Narragansett Bay Commission
2017 Data Report

Prepared by the Staff of the Environmental Monitoring & Data Analysis Section

April 20, 2018

Narragansett Bay Commission

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Introduction

The Narragansett Bay Commission

The NBC owns and operates the state's two largest WWTFs and provides quality wastewater collection and treatment services to about 360,000 persons and 7,700 commercial and industrial customers located in Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence, and small sections of Cranston and Smithfield.

The Narragansett Bay Commission (NBC) was created in 1980 by the Rhode Island General Assembly to reduce the amount of pollutants Providence's Field's Point Wastewater Treatment Facility (WWTF) was discharging into Narragansett Bay and its tributaries. At that time, nearly 65 million gallons of untreated sewage flowed into Rhode Island's waterways every day, resulting in temporary and permanent closures of shellfishing beds in upper Narragansett Bay, violations of federal laws, and most importantly, a serious threat to public health and the region's environmental and economic well-being.

The NBC acquired the facility from the City of Providence in 1982 and with statewide voter approval of an $87.7 million bond referendum, transformed this dilapidated facility, the third oldest WWTF in the nation, into a state-of-the-art award-winning facility. As the largest secondary WWTF in Rhode Island and the second largest in New England, the Field's Point WWTF provides preliminary and primary treatment for up to 200 million gallons per day (MGD) of wastewater, secondary treatment for up to 91 MGD, and had an average daily flow to the facility of 42.4 MGD in 2017. Construction of biological nutrient removal upgrades were completed in 2013 at Field's Point, and a new seasonal May through October total effluent nitrogen limit of 5.0 mg/L went into effect in May 2014. The seasonal May through October total nitrogen average for 2017 was 3.7 mg/L.

In 1992, the Rhode Island General Assembly expanded the NBC's mission by placing it in charge of the Bucklin Point WWTF in East Providence. This facility is designed to provide preliminary and primary treatment for up to 116 MGD, secondary treatment for up to 46 MGD, and had an average daily flow to the facility of 18.7 MGD in 2017. In 1999, supervisory management of this plant was privatized to Professional Services Group (PSG) and was managed by Suez Environment/United Water. On July 1, 2015, NBC resumed full management and operations of the facility.

Over the last fifteen years, the Bucklin Point plant has undergone major upgrades to include new screening and grit facilities, wet weather facilities capable of providing primary treatment and disinfection, new fine bubble-diffusion aeration system, nutrients removal facilities, and ultraviolet disinfection of wastewater, eliminating the need to add chemicals to disinfect and dechlorinate wastewater prior to discharge. Biological nutrient removal upgrades were completed in 2014 at Bucklin Point in order to meet a seasonal May through October permit limit of 5.0 mg/L total effluent nitrogen, which went into effect on July 14th, 2014. The seasonal May through October total effluent nitrogen average for 2017 was 4.6 mg/L.

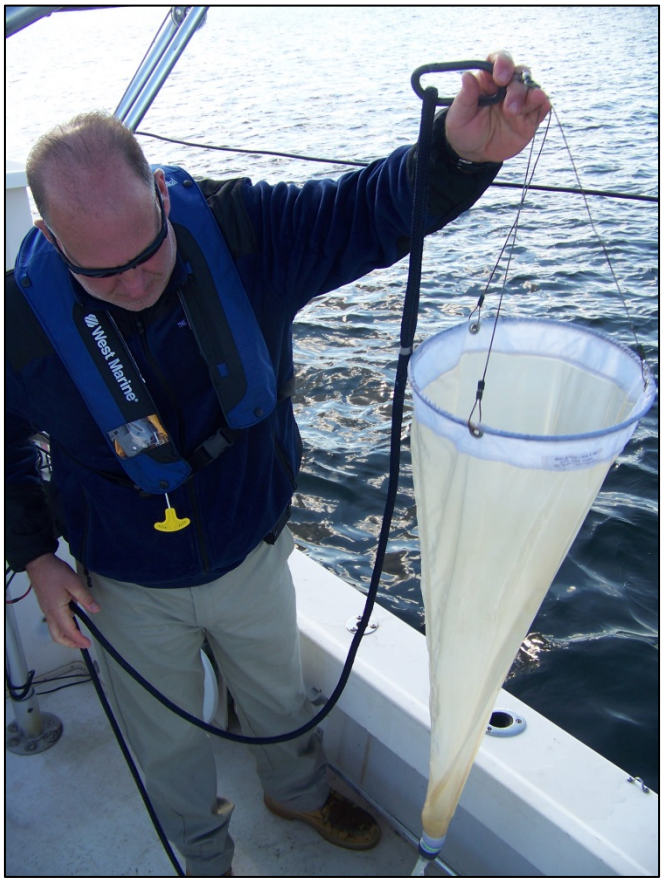
Environmental monitor collecting a sample at the Field's Point WWTF

Environmental Monitoring and Data Analysis Program Overview

The Environmental Monitoring and Data Analysis (EMDA) section evolved from the Pretreatment section, where prior to 1992, two Engineering technicians, assisted by Pretreatment staff, implemented the industrial and manhole monitoring activities. With the acquisition of the Bucklin Point WWTF in 1992, there were two separate and distinct Pretreatment programs, one for each treatment facility. Shortly thereafter, the two Pretreatment programs were united and the EMDA section was created within the NBC Planning, Policy and Regulation Division. Over the years, the EMDA section has evolved and is now responsible not only for industrial and manhole monitoring activities, but for all aspects of environmental monitoring for the NBC, outlined further below. EMDA staff also conducts many sampling initiatives to evaluate effectiveness of new technologies, such as nutrient removal and ultraviolet disinfection.

In 2002, the NBC was awarded a grant from the United States Environmental Protection Agency (EPA) to develop a website to provide real-time data of the upper Bay receiving waters of the NBC plant outfalls. A fixed-site station was constructed at an abandoned pier at Phillipsdale Landing in East Providence, and a state-of-the-art monitoring buoy was acquired and deployed at Bullock Reach, just north of Conimicut Point in upper Narragansett Bay. In 2005, these sites became permanently funded by the NBC. These sites continue to provide invaluable data to the Rhode Island Department of Environmental Management (DEM) and the scientific community over the past several years and played a key role to these stakeholders in their investigation to understand the August 2003 fish kills associated with hypoxic events in Narragansett Bay. In order to maximize the utility of the NBC monitoring program to area stakeholders, the NBC frequently works with members of the DEM, several universities, environmental groups, and is also a valuable contributing member of the Rhode Island Environmental Monitoring Collaborative, an organization formed by the Governor in 2004. The NBC coordinates monitoring activities with other agencies performing monitoring statewide, and as a result the NBC EMDA section's role in environmental monitoring and compliance issues continues to expand as compliance issues become ever more complex.

In 2016, the EMDA section and the NBC laboratory section moved into a centralized building,



Environmental monitor retrieving the plankton net onboard the RV Monitor

the Water Quality Science Building (WQSB), featuring state of the art laboratory space to continue and expand the numerous sampling and data analysis duties of the NBC. The WQSB is able to accommodate all sampling, monitoring, and analysis needs of the NBC.

The EMDA Section continues to perform the following monitoring activities:

- Daily sampling of NBC's two WWTFs to satisfy Rhode Island Pollutant Discharge Elimination System (RIPDES) requirements;
- Sampling of each Significant Industrial User at least twice annually to satisfy and exceed EPA Pretreatment Program mandates;
- Weekly monitoring of surveillance manholes to satisfy EPA mandates;
- Monitoring of sanitary manholes to obtain data required for local limits development;
- Weekly sampling of the urban rivers for bacteria analysis;
- Sampling of 20 locations in the NBC receiving waters (i.e., the Providence and Seekonk Rivers) for bacteria analysis;
- Bimonthly sampling of rivers entering the upper Bay from Massachusetts and Rhode Island for nutrients;
- Sampling of 7 locations at surface and bottom in the Providence and Seekonk Rivers for nutrients;
- Mapping of the Providence and Seekonk Rivers for chlorophyll, dissolved oxygen (DO), temperature, and salinity;
- Video surveys of the Providence River benthos to track changes in algae growth, species occurrences and other indicators of environmental health;
- Special project sampling for the NBC Engineering, Operations and other sections to assist in facilities planning, improvements to plant operations, etc.;
- Routine maintenance of the Fixed-Site Water Quality Monitoring buoy and land-based dock station to ensure accurate data for state partners and the public.

The NBC EMDA section has always done an excellent job of implementing monitoring initiatives; however, in the past, the public has had to specifically request data results of the NBC's sampling activities. The first EMDA annual report was published in 2005 to summarize the 2004 monitoring data and activities and provide statistical analyses to discern trends and fluctuations in the data over time. Due to the size and effort required to produce such a report on an annual basis, a more streamlined presentation of the data was created for monitoring results for each year since 2007 in order to get the data to the public in a timelier manner. This report serves as a format for public dissemination of all 2017 EMDA monitoring data.

Acknowledgements

This report has been prepared by the staff of the EMDA section, under the general direction of Thomas P. Uva, Director of Environmental Science & Compliance (ES&C). This report is a summation of the collective efforts by the Environmental Monitors and Monitoring Field Supervisors that collected 30,023 samples during 2017. It represents the countless hours of processing, compiling, analyzing and interpreting all the data by the Environmental Scientists and Assistant Manager, and data entry and general assistance by clerical staff.

The laboratory staff analyzed all of the samples collected by the EMDA section. In total, during 2017, the laboratory generated 112,465 analyses from the samples it received. A special acknowledgement and thank you to the NBC EMDA, Laboratory, and other ES&C staff that made this report possible:

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Field's Point and Bucklin Point WWTF Sample Collection Methodology

Introduction

It is the Narragansett Bay Commission's (NBC) mission to protect and enhance the water quality of Narragansett Bay and its tributaries through careful collection and treatment of wastewater from residences, businesses, and industries in the NBC District. The Environmental Monitoring and Data Analysis (EMDA) section's primary objective is to perform routine and adequate sampling of a wide variety of parameters to ensure that both the Field's Point and Bucklin Point wastewater treatment facilities (WWTF) are effectively meeting operational and Rhode Island Pollutant Discharge Elimination System (RIPDES) permit requirements. An extensive sampling schedule employing composite and grab samples within the two WWTFs at the raw influent, primary influent, primary effluent, mixed liquor, return activated sludge, final sludge, and final effluent are necessary to keep abreast of what is introduced to and discharged from each plant, and the removal efficiencies of all conventional and non-conventional pollutants. Synthesis of these data is a continuous and ongoing process with monthly evaluations required for RIPDES discharge monitoring reports as well as periodic evaluation of the local limits that the Pretreatment section uses to regulate industrial and commercial users and ensure that no upset, pollutant pass-through, process interference, or discharge permit limit violations occur. Clean sampling and sample-handling techniques, high quality laboratory measurements, and ease of access to data are the necessary ingredients to quickly identify potential problems within the plants, and to routinely reassess the removal efficiency of pollutants. All sample collection, preservation, and storage at the Field's Point and Bucklin Point WWTFs are performed with strict adherence to United States Environmental Protection Agency (EPA) protocols.

NBC's continuing goal is to improve receiving water quality by limiting the impact of WWTF effluent on Narragansett Bay. The NBC has analyzed and tracked the toxic pollutant loading trends at its treatment facilities since the creation of the agency. EMDA works in conjunction with the Pretreatment, Laboratory, Operations, and Engineering sections of NBC to conduct sampling of wastewater from its sources, throughout its collection and treatment systems, and ultimately to its final fate as either sludge or as effluent discharged to Narragansett Bay. In support of NBC's mission and RIDPES requirements, the EMDA section collected 30,023 samples and the NBC lab analyzed these samples for 112,465 parameters during 2017. WWTF sampling data for 2017 are attached and can be found in Tables 1–39. Table numbers are also referred to in each section below.

