.8	6	277666	5/6/2011	1200	EPA 7471A	0.387	0.00358	*	
SR	29585-003	11-258	Largemouth Bass	232	176	64.9	4	277666	5/6/2011	1200	EPA 7471A	0.372	0.00368	*	
SR	29585-004	11-259	Chain Pickerel	340	264	108.2	3	277666	5/6/2011	1200	EPA 7471A	0.416	0.00383	*	
SR	29585-005	11-260	Chain Pickerel	330	184	68.7	3	277666	5/6/2011	1200	EPA 7471A	0.305	0.00396	*	
SR	29585-006	11-261	Pumpkinseed	166	104	28	4	277666	5/6/2011	1200	EPA 7471A	0.163	0.00354	*	
MR	31108-001	11-001	Chain Pickerel	358	227.2	86.8	5	275808	4/6/2011	1500	EPA 7471A	0.582	0.0361		
MR	31124-001	11-056	Brown Bullhead	293	334	83.9	6	276063	4/12/2011	1500	EPA 7471A	0.27	0.00387		
MR	31124-002	11-057	Brown Bullhead	282	296	73.3	5	276063	4/12/2011	1500	EPA 7471A	0.104	0.0036		
MR	31124-003	11-058	Brown Bullhead	281	276	76.2	5	276063	4/12/2011	1500	EPA 7471A	0.238	0.00386		
MR	31124-004	11-059	Brown Bullhead	275	276	72.7	6	276063	4/12/2011	1500	EPA 7471A	0.369	0.00364		
MR	31124-005	11-060	Brown Bullhead	273	222	64.5	5	276063	4/12/2011	1500	EPA 7471A	0.292	0.00401		
MR	31124-006	11-061	Brown Bullhead	271	246	71.3	6	276063	4/12/2011	1500	EPA 7471A	0.408	0.00403		
MR	31124-007	11-062	Brown Bullhead	271	236	68.1	5	276063	4/12/2011	1500	EPA 7471A	0.235	0.00344		
MR	31124-008	11-063	Brown Bullhead	269	254	76.1	5	276063	4/12/2011	1500	EPA 7471A	0.335	0.00381		
MR	31124-009	11-064	Brown Bullhead	257	222	61	5	276063	4/12/2011	1500	EPA 7471A	0.211	0.0038		

Appendix G - 2011 Peconic River Fish Samples

Mercury

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (yrs)	SDG	Sample Date	Sample Time	Method	Conc. (mg/kg)	MDL (mg/kg)	Lab Qual[1]	Rev Qual
MR	31124-010	31124-bc10	Brown Bullhead	255	444	119.8	6.5	276063	4/12/2011	1500	EPA 7471A	0.394	0.00346		
MR	31124-011	31124-bc11	Brown Bullhead	254	380	99.3	5	276063	4/12/2011	1500	EPA 7471A	0.342	0.00357		
MR	31124-012	31124-bc12	Brown Bullhead	247	368	97.9	5	276063	4/12/2011	1500	EPA 7471A	0.275	0.00383		
MR	31124-013	31124-bc13	Brown Bullhead	245	390	103.5	5.5	276063	4/12/2011	1500	EPA 7471A	0.342	0.00385		
MR	31124-014	31124-bc14	Brown Bullhead	199	272	79.7	3.7	276063	4/12/2011	1500	EPA 7471A	0.142	0.00379		
DP	29544-001	11-235	Brown Bullhead	354	700	205.9	6	276993	4/26/2011	1500	EPA 7471A	0.0869	0.00374	*N	
DP	29544-002	11-236	Brown Bullhead	354	632	164.7	6	276993	4/26/2011	1500	EPA 7471A	0.0568	0.00357	*N	
DP	29544-003	11-237	Brown Bullhead	340	584	144.2	6	276993	4/26/2011	1500	EPA 7471A	0.0578	0.00387	*N	
DP	29544-004	11-238	Brown Bullhead	337	546	110.7	14	276993	4/26/2011	1500	EPA 7471A	0.161	0.00352	*N	
DP	29544-005	11-239	Brown Bullhead	335	478	88.9	7	276993	4/26/2011	1500	EPA 7471A	0.0742	0.00353	*N	
DP	29544-006	11-240	Brown Bullhead	328	498	116.8	7	276993	4/26/2011	1500	EPA 7471A	0.0657	0.00342	*N	
DP	29544-007	11-241	Brown Bullhead	321	538	108.5	10	276993	4/26/2011	1500	EPA 7471A	0.0914	0.0034	*N	
DP	29544-008	11-242	Brown Bullhead	318	512	113	9	276993	4/26/2011	1500	EPA 7471A	0.0513	0.00351	*N	
DP	29544-009	11-243	Brown Bullhead	317	500	112.1	6	276993	4/26/2011	1500	EPA 7471A	0.0513	0.00392	*N	
DP	29544-010	11-244	Brown Bullhead	305	434	99.3	5	276993	4/26/2011	1500	EPA 7471A	0.0545	0.00389	*N	
DP	29544-011	29544-bc11	Bluegill	210	444	130.9	7	276993	4/26/2011	1500	EPA 7471A	0.112	0.00363	*N	
DP	29544-012	29544-bc12	Bluegill	210	404	93.5	5	276993	4/26/2011	1500	EPA 7471A	0.103	0.00353	*N	
DP	29544-013	29544-bc13	Bluegill	201	408	109	6	276993	4/26/2011	1500	EPA 7471A	0.0941	0.00374	*N	
DP	29544-014	29544-bc14	Bluegill	195	352	100	4	276993	4/26/2011	1500	EPA 7471A	0.0619	0.00347	*N	
DP	29544-015	29544-bc15	Bluegill	192	350	99.2	6	276993	4/26/2011	1500	EPA 7471A	0.0697	0.00406	*N	
DP	29544-016	11-255	Pumpkinseed	196	162	60	6	276993	4/26/2011	1500	EPA 7471A	0.157	0.00365	*N	
DP	29608-001	11-262	Chain Pickerel	318	198	101.2	3	278408	5/13/2011	1500	EPA 7471A	0.0999	0.00357	E	
DP	29608-002	11-263	Largemouth Bass	254	228	95.4	5	278408	5/13/2011	1500	EPA 7471A	0.174	0.00389	E	
DP	29608-003	11-264	Largemouth Bass	216	128	52.6	5	278408	5/13/2011	1500	EPA 7471A	0.134	0.00407	E	

[1] Qualifiers

* - Indicates that the duplicate analysis is not within control limits.

N - Indicates that the spiked sample recovery is not within control limits.

B - Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

E - Used when the reported value is estimated because of the presence of interference.

U - Indicates that the analyte was analyzed for but not detected.

Appendix H - 2011 Peconic River Fish Samples

PCBs

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (years)	SDG	Sample Date	Sample Time	Method	Analyte	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual[1]	Rev Qual
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1016	10.2	10.2	U	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1221	10.2	10.2	U	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1232	10.2	10.2	U	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1242	10.2	10.2	U	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1248	10.2	10.2	U	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1254	5.9	10.2	J	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	276058	4/12/2011	1200	EPA 8082	Aroclor 1260	10.2	10.2	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1016	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1221	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1232	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1242	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1248	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1254	9.93	9.93	U	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	276239	4/14/2011	1200	EPA 8082	Aroclor 1260	9.93	9.93	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1016	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1221	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1232	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1242	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1248	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1254	9.94	9.94	U	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	276239	4/14/2011	1200	EPA 8082	Aroclor 1260	9.94	9.94	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1016	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1221	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1232	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1242	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1248	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1254	9.92	9.92	U	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	276239	4/14/2011	1200	EPA 8082	Aroclor 1260	9.92	9.92	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1016	9.94	9.94	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1221	9.94	9.94	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1232	9.94	9.94	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1242	9.94	9.94	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1248	9.94	9.94	U	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1254	7.8	9.94	J	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	276239	4/14/2011	1200	EPA 8082	Aroclor 1260	9.94	9.94	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.97	9.97	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.97	9.97	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.97	9.97	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.97	9.97	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.97	9.97	U	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	7.2	9.97	J	
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.97	9.97	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.94	9.94	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.94	9.94	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.94	9.94	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.94	9.94	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.94	9.94	U	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	18.4	9.94		