Collection of Samples at Field's Point and Bucklin Point

Samples collected to evaluate the WWTF processes are either composite samples collected over a particular time period or grab samples. Composite samples are formed by combining discrete samples taken at periodic points in time. Refrigerated ISCO autosamplers are used throughout Field's Point and Bucklin Point to collect composite samples on a regular predetermined basis. All refrigerated autosamplers are kept at 4°C. Grab samples are discrete samples collected at particular time periods but placed into separate sample bottles and analyzed as individual

samples. Samples are assigned to a sample date based on the “flow-day”, which is generally from 07:00 to 06:59 the following day, except as described in the following paragraph. Composite sampling therefore includes some sample water from the following calendar day.

The differences in sampling between Field’s Point and Bucklin Point mainly exist in the influent sampling at the interceptors into the facility and in the retention time used to determine when influent and effluent samples are collected. Field’s Point influent samples are collected on a time-paced basis at the single interceptor that feeds the facility, after bar screening and prior to grit removal tanks. When samples are collected for metals or nutrient analysis, the effluent samples are delayed by 12 hours with the goal of sampling the same parcel of water as it enters the plant for treatment and after treatment to evaluate the performance of the plant. For biological oxygen demand (BOD) and total suspended solids (TSS), the influent and effluent samples are collected without any time offset. Bucklin Point influent samples are collected on a time-paced basis from the two interceptors that feed the facility, the Blackstone Valley Interceptor (BVI) and the East Providence Interceptor (EPI). Composite samples are collected

Environmental monitor sampling at the Bucklin Point WWTF

from both interceptors and mixed flow-proportionally. Effluent samples are collected 17 hours later than the influent with the goal of sampling the same parcel of water to evaluate the performance of the plant. At both facilities, final effluent sample collections are time-paced and downstream of all treatment processes. The final effluent represents wastewater after complete treatment just prior to entering the receiving waters of the Providence or Seekonk River. Collection of the final effluent sample at Field's Point takes place after chlorination and dechlorination of the wastewater, in the outfall channel downstream of the chlorine contact tank. The final effluent sample at Bucklin Point is collected downstream of the UV chamber in the UV building. The following are more detailed descriptions of composite sampling at both WWTFs.

Composite Sampling at Field's Point

Composite sampling at Field's Point is done on a time-paced basis. All composite samplers sample the waste stream at 30-minute intervals and take a volume of 100 mL. The samples are combined into 24-hour composites of the wastewater at the sampling location. EMDA uses refrigerated ISCO 3700, ISCO 4700, and ISCO 6712 programmable autosamplers throughout Field's Point. The samplers are located at the influent/grit building, primary influent, primary effluent, mixed liquor east and mixed liquor west, wet weather tank influent and effluent, and final effluent. Temperatures of the samplers are maintained at 4°C (acceptable range is 1-6°C).

Two types of suction tubing are used for composite sampling at the Field's Point WWTF. Influent and effluent peristaltic samplers collecting trace metals samples use suction tubes lined with Teflon®. Teflon® has characteristics that enable it to be cleaned to trace-metal grade. Extra care is required in handling this tubing to prevent cracking due to its brittle nature. Peristaltic samplers not collecting trace metals samples use Tygon® tubing as suction lines. This tubing is much more resilient and pliable. The Teflon® and Tygon® suction lines both measure ½-inch in outer diameter and ⅜-inch in inner diameter. Sampler suction lines are changed semi-annually and pump tubing changed every month. A dilute sodium hypochlorite solution is used to clean both the Teflon® and Tygon® suction line and pump tubing of the autosamplers weekly. This procedure takes place at the autosampler collection site. The Teflon® tubing is also acid washed monthly.

The EPA released a report in 1994 assessing historically-used trace metals sampling procedures. The report found that the levels of contamination from the sampling/vessel cleaning process resulted in metals levels higher than the bodies of water being sampled. Following the report, the EPA developed a series of recommended techniques for clean sampling that EMDA follows specifically. For influent/grit building and final effluent autosamplers that collect wastewater analyzed for trace metals and nutrients, these clean sampling methods are used to reduce contamination. The method requires acid cleaning of composite containers prior to use, and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A Nalgene® polyethylene carboy is used to collect composite samples for analyses of these parameters.

Composite Sampling at Bucklin Point

Composite sampling at Bucklin Point is time-paced. The autosamplers sample the waste stream at 30-minute intervals and take a volume of 100 mL. The samples are combined into 24-hour composites of the wastewater at a sampling location.

All autosamplers used at the Bucklin Point WWTF are refrigerated peristaltic pump samplers. Autosamplers used include the ISCO sampler models 3700, 4700, 6712, and Sigma sampler model 9000. These samplers are located at BVI, EPI, primary influent, primary effluent, mixed liquor, final effluent, and wet weather effluent. Influent composite samples from the BVI and EPI are combined flow-proportionally and analyzed together for all parameters. All sample locations use the ISCO samplers, except for the primary effluent which uses the Sigma sampler. Temperatures of the refrigerated samplers are maintained at 4°C (acceptable range is 1-6°C) and their temperature is documented three times per day by EMDA staff. Each composite carboy container has been marked with a permanent marker to identify the sampling location at which it is used.

Influent and effluent peristaltic samplers collecting samples for trace metals use special suction tubes lined with Teflon®. Teflon® has characteristics that enable it to be cleaned to trace-metal grade. Extra care is required in handling this tubing to prevent cracking due to its brittle nature. Peristaltic samplers not collecting trace metals samples use Tygon® tubing as suction lines. This tubing is much more resilient and pliable. The Teflon® and Tygon® suction lines both measure ½-inch in outer diameter and ⅜-inch in inner diameter. Sampler suction lines are changed semi-annually and pump tubing changed every month. A dilute sodium hypochlorite solution is used to clean both the Teflon® and Tygon® suction line and pump tubing of the autosamplers weekly. This procedure takes place at the autosampler collection site. The Teflon® tubing is also acid washed monthly.

As mentioned above for Field's Point, Bucklin Point also uses the EPA-recommended clean sampling techniques for sample collection of wastewater for metals and nutrients analyses. The clean sampling method requires acid cleaning of composite containers prior to use and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A Nalgene® polyethylene carboy is used to collect composite samples for analyses of these parameters. Cleaning and handling of samplers, pump and suction tubing, and composite carboys are also outlined in the following sections under the specific parameters analyzed.

Sample Collection for Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Carbonaceous BOD (CBOD) and Bacteria Analyses at Field's Point and Bucklin Point

NBC's RIPDES permits require sampling of TSS and BOD daily using 24-hour composites at both the influent and effluent; new RIPDES permits effective December 1, 2017, replaced influent and effluent BOD monitoring with CBOD monitoring, though note the sample collection requirements for both BOD and CBOD are the same. As stated above, the influent and effluent samplers collect samples from the waste stream at 30-minute intervals. Carboys with collected

sample water are brought to the NBC laboratory for analysis every morning around 08:00. EMDA staff clean sample carboys used for TSS, BOD, or CBOD collections in the dishwasher after each use, and carboys are replaced as necessary.

At the Field's Point WWTF, two grab samples are taken at the effluent per flow day for fecal coliform bacteria analyses; under the new RIPDES permit, effective December 1, 2017, fecal coliform sampling at Field's Point was reduced to once per day, and was replaced with twice daily sampling for Enterococci. EMDA staff takes the first fecal coliform sample at 08:00; operations staff takes the second sample in the time frame of 03:00-05:00. The final fecal coliform value for that day is a geometric mean of the two grab samples as well as any duplicate samples or extra samples collected that day. At the Bucklin Point WWTF, four effluent grab samples are taken throughout the day for fecal coliform analysis; under the new RIPDES permit, effective December 1, 2017, fecal coliform sampling at Bucklin Point was reduced to once per day. A geometric mean is then determined from these results and any duplicate or extra samples and is assigned as the fecal coliform value for that day.

The procedure for fecal coliform sampling at both WWTFs is as follows:

- Wearing new, clean nitrile gloves, place sample container in sampling device (an open-ended PVC cylinder with the bottle held in place by a small screw running through the cylinder body. A line is attached to the cylinder body for lowering into the water).
- Open the sterile 250-ml container. Do not use if seal is broken before opening. Make sure that the sodium thiosulfate pellet remains in the bottle throughout the collection process. This chemical neutralizes residual chlorine if present.
- Place sampling device into the center of the stream, 6 inches below surface, to collect sample.
- Container must be filled to the "EPA FILL LINE".
- Remove sample bottle from the sampling device and close container.
- Secure and seal the sample cover.
- Place label on container with time, date, collector's initials, and the operator-collected TRC value (TRC at Field's Point only) in ppm.
- Place sample in cooler with ice and transport directly to NBC laboratory.

Since 2010, a subset of grab samples for fecal coliform has also been analyzed for enterococci bacteria. Under the most recent RIPDES Permit, effective December 1, 2017, enterococci monitoring is required twice per day at both Field's Point and Bucklin Point; these samples are collected as outlined above for fecal coliform sampling.

TSS, BOD, and CBOD daily data and enterococci and fecal coliform daily geometric mean data for 2017 can be found in the attached Tables 1 and 2. Enterococci and fecal coliform sample results can be found in Tables 3 and 4.

Sample Collection for Trace Metals and Cyanide Analyses at Field's Point and Bucklin Point

Toxic pollutant monitoring requirements include 24-hour composite sample collections for the analysis of trace metals and cyanide at both treatment facilities. Under the RIPDES permit in effect through November 2017, the pollutants monitored at Field's Point included copper, mercury, nickel, silver, zinc, and cyanide; under the newest permit, monitoring requirements for mercury and silver were eliminated and arsenic, cadmium, hexavalent chromium, lead, and aluminum monitoring was added. At Bucklin Point, under the old permit, copper, lead, mercury, nickel, silver, zinc, hexavalent chromium, and cyanide monitoring was required; under the new permit, monitoring requirements for mercury and silver were eliminated and cadmium and aluminum monitoring was added. Metals and cyanide measurements are required twice-weekly at both plants except for zinc at Field's Point and cadmium, aluminum, hexavalent chromium, and lead at each plant, which are required once per month. Other metals that are analyzed for but are not required by the RIPDES permits include iron, selenium, molybdenum, and tin. Since monitoring requirements were eliminated under the new RIPDES permits, NBC has also continued to monitor silver and zinc at a reduced frequency. Metals and cyanide data for 2017 can be found in the attached Tables 5-12.

The current method for collection of cyanide at both Field's Point and Bucklin Point mandates nine grab samples to be collected over a 24-hour period, separated by a minimum of two hours. The autosamplers collect discrete samples for cyanide analysis into one-liter containers that are pre-preserved with sodium hydroxide. These samplers collect a 300 mL sample every two hours for 48 hours, once per week. At Bucklin Point, composite samples for cyanide and metals at the influent are collected from both interceptors, the BVI and EPI, and are composites of nine separate grab samples at each location. These samples are then mixed flow-proportionally. At both plants, nine of the twelve grab samples from each twenty-four hour sampling period are composited into a 2-liter HDPE bottle. The pH is tested to ensure it is greater than 12 standard units (s.u.) before compositing. The composite is poured off into a 500-mL brown HDPE bottle.

For influent and final effluent autosamplers that collect wastewater analyzed for trace metals, a special clean sampling method is used to reduce contamination. The method requires acid cleaning of composite containers prior to use, and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A 15-liter Nalgene® polyethylene carboy is used to collect composite samples. Carboy cleaning procedures and quality assurance measures are in place to ensure clean and proper sampling. Acid-washed carboys are put into place twice weekly at the influent and effluent to collect samples to be tested for trace metals and nutrients; this is in conjunction with the samples collected for cyanide. Monthly post-cleaning blanks are collected from the acid-washed carboys to ensure the success of the cleaning procedure. These blanks are collected by adding deionized (DI) water to a cleaned carboy, swirling the DI water in the carboy, and letting it sit overnight refrigerated. The DI water is then poured off into pre-labeled, pre-cleaned containers for analysis of parameters of interest.

Field blanks are taken each time a sample is collected for mercury at both Field's Point and Bucklin Point. The procedure for collecting a field blank consists of transporting sufficient DI

water into the field and collecting a sample of that DI water using identical sampling and preserving procedures that are used in collecting the mercury sample.