Appendix H - 2011 Peconic River Fish Samples

PCBs

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (years)	SDG	Sample Date	Sample Time	Method	Analyte	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual[1]	Rev Qual
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	8.9	9.94	J	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.92	9.92	U	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.92	9.92	U	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.92	9.92	U	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.92	9.92	U	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.92	9.92	U	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	22.2	9.92		
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	10.4	9.92		
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.96	9.96	U	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.96	9.96	U	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.96	9.96	U	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.96	9.96	U	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.96	9.96	U	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	4.6	9.96	J	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.96	9.96	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	9.91	9.91	U	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.91	9.91	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.96	9.96	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.96	9.96	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.96	9.96	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.96	9.96	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.96	9.96	U	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	14.3	9.96		
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	6.4	9.96	J	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.98	9.98	U	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.98	9.98	U	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.98	9.98	U	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.98	9.98	U	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.98	9.98	U	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	6.7	9.98	J	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.98	9.98	U	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	7.6	9.98	J	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.98	9.98	U	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1016	9.94	9.94	U	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1221	9.94	9.94	U	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1232	9.94	9.94	U	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1242	9.94	9.94	U	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1248	9.94	9.94	U	

Appendix H - 2011 Peconic River Fish Samples

PCBs

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (years)	SDG	Sample Date	Sample Time	Method	Analyte	Conc. (ug/kg)	MDL (ug/kg)	Lab Qual[1]	Rev Qual
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1254	7.4	9.94	J	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	276677	4/20/2011	1200	EPA 8082	Aroclor 1260	9.94	9.94	U	

[1] Qualifiers

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

U - Indicates that the analyte was analyzed for but not detected.

Appendix I - 2011 Peconic River Fish Samples

Radionuclides

Area	Sample ID	Fish ID or Composite ID	Species	Length (mm)	Wet Weight Whole (grams)	Wet Weight Fillet (grams)	Age (yrs)	Sample Date	Sample Time	Method	Analyte	Conc. (pCi/g)	Error (pCi/g)	MDL (pCi/g)	Lab Qual[1]	Rev Qual
A	31122-001	31122-bc1	Brown Bullhead	272	1000	225.6	5	4/12/2011	1200	DOE HASL 300	Cesium-137	0.257	0.0497	0.0205	J	
A	31122-002	31122-bc2	Brown Bullhead	234	384	81.6	4.5	4/12/2011	1200	DOE HASL 300	Cesium-137	0.25	0.0986	0.0719	J	
A	31122-003	31122-bc3	Brown Bullhead	166	358	67.6	2	4/12/2011	1200	DOE HASL 300	Cesium-137	0.223	0.0605	0.0423	J	
A	31122-009	31122-bc9	Chain Pickerel	370	570	206.5	3	4/12/2011	1200	DOE HASL 300	Cesium-137	0.377	0.0706	0.0435	J	
A	31122-010	31122-bc10	Chain Pickerel	326	580	209.7	3	4/12/2011	1200	DOE HASL 300	Cesium-137	0.282	0.072	0.0376	J	
A	31122-011	31122-bc11	Chain Pickerel	169	140	58.4	1.2	4/12/2011	1200	DOE HASL 300	Cesium-137	0.143	0.0892	0.0663	J	
A	31122-013	31122-bc13	Pumpkinseed	162	608	195.7	3.2	4/12/2011	1200	DOE HASL 300	Cesium-137	0.358	0.0777	0.0385	J	
A	31122-014	31122-bc14	Pumpkinseed	149	466	159.9	3.2	4/12/2011	1200	DOE HASL 300	Cesium-137	0.51	0.118	0.0603	J	
A	31122-015	31122-bc15	Pumpkinseed	143	248	79.2	2.8	4/12/2011	1200	DOE HASL 300	Cesium-137	0.175	0.0842	0.073	J	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	4/14/2011	1200	DOE HASL 300	Cesium-137	0.25	0.0547	0.0234	J	
C	31130-001	31130-bc1	Brown Bullhead	358	1324	252.4	6.5	4/14/2011	1200	DOE HASL 300	Potassium-40	3.26	0.705	0.228		
C	31130-002	11-078	Brown Bullhead	310	384	80.2	6	4/14/2011	1200	DOE HASL 300	Cesium-137	0.254	0.0602	0.0453	J	
C	31130-002	11-078	Brown Bullhead	310	384	80.2	6	4/14/2011	1200	DOE HASL 300	Potassium-40	4.27	0.922	0.595		
C	31130-003	31130-bc3	Brown Bullhead	192	380	76.7	2	4/14/2011	1200	DOE HASL 300	Cesium-137	0.2	0.0661	0.0582	J	
C	31130-003	31130-bc3	Brown Bullhead	192	380	76.7	2	4/14/2011	1200	DOE HASL 300	Potassium-40	3.67	1.16	0.623		
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	4/14/2011	1200	DOE HASL 300	Cesium-137	0.335	0.0631	0.0329	J	
C	31130-007	11-086	Largemouth Bass	450	1562	482.2	10	4/14/2011	1200	DOE HASL 300	Potassium-40	3.41	0.837	0.39		
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	4/14/2011	1200	DOE HASL 300	Cesium-137	0.252	0.0991	0.0703	J	
C	31130-011	31130-bc11	Bluegill	208	720	186.9	5.3	4/14/2011	1200	DOE HASL 300	Potassium-40	2.84	1	0.717		
C	31130-012	31130-bc12	Bluegill	162	270	79.9	2.7	4/14/2011	1200	DOE HASL 300	Cesium-137	0.157	0.058	0.0654	J	
C	31130-013	31130-bc13	Bluegill	124	232	67.9	2	4/14/2011	1200	DOE HASL 300	Cesium-137	0.147	0.0846	0.0548	J	
C	31130-013	31130-bc13	Bluegill	124	232	67.9	2	4/14/2011	1200	DOE HASL 300	Potassium-40	2.79	0.853	0.445		
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	4/14/2011	1200	DOE HASL 300	Cesium-137	0.194	0.0537	0.039	J	
C	31130-016	31130-bc16	Pumpkinseed	180	660	190.4	4	4/14/2011	1200	DOE HASL 300	Potassium-40	2.61	0.783	0.407		
C	31130-017	31130-bc17	Pumpkinseed	161	276	91.2	4.3	4/14/2011	1200	DOE HASL 300	Cesium-137	0.215	0.0697	0.0495	J	
C	31130-017	31130-bc17	Pumpkinseed	161	276	91.2	4.3	4/14/2011	1200	DOE HASL 300	Potassium-40	2.31	0.796	0.512		