Sample Collection for Nutrients Analysis at Field's Point and Bucklin Point

Permit requirements for nutrients were modified by the DEM in 2005 as part of new permit limits issued to reduce the amount of nitrogen discharged to Narragansett Bay. The permit requirements mandated monitoring of nitrate, nitrite, and total Kjeldahl nitrogen (TKN) three times per week. Ammonia monitoring permit requirements remained at twice weekly, but NBC has sampled all nutrient parameters three times per week since August 1, 2005. Seasonal effluent discharge limits of 5.0 ppm for total nitrogen were proposed in the 2005 RIPDES permit modification. In June 2006, a consent agreement was signed, which imposed a seasonal interim effluent permit limit of 18.2 ppm for total effluent nitrogen at Field's Point and 10.0 ppm for Bucklin Point. In May 2009, the DEM modified the consent agreement for Bucklin Point to impose a seasonal interim total effluent nitrogen limit of 8.5 ppm. NBC worked diligently to maximize nitrogen removal at Bucklin Point and achieved significant reductions in nitrogen loading. However, NBC determined that additional modifications were required to achieve compliance with the nitrogen limit of 5 mg/L as set forth in the consent agreement. Major facility upgrades and renovations were necessary to implement biological nutrient removal (BNR) technology at each plant. Field's Point completed these upgrades in 2013, and the Consent Agreement effluent total nitrogen limit of 5.0 mg/L went into effect on May 1st, 2014; Bucklin Point completed upgrades and began operations under this limit on July 14th, 2014.

Nutrients are analyzed from 24-hour composite influent and effluent samples. Sample collection carboys are dishwasher cleaned, acid washed, and DI water rinsed before they are placed at their sampling location. Equipment blanks are collected every other month from the acid-washed carboys and pump tubing and are used to verify the absence of sample contamination.

All nutrient samples are analyzed by the NBC laboratory. The nutrients analyzed are TKN, nitrite, nitrate, ammonia, and total phosphorus. TKN comprises the ammonia nitrogen and organic nitrogen in a sample. The organic nitrogen component is necessary to determine and monitor total nitrogen. Nitrate is determined by difference from a combined nitrite+nitrate measurement and a nitrite measurement. A nutrient autoanalyzer acquired by NBC's laboratory in 2004 showed improved analysis efficiency for nutrient measurements, and analytical results with better precision and accuracy than previous analyses. NBC's laboratory continues to update their techniques and equipment to ensure high-quality data; the nutrient autoanalyzers currently online and in use were acquired in 2016 and 2017. WWTF nutrients data for 2017 can be found in Tables 13 and 14.

Sample Collection for Oil and Grease Analysis at Field's Point and Bucklin Point

The NBC RIPDES permits require effluent sampling for oil and grease by three grab samples collected over the course of a 24-hour period, with one grab per shift, once per month at each facility. The grabs are analyzed separately and the maximum is reported on the monthly DMRs, though the RIPDES permit does not set a discharge limit. The NBC conducts similar sampling of

the influent for oil and grease at each facility as well, though these data are not reported on the monthly DMR.

Oil and grease samples are collected using a pre-cleaned bottle, which is labeled with collection time and date, site, and the parameter to be analyzed. The cap is removed, taking care to avoid contamination, and the sampler is lowered just below the surface. The bottle is filled and then recapped. Oil and grease grabs are preserved with hydrochloric acid to a pH less than 2 s.u. by EMDA staff as soon as possible after collection. These samples are then brought to the NBC lab for analysis. Oil and grease average results for 2017 can be found in the attached Table 15.

Sample Collection for Effluent Dissolved Metals Analysis at Field's Point and Bucklin Point

In 2000, the NBC began a study to monitor the dissolved fraction of metals in the effluent discharged to the receiving waters of the Providence and Seekonk Rivers. During 2017, monthly samples were taken in the Field's Point and Bucklin Point effluent and were analyzed for dissolved metals. The NBC and DEM use these data to better understand the fate, effect, and physical partitioning of metals discharged from the WWTFs. Metals in the dissolved form are more readily absorbed by marine life than metals associated with particles, therefore the EPA and DEM have established fresh and saltwater water quality criteria for dissolved metals concentrations. However, WWTFs are permitted for total metals only. Therefore, the DEM must use a "metal translator conversion factor" to set appropriate total metals limits for a WWTF, based upon the dissolved metals water quality criteria. By conducting monthly sampling for both total and dissolved metals, the NBC will be able to better assess the phase partitioning of metals in its effluent and in the receiving waters and better inform the use of metal translators.

Effluent dissolved metals samples are split from the effluent total metals composite sample on the first Tuesday of each month. The effluent total metals sample is a 24-hour composite sample taken after treatment of the wastewater is complete, just before entering the Providence River. As part of a quality assurance plan, the NBC lab analyzes laboratory equipment blank samples along with the dissolved metals to ensure accurate results. Effluent dissolved metals data results for 2017 can be found in Tables 16 and 17.

Collection of Final Effluent for Quarterly Bioassay Analyses

The two NBC WWTFs are required to conduct quarterly bioassay studies to determine whole effluent toxicity (WET) to test organisms. These bioassays use the response of organisms to effluent at varying dilutions to detect and measure the potential impact of substances, wastes, or environmental factors, alone or in combination as they exist in the effluent. NBC met the quarterly bioassay sampling frequency requirements during 2017 for both facilities. Effluent samples are collected only in dry weather, defined as no rain 48 hours prior to or during sampling. These samples are 195 mL composites of wastewater collected every 30 minutes over the course of 24 hours. The back-up automatic composite samplers are used for this sampling and are cleaned and maintained in the same way as those collecting samples for TSS, BOD, or CBOD, with sample carboys cleaned in the dishwasher after each use and replaced yearly.

Two bioassay tests are performed as required by the NBC RIPDES permits. An acute toxicity test is conducted to examine survival of test organisms, the mysid shrimp *Americamysis bahia*, in varying concentrations of effluent. The second test is a chronic toxicity test which examines the effect of effluent on fertilization success in eggs of the sea urchin *Arbacia punctulata*. Both tests are conducted in five concentrations of effluent plus a control: 100% effluent, 50% effluent, 25% effluent, 12.5% effluent, and 6.25% effluent. Natural seawater is used for both the control treatment and dilutions of effluent.

Acute toxicity test results are summarized using the LC_{50} and the A-NOEC statistics. The LC_{50} result is defined as the concentration of wastewater that causes mortality to 50% of the test organisms, *A. bahia*; the permit requirement of 100% or greater is defined as a sample which is composed of 100% effluent. A-NOEC or Acute-No Observable Effect Concentration is defined as the highest concentration of the effluent in which 90% or more of the test animals survive, and is monitored though there is no permit limit. The chronic test results are summarized using the C-NOEC or Chronic-No Observed Effect Concentration statistic. The permit limit for Bucklin Point is 50% or greater for this parameter while at Field's Point the permit requires only monitoring.

The WET tests are designed to supplement effluent monitoring to determine whether the combination of chemical species present in a WWTF's effluent is toxic to test organisms. The monitoring for individual pollutants is targeted towards ensuring that the concentrations of the individual pollutants are at levels which do not pose harm to aquatic organisms. The WET tests are an attempt to determine the synergistic impact of NBC effluent on organisms in the receiving waters. All bioassay analyses are performed by third party laboratories contracted by NBC and are conducted in accordance with protocols listed in most recent edition of the EPA document: Cornelius I. Weber, et al., 1991, Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms. Bioassay data results for 2017 can be found in attached Tables 18 and 19.

Sample Collection for Sludge Analysis at Field's Point and Bucklin Point

Sludge from Field's Point WWTF is collected daily; sludge from Bucklin Point WWTFs is collected Monday through Saturday only, as the contractor processing the sludge is closed on Sundays. Sludge from each plant is analyzed for total solids (TS) and volatile solids (VS). Sludge samples are also analyzed one to two times per month for metals and cyanide. The Field's Point WWTF sludge is handled by an outside contractor. Grab samples are taken throughout the day by the contractor and composited in one 4-L container. EMDA staff then pours part of this composite into a 16-oz. container for delivery to the lab by 08:00 the next day. These containers are disposed of after a single use. At the Bucklin Point WWTF, an outside contractor also processes the sludge. Similar to Field's Point, the contractor staff takes grab samples throughout the day and composites these into a 4-L container at the end of the day. This is stored in the refrigerator until EMDA picks up the sample the next morning. EMDA staff mix the sample and pour off approximately 500 mL into a smaller container to bring to the lab for analysis. Data results from sludge sampling for 2017 can be found in attached Tables 20-23.

Sample Collection for EPA Priority Pollutants: Volatile Organic Compounds (VOCs)

Grab samples are collected monthly at influent and effluent locations to be analyzed for volatile organic compounds (VOC), a subset of the EPA Priority Pollutants. The same type of glass jars used for oil and grease samples are used for the grab collection of VOCs. The glass jar is fastened to the end of a pole and dipped into the wastewater to collect the sample. This sample is then poured off into three pre-preserved 40-mL glass vials. The glass vials have each been pre-preserved with 3 drops of hydrochloric acid before collection. The glass vials are then transported to the laboratory for analysis. VOC data results for 2017 can be found in attached Tables 24 and 25.

Sanitary Manhole Sampling

EPA and RIPDES permit regulations require the NBC Pretreatment Program to reevaluate local discharge limitations every five years. In order to complete this task, the NBC must monitor sanitary manholes to evaluate pollutant loadings from residential sources upstream of any industrial or commercial facilities. These background loadings are outside the realm of regulatory control by the NBC Pretreatment Program; however, NBC must understand these loadings in order to determine acceptable loading limits for industrial users to maintain effective

Sanitary Manhole Sampling

pollutant removal at the treatment facilities. These samples reveal the composition of what is being introduced into the collection system in a more site-specific way than the influent composite samples. The NBC began sanitary sewer manhole sampling in 1993, and in 2000, EMDA began to make these collections using EPA-approved clean sampling techniques. As laboratory detection limits continue to decrease due to improved clean sampling techniques, these data become a more precise measure of the amount of uncontrolled toxic chemicals that enter the NBC collection system from residential, non-industrial sources.

To collect these samples, automated sampling devices are suspended in the sanitary manholes and are programmed to collect 100 mL of wastewater every fifteen minutes for 24 hours, starting in the early morning on a weekday. The aliquots collect into a 10-L acid-washed Nalgene® jug, and the composite sample is later poured off into specified containers for each analytical parameter including total metals, cyanide, TSS and BOD, and mercury.

The initial pH of the composite is taken and recorded on a chain-of-custody document, and for those parameters that require preserving, the preservative used is marked and the final pH is recorded. After every use, the automated sampling device tubing and jug are acid cleaned, rinsed with DI water, and a cleaning blank is produced.

BOD, TSS, cadmium, chromium, copper, lead, nickel, molybdenum, silver, zinc, cyanide, mercury, arsenic, selenium, and tin were measured in both Field's Point and Bucklin Point district sanitary manholes in 2017.

In addition to informing the calculation of local limits that the NBC imposes on its industrial users, sanitary manhole data is essential for providing a point of comparison and screening of collection system data to determine problem areas within the collection system. Sanitary manhole testing results for 2017 can be found in Table 26.

Significant Industrial User (SIU) Sampling

The EPA requires that all significant industrial users (SIU) be sampled at least once every twelve months. NBC has established a more stringent goal to sample each SIU twice per year. Information regarding industrial flows to NBC facilities is gathered through SIU and industrial manhole sampling, in addition to required user self-monitoring. The industrial manhole sampling is an additional means to track chemical spills or concentrated discharges, as well as to ensure that industrial users are in compliance with the limits set by the NBC. The NBC collected 4,272 individual sample analyses from SIUs within both service districts during 2017. These samples were analyzed for numerous parameters and resulted in 184 sets of SIU results. SIU data for 2017 can be found in Tables 27A and 27B.

Industrial manhole sampling activities are designed to isolate a specific business within the collection system to surreptitiously determine the typical discharge from the business. Samples are taken upstream and downstream of a significant user’s discharge point via manholes. The upstream sample serves to establish a background concentration with which to compare the results from the industry, as well as confirm that the source of any contaminants is from the permitted user, not additional sources. The distance between these two sampling locations is

typically 150 feet, depending on the location of the nearest manhole. Sampling of industrial manholes in 2017 resulted in 291 sets of data, with 2,316 individual parameters analyzed within both service districts.