C	31130-018	31130-bc18	Pumpkinseed	136	260	79.6	2.4	4/14/2011	1200	DOE HASL 300	Cesium-137	0.202	0.0601	0.0378	J	
C	31130-018	31130-bc18	Pumpkinseed	136	260	79.6	2.4	4/14/2011	1200	DOE HASL 300	Potassium-40	2.83	0.759	0.559		
C	31130-019	31130-bc19	Pumpkinseed	118	190	67.6	2	4/14/2011	1200	DOE HASL 300	Cesium-137	0.13	0.0789	0.0893	J	
C	31130-019	31130-bc19	Pumpkinseed	118	190	67.6	2	4/14/2011	1200	DOE HASL 300	Potassium-40	3.45	1.12	0.98		
D	31153-001	31153-bc1	Brown Bullhead	340	1094	216.8	5	4/20/2011	1200	DOE HASL 300	Cesium-137	0.244	0.0441	0.0198	J	
D	31153-002	31153-bc2	Brown Bullhead	330	1076	240.1	6	4/20/2011	1200	DOE HASL 300	Cesium-137	0.216	0.0394	0.0156	J	
D	31153-003	31153-bc3	Brown Bullhead	318	886	199.7	5	4/20/2011	1200	DOE HASL 300	Cesium-137	0.178	0.0366	0.0213	J	
D	31153-004	31153-bc4	Brown Bullhead	311	1206	269.4	6	4/20/2011	1200	DOE HASL 300	Cesium-137	0.178	0.0335	0.0197	J	
D	31153-005	31153-bc5	Brown Bullhead	303	1104	240.8	5.3	4/20/2011	1200	DOE HASL 300	Cesium-137	0.204	0.0397	0.015	J	
D	31153-006	31153-bc6	Brown Bullhead	299	1002	229.2	5.7	4/20/2011	1200	DOE HASL 300	Cesium-137	0.22	0.0485	0.0251	J	
D	31153-007	31153-bc7	Brown Bullhead	290	992	223.9	5.7	4/20/2011	1200	DOE HASL 300	Cesium-137	0.189	0.0393	0.0212	J	
D	31153-008	31153-bc8	Brown Bullhead	281	872	190.1	5	4/20/2011	1200	DOE HASL 300	Cesium-137	0.199	0.044	0.0232	J	
D	31153-009	31153-bc9	Brown Bullhead	259	854	197.5	4	4/20/2011	1200	DOE HASL 300	Cesium-137	0.177	0.0354	0.0198	J	
D	31153-010	31153-bc10	Brown Bullhead	231	456	100.8	2.3	4/20/2011	1200	DOE HASL 300	Cesium-137	0.149	0.069	0.0524	J	
D	31153-011	31153-bc11	Brown Bullhead	203	314	68.4	2	4/20/2011	1200	DOE HASL 300	Cesium-137	0.131	0.0564	0.0393	J	
D	31153-016	11-176	Black Crappie	275	318	112.4	4	4/20/2011	1200	DOE HASL 300	Cesium-137	0.213	0.049	0.0314	J	
D	31153-017	31153-bc17	Black Crappie	144	158	61.1	2.3	4/20/2011	1200	DOE HASL 300	Cesium-137	0.185	0.105	0.0891	J	
D	31153-018	11-181	Bluegill	185	162	63.5	3	4/20/2011	1200	DOE HASL 300	Cesium-137	0.184	0.0585	0.0624	J	
D	31153-020	31153-bc20	Pumpkinseed	169	240	78.4	3	4/20/2011	1200	DOE HASL 300	Cesium-137	0.143	0.0634	0.0357	J	
D	31153-021	31153-bc21	Pumpkinseed	141	158	56.7	2.5	4/20/2011	1200	DOE HASL 300	Cesium-137	0.16	0.0481	0.0552	J	
D	31156-001	11-191	Brown Bullhead	335	568	144.5	6	4/21/2011	1300	DOE HASL 300	Cesium-137	0.189	0.061	0.0431	J	
D	31156-002	31156-bc2	Brown Bullhead	213	258	69.6	4	4/21/2011	1300	DOE HASL 300	Cesium-137	0.132	0.0756	0.0669	J	
D	31156-008	11-202	Largemouth Bass	402	772	233.6	6	4/21/2011	1300	DOE HASL 300	Cesium-137	0.178	0.0438	0.0253	J	
D	31156-009	11-203	Largemouth Bass	334	462	161.1	6	4/21/2011	1300	DOE HASL 300	Cesium-137	0.239	0.0517	0.0276	J	
D	31156-012	11-206	Bluegill	215	224	80.7	6	4/21/2011	1300	DOE HASL 300	Cesium-137	0.138	0.0599	0.0435	J	
D	31156-013	31156-bc13	Bluegill	165	220	84	4	4/21/2011	1300	DOE HASL 300	Cesium-137	0.189	0.0847	0.0705	J	
D	31156-014	31156-bc14	Bluegill	138	174	70.5	3	4/21/2011	1300	DOE HASL 300	Cesium-137	0.181	0.0582	0.0423	J	
D	31156-016	31156-bc16	Pumpkinseed	167	222	77.4	5	4/21/2011	1300	DOE HASL 300	Cesium-137	0.175	0.0517	0.0387	J	
D	31156-018	31156-bc18	Pumpkinseed	156	274	98.3	4.3	4/21/2011	1300	DOE HASL 300	Cesium-137	0.163	0.0524	0.043	J	
D	31156-019	31156-bc19	Pumpkinseed	153	250	84.7	3.7	4/21/2011	1300	DOE HASL 300	Cesium-137	0.178	0.0505	0.0407	J	
D	31156-020	31156-bc20	Pumpkinseed	152	244	92.8	3.7	4/21/2011	1300	DOE HASL 300	Cesium-137	0.133	0.0415	0.0274	J	
D	31156-021	31156-bc21	Pumpkinseed	136	232	82.5	3.5	4/21/2011	1300	DOE HASL 300	Cesium-137	0.175	0.0531	0.0515	J	
D	31156-022	31156-bc22	Pumpkinseed	115	192	75.2	4	4/21/2011	1300	DOE HASL 300	Cesium-137	0.147	0.0522	0.0491	J	
SR	29585-001	11-256	Brown Bullhead	320	490	146	5	5/6/2011	1200	DOE HASL 300	Cesium-137	0.0567	0.0412	0.05	J	
SR	29585-002	11-257	Largemouth Bass	280	308	76.8	6	5/6/2011	1200	DOE HASL 300	Cesium-137	0.13	0.0353	0.0445	J	