As with sanitary manhole sampling, autosamplers are programmed to collect samples from each manhole location every 15 minutes for 24 hours, thereby providing a composited representation of the average discharge over that time period. Autosamplers can dispense the water collected into up to 24 sample bottles, thereby allowing for an intensive analysis of the variations within the upstream and downstream sample locations, if necessary.

A Tygon® suction line with a stainless-steel strainer attached at the end is used to collect samples from the middle of the waste stream. Samples are immediately checked for sulfides and chlorides using lead acetate and potassium iodide indicator paper, respectively, as these chemicals can interfere with cyanide measurements.

Cyanide sample pH is adjusted using sodium hydroxide to a pH above 12 s.u., while metals samples are acidified using trace metal grade nitric acid to a pH of less than 2 s.u. Samples are analyzed for cadmium, chromium, copper, lead, nickel, silver, zinc, and cyanide. All metals were analyzed by Inductively Coupled Plasma (ICP) at the NBC laboratory.

The implementation of clean sampling techniques at the NBC has provided additional means of confirming that industrial discharges do not exceed treatment capacity. The EMDA SIU sampling supplements self-monitoring activities of each industrial user, providing a means for enforcing local limits for pollutants.

Septage Sampling

The NBC receives septage waste (waste pumped out of septic tanks) at the Lincoln Septage Receiving Station in Lincoln, RI. The Lincoln Station input point is within the Bucklin Point service district, approximately 11 miles from the Bucklin Point facility. The septage is routinely monitored by the EMDA section for toxic constituents to ensure that the material received does not contain toxics in concentrations that exceed NBC's Pretreatment Industrial Discharge Limitations for the Bucklin Point WWTF, to which the waste ultimately discharges. This sampling also helps NBC evaluate the percent of metals loading received from septage into the Bucklin Point WWTF. Grit removal at the septage facility removes a portion of the metals loading prior to its introduction to the sewer system and the treatment plant. Prior to septage samples being collected, Interceptor Maintenance (IM) staff sample and screen each septage truck's waste delivery for quality by looking at the physical characteristics and by measuring pH during the pump-out at the septage facility. Septage samples are collected from each delivery truck after the sample port is flushed thoroughly, usually after the load has discharged for approximately one minute. The sample from an individual truck is screened for pH, odor, and other unusual characteristics. If any anomaly is observed, the sample is targeted for individual analysis; otherwise, it is composited with samples from each of the septage truck deliveries that day and sent to the laboratory for analysis.

Septage samples are collected daily Monday-Saturday. All six daily composite samples are kept refrigerated until they are picked up by EMDA staff on Mondays at the Lincoln Septage Station and are brought to the NBC lab that same day, barring unforeseen circumstances. Three daily samples are chosen at random and analyzed by the NBC laboratory for trace metals each week.

Revised septage sample collection techniques and equipment were introduced in June of 2004. The new equipment allowed for easier, in-line sampling during septage delivery and has helped to more quickly locate potential toxic inputs to the collection system. These more representative sampling techniques may partially explain the observed increase in septage metal loadings since 2004.

During 2017, 156 septage samples were analyzed for trace metals. Septage sample results for 2017 can be found in Tables 28 and 29.

NBC Receiving Waters Monitoring Activities

Introduction

The NBC not only monitors wastewater from the sources (e.g., industries and manholes) to the WWTFs and throughout the plant process, but also monitors the receiving waters, where treated effluent and combined sewer overflows (CSOs) enter. Receiving waters monitoring includes sampling the surrounding urban rivers and upper Narragansett Bay as well as some of the rivers that enter the upper Bay from Massachusetts. This monitoring is vital to determining the impact of NBC effluent on the river and bay ecosystems. The data are useful in evaluating the success of the CSO Abatement Project in the upper Bay and provide insight into the response of the receiving waters to WWTF upgrades. The EMDA section's role in environmental monitoring and compliance issues also continues to expand as compliance issues become ever more complex.

In 2017, EMDA continued sampling for nutrients at several locations in Narragansett Bay and within the watershed at both local river stations and at river stations on the MA/RI border. These measurements are aimed at effectively characterizing the magnitude, composition, and distribution of nutrient inputs to these rivers, and comparing these results to previous years to examine factors influencing nitrogen loading into the Bay. The characterization of nutrient loading dynamics is integral to understanding nutrient pollution issues. Determination of background loadings, effluent discharge impacts, and fate of nutrients from the NBC facilities are necessary components of a sound environmental policy. This initiative was undertaken to gain greater insight into the nutrient cycling within the rivers, and to help quantitatively define the amount of nitrogen that the WWTFs can safely discharge without adversely impacting water quality.

In addition to nutrient sampling, the NBC conducts routine field sampling for bacteria in the local freshwater rivers and the estuarine waters of the Providence and Seekonk Rivers. Specifically, fecal coliform and enterococci are monitored as they are widely accepted as indicators of potential presence of pathogens (disease-causing organisms) in waterbodies. Generally, if bacteria counts are elevated, there is a high potential for the presence of pathogens that could be harmful to both humans and wildlife. Raw, undiluted sewage contains high levels of both fecal coliform and enterococci bacteria because this type of bacteria is found in the feces of all warm-blooded animals, including humans. The wastewater treatment process at NBC's facilities eliminates almost all of these bacteria after the waste stream passes through primary and secondary treatment and, ultimately, disinfection via chlorination or ultraviolet light. Final effluent wastewater discharged from the Field's Point and Bucklin Point WWTFs typically has very low levels of fecal coliform and enterococci bacteria.

Both fecal coliform and enterococci data are utilized by State agencies to monitor water quality in the Bay and rivers. Measurements of enterococci bacteria, considered a more accurate metric for potential human health impacts from primary contact, were adopted to replace fecal coliform as the primary bacteriological indicator for both fresh and saline waters in 2006. Fecal coliform criteria are only applied when enterococci data are not available. However, shellfishing standards

continue to be based on fecal coliform bacteria levels. Collecting data for both groups of indicator bacteria also allows the NBC and others to evaluate whether there is a consistent relationship between enterococci and fecal coliform results in the receiving waters environment.

Bacteria monitoring is particularly important for evaluating the impacts of the NBC's combined sewer system. During large rain events, the two treatment facilities use special wet weather treatment tanks to treat and disinfect the higher volumes of combined rainwater and sewage influent. However, during intense rain events when the collection system is overwhelmed, the NBC's combined sewer outfalls (CSOs) can send untreated stormwater and sewage that the collection system cannot contain directly into the freshwater rivers and upper Bay. The NBC river bacteria monitoring stations are strategically located upstream and downstream of CSOs to regularly evaluate their impact.

EMDA also conducts monitoring of particular CSOs themselves during wet weather events that cause these outfalls to discharge. The NBC has embarked on an historic public works project to eliminate the negative impact that CSOs can have on water quality, with a three phase CSO Abatement Project of which Phase I began operation in the fall of 2008. Phase II systems were completed and online as of the beginning of 2015. Phase III of the project is in the planning stages.

As part of investigating the overall health of the Bay, the NBC also maintains two water quality monitoring stations located at a dock at Phillipsdale Landing in the Seekonk River and a buoy at Bullock Reach in the Providence River. The monitoring sites are continuously collecting data on the conditions of the water such as temperature, dissolved oxygen, salinity, pH, chlorophyll, and turbidity.

River and Bay Nutrient Monitoring

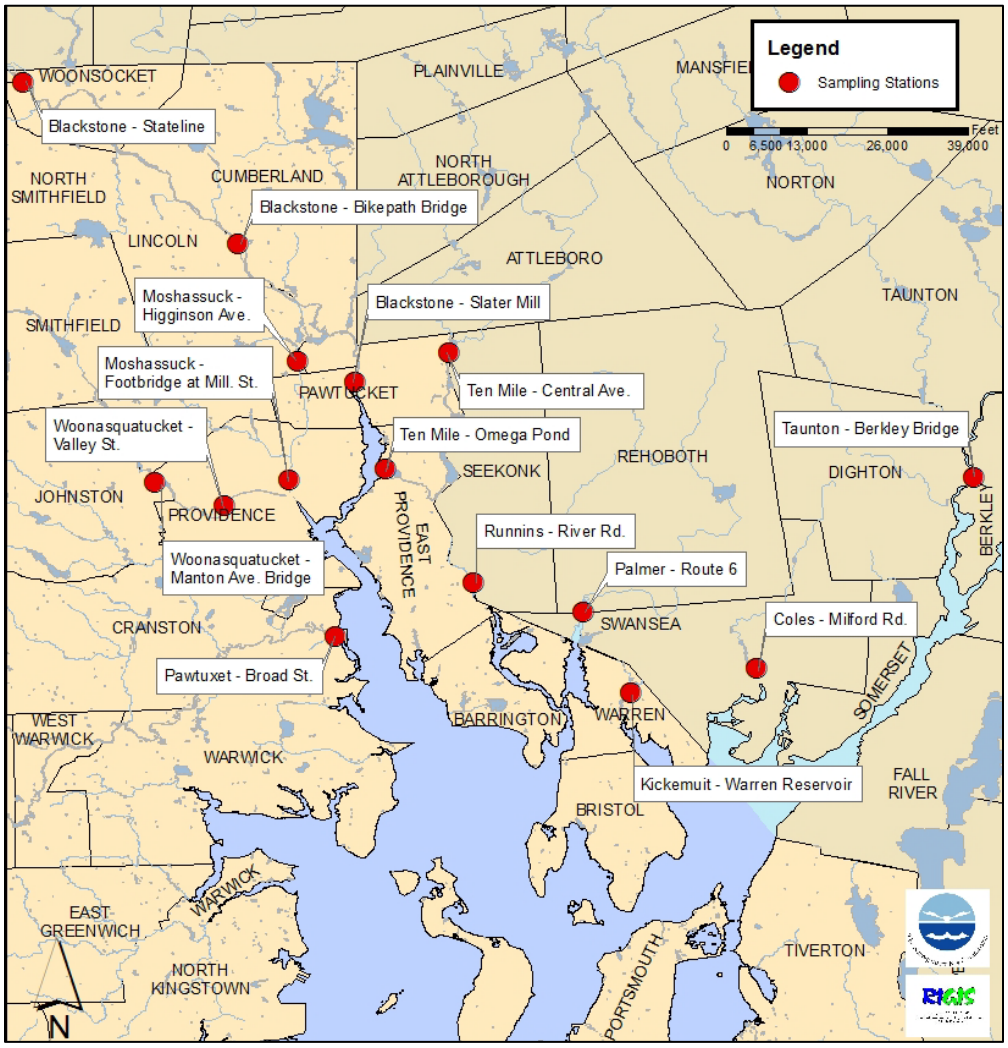
The NBC has been proactive in responding to the environmental concerns regarding Narragansett Bay and the state of Rhode Island. As a part of a continuing effort to both address and understand the magnitude of the impacts that facility operations have on our receiving waters, an intensive sampling program of the urban and local rivers that are part of the Narragansett Bay watershed has been developed for nutrient analysis and loading determination. This sampling program was designed to encompass two components: an evaluation of the loadings from the urban rivers that empty into Narragansett Bay just upstream of tidal influence, and an evaluation of the nutrients entering Narragansett Bay from Massachusetts. Both components are important to accurately determine the nutrient inputs to Narragansett Bay as well as a means of determining the impact of sources outside of the NBC service district. By determining the magnitude and relative importance of these loads, the NBC will be able to more accurately determine the impact of biological nutrient removal (BNR) systems as well as planned future facility upgrades at both the Bucklin Point and Field's Point facilities. These data will also contribute to developing a thorough understanding of nutrient fluxes to Narragansett Bay.

The NBC initiated nutrient monitoring of the local urban rivers in 2005, and expanded the sampling locations and increased the frequency of sampling in 2006. An additional station was added on the Ten Mile River in December 2011 to get a better representation of nutrient loadings

from Massachusetts into this river. In 2017, there were fifteen sample stations monitored one to two times per month. In the beginning of the program in 2005 and 2006, sample splits were also submitted to both the NBC and the University of Rhode Island Graduate School of Oceanography Marine Ecosystems Research Laboratory (URI GSO MERL) facilities to assure data quality. The locations of sample stations can be found in Figure 1.

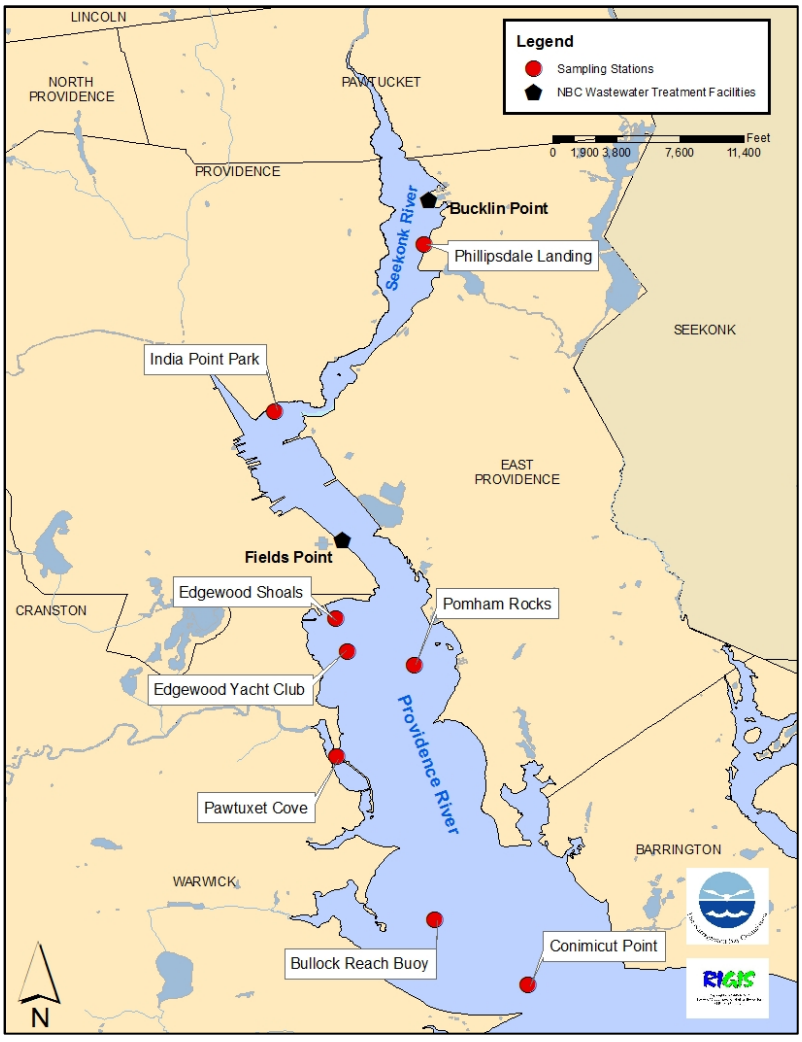
River nutrient samples are taken at a depth of approximately 0.5 to 1 meter below the surface using a peristaltic pump, Tygon® tubing, and new plastic sample bottles. All tubing and sample bottles are acid washed and then rinsed with DI water before the sampling event, and tubing is rinsed with DI water between sample stations. DI water field blanks and duplicates are collected in order to determine the accuracy and precision of sampling methods and sample handling techniques. In addition to these sampling QA/QC measures, the NBC laboratory has a rigorous analytical QA/QC program in place for all nutrient samples.

Figure 1: NBC River Nutrient Sampling Stations



To measure any direct changes in nutrients in the upper Bay as a result of WWTF upgrades and the CSO Abatement Project, the NBC began sampling for nutrients in the Providence and Seekonk River estuaries during the summer of 2005. The direct water column nutrient measurements provide an important look at the amount of nutrients in the upper Bay from all sources, including river loading, surrounding WWTFs, atmospheric deposition, groundwater, runoff, failing septic systems, and nutrients from the middle and lower Bay area as well as from offshore. Original bay sampling stations in 2005 included five surface stations and one bottom station. These bay stations included Conimicut Point, Edgewood Yacht Club, Pomham Rocks, and India Point Park at the surface and Phillipsdale Landing at the surface and bottom. In July 2006, one additional bay station was added as well as bottom samples at all bay stations. The new bay station was located at the Bullock Reach Buoy, where the NBC fixed-site continuous water quality monitoring buoy is located. In August of 2012, a seventh site was added in Pawtuxet Cove, near the mouth of the Pawtuxet River, at the channel marker of Red Can #6. This site was added to observe the effects of the Pawtuxet River on upper Narragansett Bay. As seen in Figure 2, the Conimicut Point, Bullock Reach Buoy, Pawtuxet Cove, Edgewood Yacht

Figure 2: NBC Bay Nutrient Sampling Stations



Environmental monitor filtering a chlorophyll sample onboard the NBC research vessel

Club, and Pomham Rocks stations are located in the Providence River. The Phillipsdale Landing station is located in the Seekonk River at our fixed continuous water quality monitoring dock site, and the India Point Park station is located near the mouth of the Seekonk River estuary.

All surface collections in bay waters are made at a depth of approximately 0.5 to 1 meter below the surface. Bottom collections were made approximately 0.5 to 1 meter above the sediment. Samples were collected using an acid-washed and DI water-rinsed Niskin sampler attached to the boat davit with sample water then poured off into a sample bottle. All tubing and sample bottles are acid washed and then rinsed with DI water before the sampling event, and tubing is rinsed with DI water between sample stations. DI water field blanks and duplicates are collected in order to determine the accuracy and precision of sampling methods and sample handling techniques. In addition to sampling QA/QC measures, the NBC laboratory has a rigorous analytical QA/QC program in place for all nutrient samples. Bay samples were collected, filtered, and preserved on-board the NBC research vessel, the *R.V. Monitor*.

The NBC laboratory analyzes both freshwater and saltwater nutrient samples for nitrite+nitrate, nitrite, total dissolved nitrogen, ammonia, orthophosphate, silicate, and total nitrogen. All nutrient samples, except for the total nitrogen, were filtered prior to analysis; therefore, these results are measurements of the dissolved (or soluble) phase. Grab samples for TSS and chlorophyll are also taken at the same time as nutrient samples and analyzed by the NBC laboratory. The instrument the laboratory acquired in 2005 to measure nutrient parameters in saltwater could only measure nutrients in the dissolved phase; new instruments acquired since 2012 allow the lab to analyze fresh and saltwater samples for total nitrogen. All data from 2017 River and Bay Nutrient sampling can be found in the attached Table 30.

Urban River Pathogen Monitoring

Consistent NBC monitoring for fecal coliform in the Providence area urban rivers began in 1997 and became the responsibility of EMDA in 1998. It was developed in conjunction with the CSO remediation stakeholder process and has developed as a tool of the IM section to check for potential problems occurring at any of the 67 CSOs the NBC owns, operates, and maintains. Since 2007, samples have also been collected for enterococci analysis at a subset of stations. Routine sample collections for analysis of fecal coliform and enterococci are made each week, with stations on the Blackstone, Woonasquatucket, Moshassuck, Seekonk, Providence, and Pawtuxet Rivers sampled on Mondays and stations on the West, Woonasquatucket, Moshassuck, and Providence Rivers on Tuesdays. In the event of a holiday or any other unforeseen circumstance arising that would prevent sampling under the regular schedule, the sampling routine will begin the next day sampling is possible. Samples are collected by EMDA staff in the morning and delivered to the lab at Field's Point no later than 11:30 the day of sampling. All stations sampled on the same river on the same day are collected within a two-hour interval. NBC's IM, Construction, EMDA, and Engineering sections determine locations to be added or omitted as needed.

Samples are collected regularly from six sites on the Woonasquatucket River, two sites on the Blackstone River, seven sites on the Moshassuck River, three sites on the West River, and one site each on the Pawtuxet, Providence, and Seekonk Rivers. The locations of these sites are shown in Figure 3; special sampling events may include sampling at additional sites not shown. On December 11, 2017, sampling resumed at the Woonasquatucket River at Pleasant Valley Parkway location, which had been temporarily discontinued due to construction activities beginning January 5, 2016. This site had been temporarily replaced by Footbridge at Bath St., which then was discontinued following the reopening of access to Pleasant Valley Pkwy in December. During 2017, a total of 1,684 river bacteria samples were collected and analyzed.

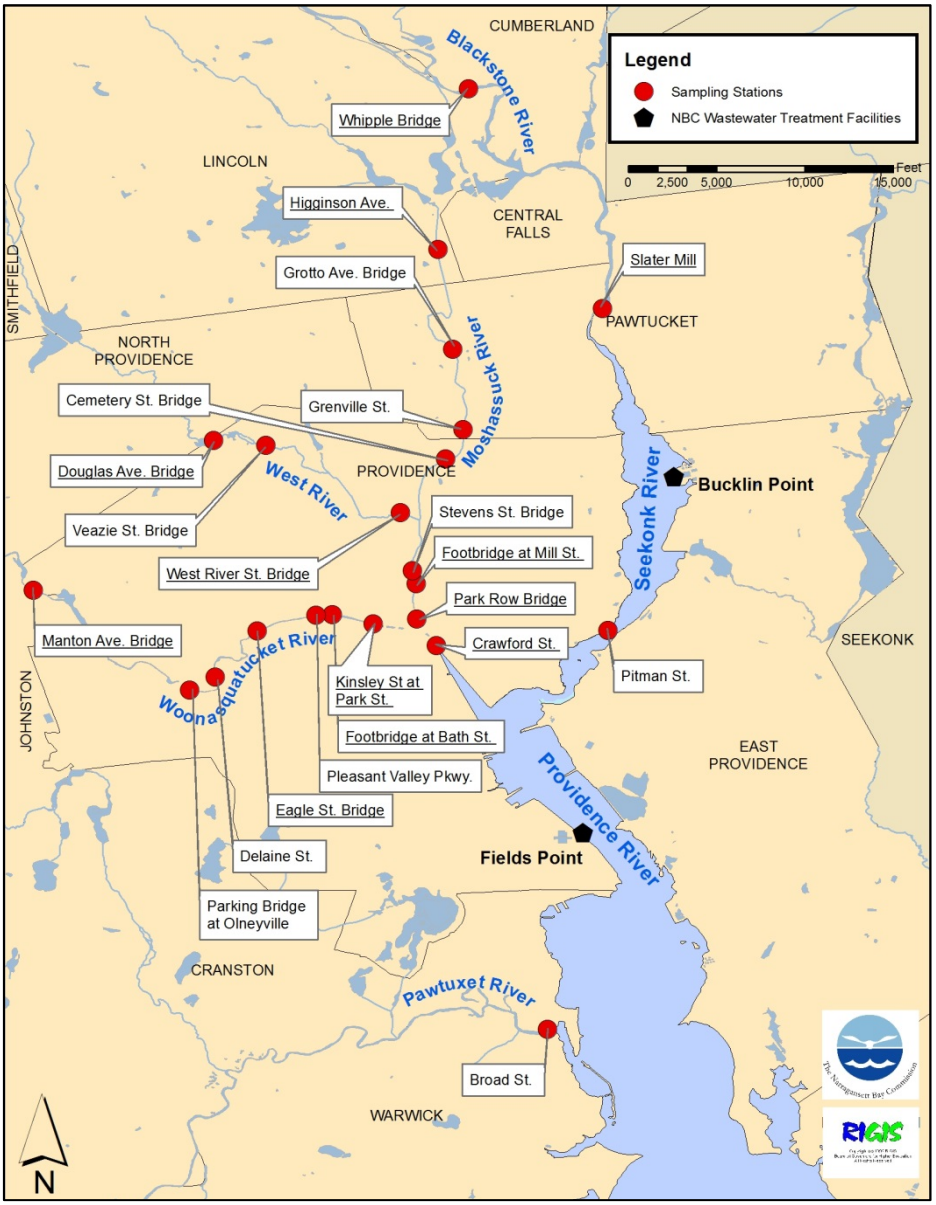
In order to improve NBC's identification of dry weather overflow (DWO) discharges and to identify other sources of bacterial contamination in the rivers, in 2002 EMDA began resampling weekly river collections when DWOs are suspected. Rivers are not resampled when collections have occurred in times of wet weather, because analytical results are expected to be high due to the normal functioning of CSOs. When results from collections are high (greater than 1,000 MPN per 100 mL) and there has been dry weather (i.e., less than 0.1 inches of rain in the preceding four days), EMDA will resample those stations a second time within the week. Resampling will also occur when results are very high (i.e., greater than 10,000 MPN/100 mL) when no rain has occurred in the preceding two days. These general resampling criteria are subject to change based on river flow, fecal bacteria level at background stations, and staff availability.