SR	29585-003	11-258	Largemouth Bass	232	176	64.9	4	5/6/2011	1200	DOE HASL 300	Cesium-137	0.104	0.0645	0.0475	J	
SR	29585-004	11-259	Chain Pickerel	340	264	108.2	3	5/6/2011	1200	DOE HASL 300	Cesium-137	0.189	0.0636	0.0526	J	
SR	29585-005	11-260	Chain Pickerel	330	184	68.7	3	5/6/2011	1200	DOE HASL 300	Cesium-137	0.117	0.101	0.0847	J	
MR	31108-001	11-001	Chain Pickerel	358	227.2	86.8	5	4/6/2011	1500	DOE HASL 300	Cesium-137	0.189	0.103	0.0962	J	
MR	31124-001	11-056	Brown Bullhead	293	334	83.9	6	4/12/2011	1500	DOE HASL 300	Cesium-137	0.0742	0.0507	0.0983	U	
MR	31124-001	11-056	Brown Bullhead	293	334	83.9	6	4/12/2011	1500	DOE HASL 300	Potassium-40	2.67	1.02	0.748		
MR	31124-002	11-057	Brown Bullhead	282	296	73.3	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.0889	0.054	0.0488	J	
MR	31124-002	11-057	Brown Bullhead	282	296	73.3	5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.23	0.909	0.523		
MR	31124-003	11-058	Brown Bullhead	281	276	76.2	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.146	0.0508	0.0496	J	
MR	31124-003	11-058	Brown Bullhead	281	276	76.2	5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.19	0.914	0.576		
MR	31124-004	11-059	Brown Bullhead	275	276	72.7	6	4/12/2011	1500	DOE HASL 300	Cesium-137	0.151	0.0655	0.0434	J	
MR	31124-004	11-059	Brown Bullhead	275	276	72.7	6	4/12/2011	1500	DOE HASL 300	Potassium-40	3.31	1.01	0.647		
MR	31124-005	11-060	Brown Bullhead	273	222	64.5	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.17	0.104	0.0864	J	
MR	31124-005	11-060	Brown Bullhead	273	222	64.5	5	4/12/2011	1500	DOE HASL 300	Potassium-40	2.84	1.37	1.01		
MR	31124-006	11-061	Brown Bullhead	271	246	71.3	6	4/12/2011	1500	DOE HASL 300	Cesium-137	0.157	0.0518	0.0525	J	
MR	31124-006	11-061	Brown Bullhead	271	246	71.3	6	4/12/2011	1500	DOE HASL 300	Potassium-40	2.56	0.805	0.504		
MR	31124-007	11-062	Brown Bullhead	271	236	68.1	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.0706	0.0576	0.0444	J	
MR	31124-007	11-062	Brown Bullhead	271	236	68.1	5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.72	0.869	0.504		
MR	31124-008	11-063	Brown Bullhead	269	254	76.1	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.154	0.0543	0.0658	J	
MR	31124-008	11-063	Brown Bullhead	269	254	76.1	5	4/12/2011	1500	DOE HASL 300	Potassium-40	2.87	1.08	0.946		
MR	31124-009	11-064	Brown Bullhead	257	222	61	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.113	0.051	0.0663	J	
MR	31124-009	11-064	Brown Bullhead	257	222	61	5	4/12/2011	1500	DOE HASL 300	Potassium-40	4.89	1.13	0.729		
MR	31124-010	31124-bc10	Brown Bullhead	255	444	119.8	6.5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.14	0.0386	0.0245	J	
MR	31124-010	31124-bc10	Brown Bullhead	255	444	119.8	6.5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.65	0.655	0.253		
MR	31124-011	31124-bc11	Brown Bullhead	254	380	99.3	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.092	0.0319	0.0257	J	
MR	31124-011	31124-bc11	Brown Bullhead	254	380	99.3	5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.25	0.766	0.311		
MR	31124-012	31124-bc12	Brown Bullhead	247	368	97.9	5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.118	0.0451	0.0401	J	
MR	31124-012	31124-bc12	Brown Bullhead	247	368	97.9	5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.58	0.971	0.396		
MR	31124-013	31124-bc13	Brown Bullhead	245	390	103.5	5.5	4/12/2011	1500	DOE HASL 300	Cesium-137	0.159	0.0373	0.0238	J	
MR	31124-013	31124-bc13	Brown Bullhead	245	390	103.5	5.5	4/12/2011	1500	DOE HASL 300	Potassium-40	3.84	0.718	0.139		
MR	31124-014	31124-bc14	Brown Bullhead	199	272	79.7	3.7	4/12/2011	1500	DOE HASL 300	Cesium-137	0.117	0.0717	0.0796	J	
MR	31124-014	31124-bc14	Brown Bullhead	199	272	79.7	3.7	4/12/2011	1500	DOE HASL 300	Potassium-40	3.64	1.09	0.812		
DP	29544-001	11-235	Brown Bullhead	354	700	205.9	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.173	0.088	0.0869	J	
DP	29544-001	11-235	Brown Bullhead	354	700	205.9	6	4/26/2011	1500	DOE HASL 300	Potassium-40	3.11	1.26	0.767		
DP	29544-002	11-236	Brown Bullhead	354	632	164.7	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0958	0.0736	0.0793	J	