Water samples for fecal coliform and enterococci analysis are collected from the center of a bridge or from a riverbank. A sterile, 120-mL sample container is used for the sample collection. Collections from bridges are conducted by placing the sample container in an open-ended PVC cylinder and holding it in place with a small screw running through the cylinder body. A rubber handle extends from the top of the cylinder with a line attached for lowering it into the water stream being sampled. Each sampler can hold up to 4 bottles. Samples being collected from a

riverbank are taken by dipping the sample container in the water stream by hand. The sample is taken from the surface as close to the center of the water stream as possible.

Once the sample has been collected, the sample container is sealed, and a label with site ID, sample number, date and time of collection, preservation techniques used, and collector's initials is placed on the container. The samples are held at 4°C in a portable cooler with ice packs for transfer to the lab. All samples are brought to the laboratory within the 8-hour holding time. If samples exceed the holding time, they are discarded and not analyzed.

Figure 3: NBC River Bacteria Sampling Stations. Underlined stations are sampled for both fecal coliform and enterococci. All other stations are sampled only for fecal coliform.



As part of EMDA's quality assurance for this program, collection and analysis of duplicate bacteria samples occurs on all regular sampling days. These collections and analyses are used to help determine analytical and sampling precision. The sampling locations that have been chosen as replicate sites are Eagle St. Bridge (W7C) in Providence on the Woonasquatucket River, Footbridge at Mill St. (M5) in Providence on the Moshassuck River, and Grenville St. (M4A) on the Moshassuck River. The Eagle St. Bridge sampling is conducted from a bridge in the center of the main current flow. The Footbridge at Mill St. site sampling is conducted from the center of the main current flow from the private footbridge near Mill Street. Sampling at the Grenville St. site is conducted from the riverbank in the center of the main current flow. The duplicate samples are taken simultaneously with the sampling device. Fecal coliform data for the sampling stations located in the urban rivers can be found in the attached Tables 31 and 32. Enterococci data for the urban rivers can be found in Table 33. For the purpose of this report, duplicate sample results are shown as the geometric mean of the two samples.

Another element of EMDA's quality assurance for this program is the collection and analysis of field blanks. Field blanks are taken by each team during each bacteria sampling day to measure the ability of staff to maintain clean sampling techniques, and to rule out any potential contaminants from normal "open-air" exposure. These blanks are taken using DI water in place of river water, with the same handling techniques as the actual river samples. The analytical method used by the NBC laboratory is the 24-hour Fecal Coliform Determination by Multiple Tube Fermentation, using A-1 broth or media. The Standard Methods reference number is 9221E for this EPA-approved methodology. Positive and negative controls are routinely run in the laboratory; in addition, tubes of uninoculated, freshly prepared media are incubated and analyzed in order to confirm the sterility of the media. The NBC laboratory is Rhode Island Department of Health certified. All samples are properly preserved prior to analysis at 4°C.

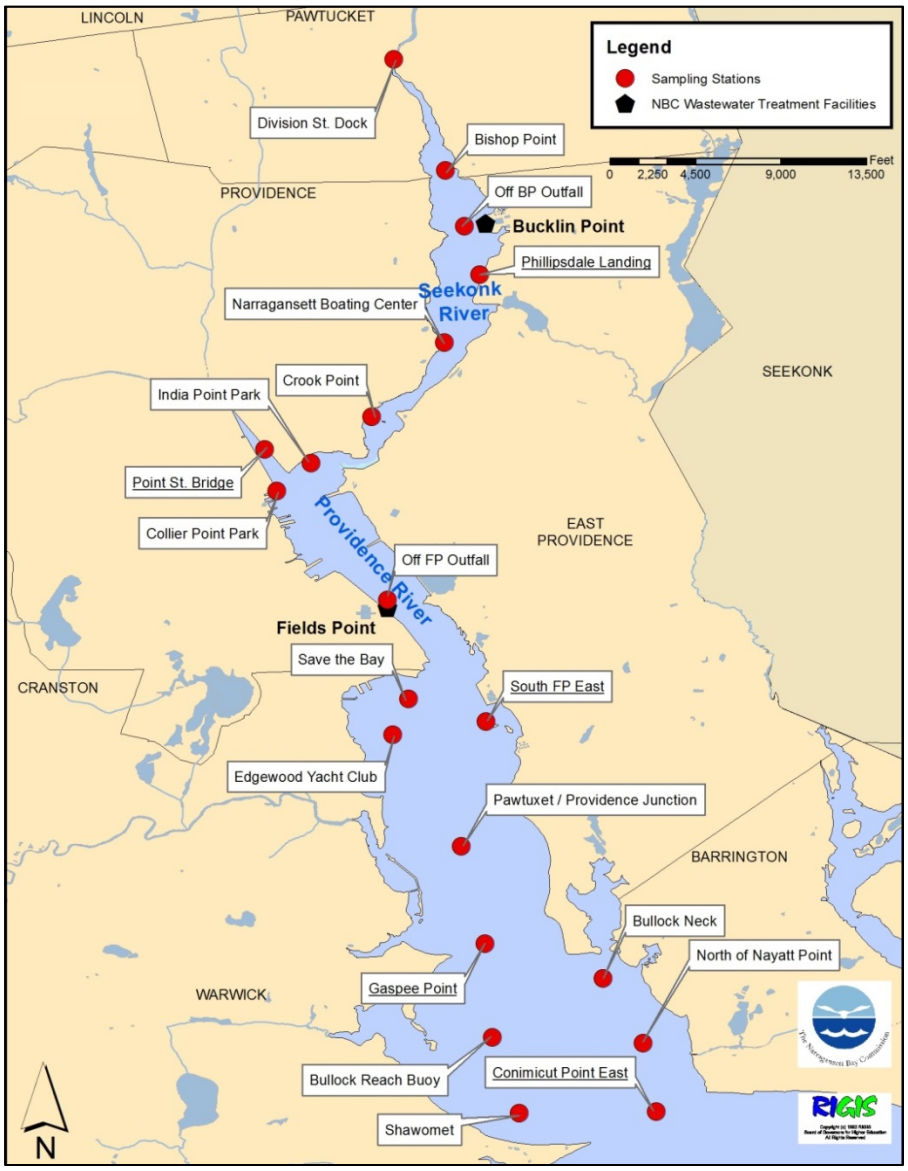
Bay Pathogen Monitoring

Fecal coliform sampling in the estuarine Providence and Seekonk Rivers began in 2003 in response to the need to understand the spatial and temporal impacts that discharges within these waterbodies have on Narragansett Bay as a whole; sampling for enterococci at a subset of Bay sites began in 2011. Routine sample collections for the analysis of bacteria are made every other week, usually on Wednesdays or Thursdays, throughout the year, dependent on weather. All station samples are collected within a three-hour interval on the same day. In the event of a holiday or any other unforeseen circumstance arising that would prevent sampling under the regular schedule, the sampling will resume on the next regular work day. Samples are collected by EMDA staff and delivered to the lab at Field's Point no later than 12:00 on the day of sampling.

Bay bacteria samples are collected from the NBC research vessel the *R/V Monitor* at six sites in the Seekonk River, four sites in the Providence River north of Field's Point WWTF, and ten sites in the Providence River south of Field's Point WWTF; these sampling locations are shown in Figure 4. During special events, including after some heavy rainfalls, special sampling may take place that includes collecting bay bacteria samples consecutively over several days in the Seekonk and/or Providence River as well as in the conditional shellfishing areas just south of the Providence River. Depending on the event, the sample stations may include all or some of the usual stations and/or additional stations further down the bay.

Water samples for bacteria analysis are collected from the port or starboard side of the EMDA research vessel. A sterile, 120-mL sample container is used for the sample collection. Collections are made by placing the sample container in an open-ended plastic cylinder which is held in place with a small screw running through the cylinder body. A metal handle extends from the top of the cylinder with a vinyl line attached for lowering it into the water being sampled. The sample is collected from just below the surface, then the sample container is sealed, and a label with site ID, sample number, date, and time of collection, and preservation techniques is placed on the container. The samples are held at 4°C in a portable cooler with ice packs or a portable refrigerated cooler for transfer to the lab. All samples are brought to the laboratory for analysis

Figure 4: NBC Bay Bacteria Sampling Stations. Underlined stations are sampled for both fecal coliform and enterococci. All other stations are sampled only for fecal coliform.



within the 8-hour holding time period. If samples exceed the holding time, they are discarded and not analyzed. Duplicate samples are taken at the Conimicut Point and Phillipsdale Landing stations. The duplicate samples for each site are collected simultaneously using a second 120-mL sample bottle. A blank sample using DI water is also taken and brought to the lab along with the bacteria samples for quality assurance purposes. During 2017, 502 bay fecal coliform samples and 162 enterococci samples were collected and analyzed. 2017 bay fecal coliform and enterococci data are shown in the attached Tables 34 and 35, respectively.

Combined Sewer Overflow Monitoring

In implementing NBC's policy of protection of Narragansett Bay and its tributary rivers, and to fulfill the requirements of the EPA and DEM Nine Minimum Controls Program, the EMDA staff sampled CSO wet weather overflows from three different CSOs in 2017. The aim of such wet weather sampling is to characterize the impact of CSO discharges and to evaluate the success of the NBC Pretreatment and Pollution Prevention programs at controlling the discharge of pollutants through CSOs. The CSO Abatement Project, once fully implemented, will effectively eliminate 98% of CSO discharges. Until both the CSO Abatement Project and the EPA's Capacity, Management, Operations, and Maintenance program for the NBC are fully implemented, all other feasible controls of CSO discharge are expected to be utilized. In 2017, wet weather monitoring was conducted at three different CSOs: Outfall 002A (North Diversion Structure), Outfall 218, and Outfall 220. Sampling at Outfall 002A took place on April 4th, with 1.51 inches of rainfall as measured by the National Weather Service at T.F. Green Airport (1.58 inches measured at Field's Point). The sampling of Outfalls 218 and 220 took place on November 22nd, with 1.28 inches of rainfall as measured by the National Weather Service at T.F. Green Airport (1.31 inches measured at Field's Point). All three of these outfalls are located in the Bucklin Point service district with Outfall 002A discharging to the Seekonk River and Outfalls 218 and 220 discharging into the Moshassuck River.

The sampling plan was designed to collect three samples at each outfall throughout the overflow event. The first sample is collected during the initial overflow, or first flush, stage and is expected to contain wastewater with the least degree of rain water dilution and the highest concentrations of materials washed from street and land surfaces into the combined sewer system. A second sample is then taken during the stage of highest overflow rate and a third sample taken near the conclusion of the event. Each event sampled in 2017 included all three of these phases. Each sample was tested for BOD, TSS, metals, nutrients, and VOCs. The data for CSO 218 can be found in Table 36, data for CSO 220 can be found in Table 37, and data for CSO 002A can be found in Table 38.

Water Column Profile Monitoring

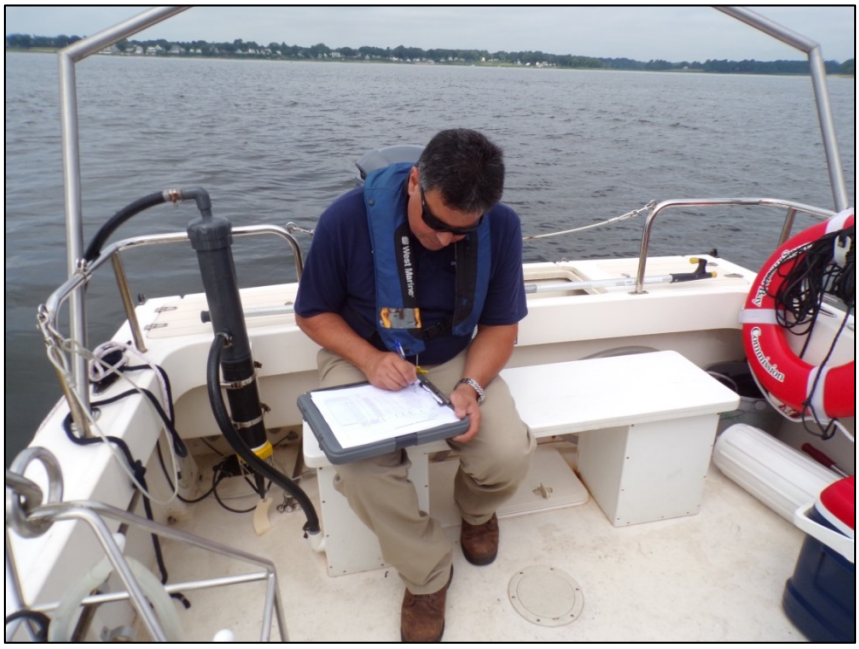
In 2007, the NBC began measuring water quality profiles at Bay sites using a Seabird Electronics profiler (SBE 19 plus). This instrument measures depth, temperature, salinity, dissolved oxygen, density, and photosynthetically active radiation (PAR) every 15 seconds as it is lowered through the water column at each site, providing valuable information on how water quality varies with depth. In particular, the data are evaluated to identify areas of stratification, where the surface and bottom waters are poorly mixed. Such conditions are normal in estuaries, particularly near

freshwater inputs and in the summer, when surface waters are warmed by the sun and winds tend to be low. Stratified conditions are monitored as they can contribute to hypoxia in estuarine waters by preventing dissolved oxygen mixing from the surface to the bottom waters. These profiles also provide valuable information on water clarity, through measurements of PAR, or the amount of sunlight, at depth. The PAR measurements on the profiler are coupled with data from a PAR sensor on deck, measuring ambient sunlight strength above water. Deployment of the profiler includes a "surface soak" of several minutes well below the surface to ensure the instrument temperature equilibrates to the ambient water temperature and all air has been purged from the flow path tubing. Following the surface soak, the profiler is brought up to the surface before dropping for the full downcast. The Seabird instrument is cleaned and maintained after each deployment by trained NBC monitoring staff and sent back to the manufacturer every two years for servicing.

All data downloaded off the profiler are analyzed using a suite of programs recommended and provided by the manufacturer to align data based upon known sensor time response differences, filter out digital "noise", correct for thermal impacts on salinity data, and derive calculated parameters. Data are visually inspected by NBC scientists to exclude the surface soak data before bin-averaging the downcast by 0.25 meter increments. This bin-averaging interpolates a smooth profile, and produces a more manageable amount of data for public presentation on the Snapshot website. Stations that are monitored for water column profiles are shown in Figure 5.

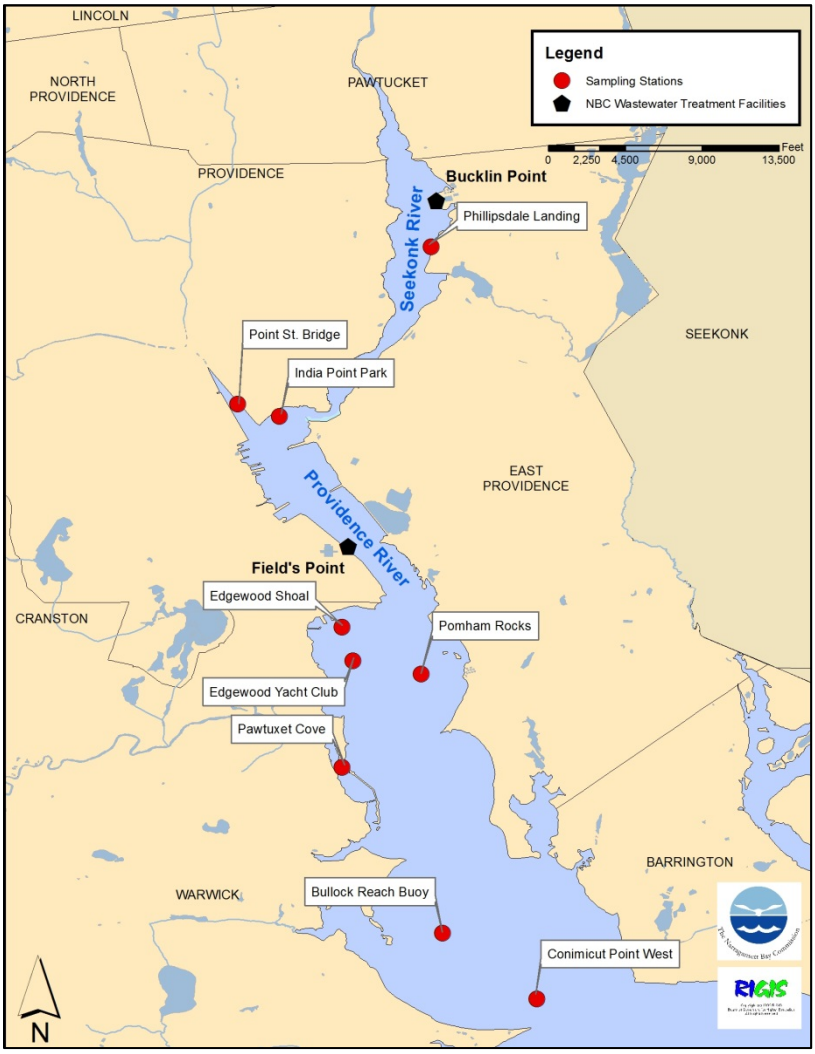
Secchi Depth Monitoring

The NBC has been conducting Secchi depth water clarity monitoring at sites in the Providence and Seekonk Rivers since 2009. This monitoring consists of lowering a black and white disk



Environmental monitor recording field notes onboard the NBC Research Vessel

Figure 5: NBC Water Column Profile and Secchi Depth Monitoring Stations



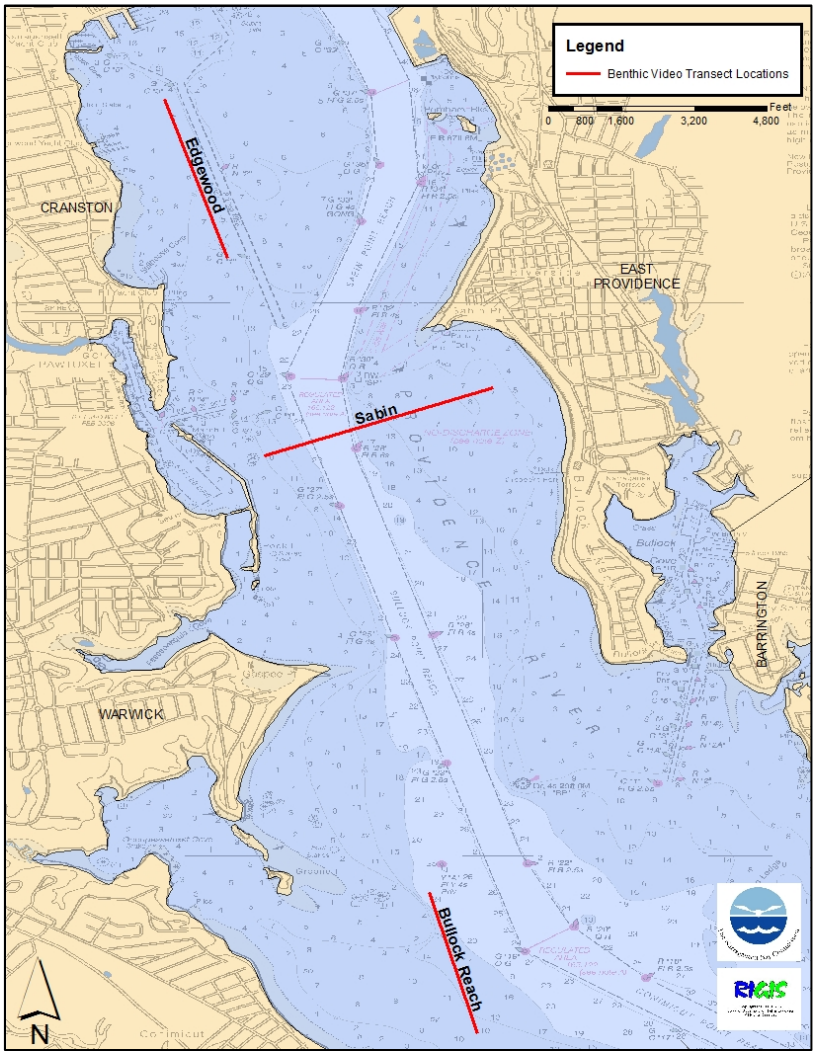
through the water column and noting the depth at which it is no longer visible, then lifting slowly and noting the depth at which it becomes visible. These steps are repeated three times per site and averaged. The measured depth varies depending on the turbidity of the water column, or the amount of suspended materials in the water. Suspended materials may include soil particles (clay, silt, and sand), algae, and other substances with anthropogenic sources including waste discharge and urban runoff. High turbidity reduces the amount of light available for photosynthesis by algae and submerged aquatic plants which in turn can decrease oxygen levels in the water. Suspended materials can also affect aquatic organisms by clogging fish gills, affect egg and larval development, lower growth rates, and reduce disease resistance. The NBC conducts Secchi depth monitoring weekly on the same days and at the same sites as Bay Nutrients (Figure 2) monitoring and Bay Pathogen (Figure 4) monitoring boat trips. In 2017, NBC collected 274 Secchi depth measurements in the Providence and Seekonk Rivers. These data can be found in Table 39.

Benthic Video Monitoring

In 2011, the NBC purchased an underwater video camera for the purposes of viewing and monitoring the benthic conditions in the Providence River in relation to plant upgrades and improved effluent water quality coming out of the WWTFs. A specialized sled mount was created to enable smooth towing of the camera and provide a consistent field of view for observations. In late 2014 the NBC designated three permanent transects to target in benthic surveys to be conducted monthly, weather permitting. The locations of these transects can be seen in Figure 6.

In 2017, the NBC collected approximately seven hours of underwater footage along these three transects, continually improving field methods and refining this monitoring initiative. These videos revealed a diverse community of estuarine organisms living in the Providence River including fish (e.g., sea robins), crustaceans (e.g., mantis shrimp, spider crabs, hermit crabs), horseshoe crabs, sea stars, tube-building worms, and mollusks (e.g., soft-shelled clams, mud

Figure 6: NBC Benthic Video Transect Locations



snails, slipper snails). In addition, variable habitat types were documented, including mudflats, zones covered in shell hash and shell rubble, and extensive rafts of macroalgae. Equipment modifications and other adjustments to these relatively-new survey techniques continued throughout 2017 as the NBC works to improve the data produced.

Video footage collected along these transects will increase the NBC's understanding of changes to the biological conditions in the upper Bay in relation to changes in effluent and related receiving waters monitoring. Summaries of each survey, with screenshot of interesting observations, are available to the public via the NBC's Snapshot webpage.

Phytoplankton Monitoring

The NBC began monitoring of the phytoplankton community at the Bullock Reach site in the Providence River in 2012. Phytoplankton are microscopic plant-like organisms that form the base of the marine and estuarine food web. These organisms use nutrients in the water column and sunlight to photosynthesize, producing dissolved oxygen in the process. The NBC initiated this monitoring program to measure changes to this important community that may be related to the drastic nitrogen reductions made by NBC and other WWTFs in the Narragansett Bay watershed. Monitoring is conducted every two weeks and includes a whole water sample to measure the density of various phytoplankton groups as well as a concentrated sample collected using a plankton net to identify the diversity of phytoplankton in the sample. From the whole water sample, a single milliliter is extracted and all phytoplankton are identified and counted. From the concentrated sample, a subsample is examined under the microscope with each different group recorded. All identifications are made by NBC's trained biologist. In 2017, the NBC collected 18 sets of phytoplankton samples. Data from this sampling may be found on the NBC Snapshot website, discussed below.