DP	29544-002	11-236	Brown Bullhead	354	632	164.7	6	4/26/2011	1500	DOE HASL 300	Potassium-40	3.75	0.961	0.733		
DP	29544-003	11-237	Brown Bullhead	340	584	144.2	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0297	0.071	0.0849	U	
DP	29544-003	11-237	Brown Bullhead	340	584	144.2	6	4/26/2011	1500	DOE HASL 300	Potassium-40	2.38	1.32	0.787		
DP	29544-004	11-238	Brown Bullhead	337	546	110.7	14	4/26/2011	1500	DOE HASL 300	Cesium-137	0.163	0.0481	0.0472	J	
DP	29544-004	11-238	Brown Bullhead	337	546	110.7	14	4/26/2011	1500	DOE HASL 300	Potassium-40	3.28	0.931	0.481		
DP	29544-005	11-239	Brown Bullhead	335	478	88.9	7	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0939	0.0702	0.134	U	
DP	29544-005	11-239	Brown Bullhead	335	478	88.9	7	4/26/2011	1500	DOE HASL 300	Potassium-40	2.31	1.16	0.991		
DP	29544-006	11-240	Brown Bullhead	328	498	116.8	7	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0794	0.107	0.0964	U	
DP	29544-006	11-240	Brown Bullhead	328	498	116.8	7	4/26/2011	1500	DOE HASL 300	Potassium-40	3.6	1.35	1.08		
DP	29544-007	11-241	Brown Bullhead	321	538	108.5	10	4/26/2011	1500	DOE HASL 300	Cesium-137	0.116	0.0533	0.0575	J	
DP	29544-007	11-241	Brown Bullhead	321	538	108.5	10	4/26/2011	1500	DOE HASL 300	Potassium-40	2.81	0.975	0.663		
DP	29544-008	11-242	Brown Bullhead	318	512	113	9	4/26/2011	1500	DOE HASL 300	Cesium-137	0.112	0.0585	0.118	U	
DP	29544-008	11-242	Brown Bullhead	318	512	113	9	4/26/2011	1500	DOE HASL 300	Potassium-40	2.58	1.22	1.2		
DP	29544-009	11-243	Brown Bullhead	317	500	112.1	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0304	0.0761	0.129	U	
DP	29544-009	11-243	Brown Bullhead	317	500	112.1	6	4/26/2011	1500	DOE HASL 300	Potassium-40	3.34	1.54	1.26		
DP	29544-010	11-244	Brown Bullhead	305	434	99.3	5	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0486	0.049	0.0522	U	
DP	29544-010	11-244	Brown Bullhead	305	434	99.3	5	4/26/2011	1500	DOE HASL 300	Potassium-40	3.97	1.02	0.672		
DP	29544-011	29544-bc11	Bluegill	210	444	130.9	7	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0575	0.0758	0.14	U	
DP	29544-011	29544-bc11	Bluegill	210	444	130.9	7	4/26/2011	1500	DOE HASL 300	Potassium-40	3.13	1.58	1.22		
DP	29544-012	29544-bc12	Bluegill	210	404	93.5	5	4/26/2011	1500	DOE HASL 300	Cesium-137	0.227	0.0905	0.102	J	
DP	29544-012	29544-bc12	Bluegill	210	404	93.5	5	4/26/2011	1500	DOE HASL 300	Potassium-40	2.82	1.53	1.19		
DP	29544-013	29544-bc13	Bluegill	201	408	109	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0361	0.0769	0.131	U	
DP	29544-013	29544-bc13	Bluegill	201	408	109	6	4/26/2011	1500	DOE HASL 300	Potassium-40	3.27	1.06	1.22		
DP	29544-014	29544-bc14	Bluegill	195	352	100	4	4/26/2011	1500	DOE HASL 300	Cesium-137	0.0476	0.0498	0.0914	U	
DP	29544-014	29544-bc14	Bluegill	195	352	100	4	4/26/2011	1500	DOE HASL 300	Potassium-40	2.39	0.987	0.711		
DP	29544-015	29544-bc15	Bluegill	192	350	99.2	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.124	0.0529	0.104	J	
DP	29544-015	29544-bc15	Bluegill	192	350	99.2	6	4/26/2011	1500	DOE HASL 300	Potassium-40	4.45	1.19	0.937		
DP	29544-016	11-255	Pumpkinseed	196	162	60	6	4/26/2011	1500	DOE HASL 300	Cesium-137	0.107	0.0776	0.147	U	
DP	29608-001	11-262	Chain Pickerel	318	198	101.2	3	5/13/2011	1500	DOE HASL 300	Cesium-137	0.0715	0.0177	0.0153	J	
DP	29608-001	11-262	Chain Pickerel	318	198	101.2	3	5/13/2011	1500	DOE HASL 300	Potassium-40	2.77	0.423	0.175		
DP	29608-002	11-263	Largemouth Bass	254	228	95.4	5	5/13/2011	1500	DOE HASL 300	Cesium-137	0.0813	0.019	0.0171	J	
DP	29608-002	11-263	Largemouth Bass	254	228	95.4	5	5/13/2011	1500	DOE HASL 300	Potassium-40	2.26	0.427	0.188		

[1] Qualifiers

J - The associated numerical value is an estimated quantity.

UI - (Uncertain identification for gamma spectroscopy) - Radionuclide peaks that are detected but fail to meet the positive identification criteria.