Narragansett Bay Fixed-Site Water Quality Monitoring

The NBC maintains two fixed-site water quality monitoring stations, one in the Providence River and one in the Seekonk River. These stations were created in 2000 as part of a formerly EPA-grant funded "Environmental Monitoring for Public Access and Community Tracking" (EMPACT) Project. NBC has maintained full funding of these sites since federal grant funding ceased in 2002. The stations have been established in proximity to the Field's Point and Bucklin Point wastewater treatment plant outfalls. The Bullock Reach station is a floating buoy located between Gaspee Point and Conimicut Point in the Providence River and the Phillipsdale Landing station is affixed to a dock located in the Seekonk River in East Providence. The locations of these sites are shown in Figure 7. These monitoring stations directly benefit Narragansett Bay research by allowing for continuous, real-time water quality monitoring in the more urbanized portions of the upper Bay allowing, Bay researchers to consistently track changes in the estuaries from remote locations. These data also provide a baseline of water quality across seasons and reveal yearly trends. These two locations are part of a larger, bay-wide monitoring network of water quality instruments deployed and maintained by other agencies.

The NBC uses water quality instruments, to collect measurements of depth, temperature, salinity, pH, dissolved oxygen, turbidity, and fluorescence (a proxy for chlorophyll and phytoplankton

Figure 7: NBC Fixed Site Station Locations

activity). From the start of the program in 2002 until 2015, the NBC relied on YSI sondes for the collection of this data. In 2016, the NBC converted the Bullock Reach buoy over to new instruments and communications from SeaBird Scientific, called Hydrocat EP (HCEP). YSI equipment was deployed alongside the new HCEPs to duplicate data collection during this first season with the new instrumentation. The use of the HCEPs was continued for the season on 2017, though many problems were encountered, that staff attempted to fix with the help of SeaBird technicians. There was minimal data loss since the YSI instruments were also collecting data.

Data collected by the water quality instruments at both the Bullock Reach buoy and Phillipsdale Landing stations are recorded every 15 minutes and are transmitted via cell-phone

communications from Bullock Reach and via LAN-line connection from Phillipsdale Landing to a base station at Field's Point every hour The EMDA staff is continually making improvements to equipment, infrastructure and QA/QC protocols to ensure the reliability of data collected.

As part of a statewide monitoring network collectively known as the Narragansett Bay Fixed-Site Water Quality Monitoring Network (Fixed-Site Network), EMDA currently works in partnership with the DEM, URI, and Narragansett Bay National Estuarine Research Reserve (NBNERR) to uphold standard operating procedures for calibration and maintenance of the sondes as well as data handling to maintain consistency between organizations. The DEM maintains a website which allows easy access to data from all of these fixed sites in one central location. This can be accessed at http://www.dem.ri.gov/bart/stations.htm. The DEM Bay Awareness and Response Team (BART) website currently displays a map showing station locations, weekly summaries of data from all network sites, monthly graphs of summer data, and all Fixed-Site Network data in raw, edited, and corrected formats. In addition to the DEM BART website, the NBC also maintains a website dedicated to the dissemination of NBC monitoring data called Snapshot of Upper Narragansett Bay (http://snapshot.narrabay.com/app/). Data from the two water quality monitoring stations are available near real-time in an easy-to-use and easy-to-understand format, including graphs and downloadable data tables.

As WWTFs reduce nitrogen input into the bay, nitrogen that is often associated with eutrophication and hypoxia, monitoring water quality can help researchers better understand the response of the bay to these reductions. Hypoxia is the condition that occurs when dissolved oxygen concentrations in water fall below a critical level, negatively affecting marine organisms. As part of the larger network of agencies continuously monitoring water quality in the bay, the NBC supports the understanding of the overall health of NBC's receiving waters and contributes to monitoring the response of these waters to nitrogen reductions from WWTFs. The water quality instruments (sondes) that NBC and the other agencies use at these fixed sites are continuously monitoring dissolved oxygen via optical sensors.

With the NBC receiving the data real-time from its two fixed sites, NBC staff can immediately determine when hypoxia is occurring and for how long. These data are extremely helpful for the NBC, DEM and other organizations in studying the dynamics of these events and how the organisms in the Bay respond.

Data from 2017 were sent to the DEM biweekly during the critical summer months to keep them updated on the water quality status at the Bullock Reach site. Throughout the years, data from the Bullock Reach buoy have been useful in DEM's analysis of water quality changes in the upper Bay, and for periodic fish kills occurring in the upper Bay and rivers. The data from these sondes are also being used in a joint NBC-URI hydrodynamic modeling project that will provide information on currents, flushing, and predicted tracks of WWTF effluent in the Providence and Seekonk Rivers.

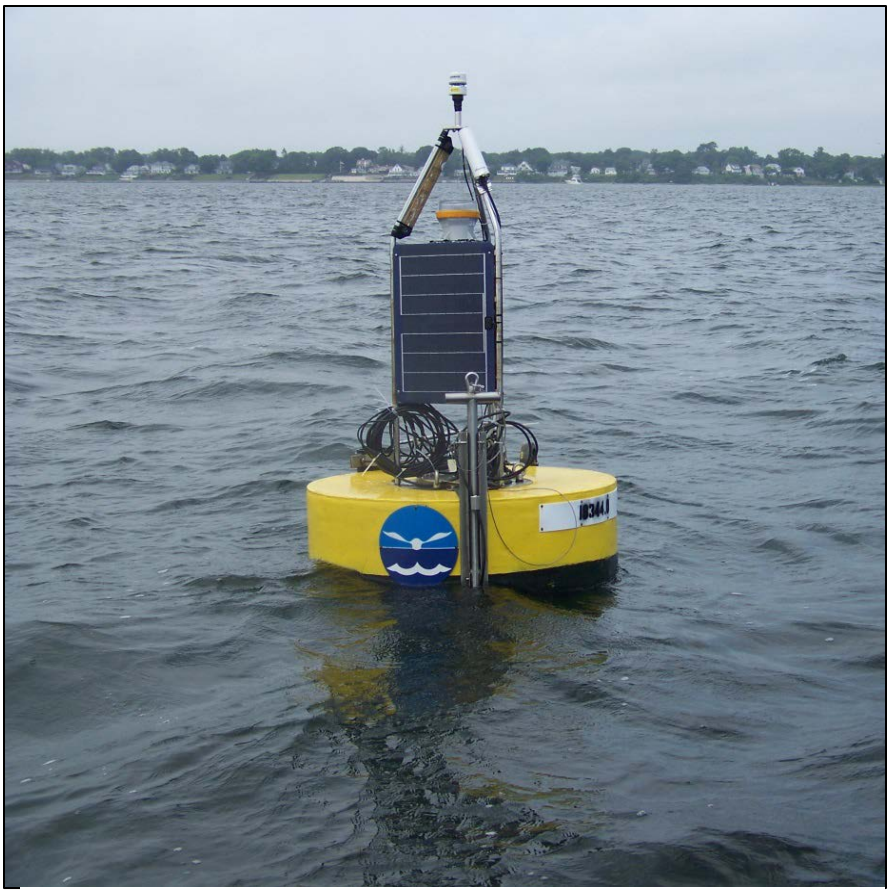
Phillipsdale Landing Dock Site

The Phillipsdale Landing site is located on the east side of the channel of the estuarine Seekonk River in East Providence. The monitoring location is very close to large freshwater river sources and is also open to the tidal estuarine Providence River. Therefore, it receives seawater flushing

during the tidal cycle and the transport of saltier bottom waters in the form of a salt wedge. This makes the Seekonk River a tidal estuary, defined as a place of fresh and saltwater mixing, in the truest sense. The freshwater rivers feeding the Seekonk River include the Blackstone River, which is north of the Phillipsdale Landing site and feeds directly into the Seekonk River as its major source, and the Ten Mile River, which enters the Seekonk River just south of the Phillipsdale Landing station. The Phillipsdale Landing site is located in about 3.5 meters (11.5 feet) of water, just south of the Bucklin Point WWTF. Two YSI sondes collect water quality data from two depths, one located near the surface and one just off the bottom. With these instruments fastened to a dock, staff has easy access to the water quality instruments from shore, allowing them to get to the instruments quickly in the event of any problems.

Bullock Reach Site

The Bullock Reach site is situated on a floating buoy that is anchored near the edge of the shipping channel in the southern section of the Providence River. This location is in deeper, more saline waters than the Phillipsdale Landing station and is less proximate to freshwater sources. The nearest freshwater source is the Pawtuxet River located to the northwest of the buoy site. The position of the buoy is to the northwest of Conimicut Point in about 8 meters (26 feet) of water, west of the Providence River channel and south of the Field's Point WWTF. There are three water quality instruments at this site. The buoy was retrofitted during the off season to



The Bullock Reach fixed-site buoy

accommodate the new SeaBird Hydrocat EPs and a new communications platform. The surface HCEP was placed in a stainless steel tube that is attached to the side the buoy that allows protected but free-flowing access to the surface water. The YSI sonde was placed in a PVC tube that in integrated into the buoy. The bottom and mid-depth sondes are attached to the buoy on one line with a mushroom anchor at the bottom and a float just above the sonde to keep it in an upright position; the HCEPs and the YSI sondes were placed together on the same line at both the mid and bottom depths. Power to the buoy is maintained by a solar-powered battery.

Data Collection

The continuous monitoring site at Phillipsdale Landing collects water quality data from two depths, ~0.65 m below the surface and at the bottom, at an average depth of 2.0m, in 15 minute intervals. The surface sonde measures depth, water temperature, specific conductance (salinity), pH, dissolved oxygen, chlorophyll a, and fluorescence. The bottom sonde measures depth, water temperature, pH, and dissolved oxygen. As with the Bullock Reach data, Phillipsdale Landing data are transferred to a computer in the Field's Point Operations Building via LAN line and are then viewed by EMDA personnel utilizing YSI software. For the 2017 season, the sondes began collecting data on April 14th and continued collecting data the rest of the year until they were removed from the water on December 27th due to concerns of ice buildup at the site.

At Bullock Reach there are three water quality instruments at three depths: with the surface sonde at an approximate depth of 0.9 meters, a mid-depth sonde at approximately 4.3 meters, and sonde at the bottom at an approximate depth of 7.8 meters. The surface and mid-depth sondes measure depth (m), water temperature (°C), specific conductance (salinity; mS/cm and ppt), pH (s.u.), dissolved oxygen (% and mg/L), chlorophyll a (µg/L), and fluorescence (%). The bottom sonde also measures the same parameters with the exception of chlorophyll which is replaced by turbidity (NTU). This data are recorded every 15 minutes from all three depths. The buoy is serviced via NBC's research vessel the *R/V Monitor*. Data from the buoy are transferred to a computer in the Field's Point Operations Building via cell-phone communications every hour and are then viewed by EMDA personnel. For the 2017 season, the buoy was deployed in the water in mid-May and data began being collected on May 30th until they were removed for the season on October 31st.

Lab and Field Procedures

YSI sondes are calibrated generally the day before deployment for each site at the lab in the EMDA office. All sondes are calibrated using YSI-recommended methods in the YSI Operations Manual as well as agreed upon protocols from the Fixed-Site Network. All calibrations use YSI standards and are conducted by trained NBC EMDA staff in the EMDA laboratory. Sondes are designated for each specific site, deployed, and then retrieved after approximately two weeks in the water. Upon returning to the EMDA lab, sondes undergo post-deployment checks, which consist of testing each parameter on the instrument for any issues with performance. The post-deployment check involves placing the sonde probes in each calibration solution, as done during calibration, to check readings in that solution of known concentration. These data can be used in assessing how closely the sonde is reading to the actual solution levels, and therefore how far it has drifted from the original calibration or if there has been a probe failure. After the post-calibration check, sondes are cleaned and re-calibrated just before the next deployment period.

Calibration and post-calibration results are recorded and kept for reference and data editing purposes. The HCEPs do not need to be calibrated as often, though the sensors do need to be field checked. However, since many issues arose during the 2016 season, a regular maintenance protocol was not able to be established.

Once at the deployment site, a vertical profile is done using another YSI sonde instrument that measures depth, water temperature, pH, and dissolved oxygen. This instrument can be lowered to the approximate depths of the sondes and can display readings for the parameters on a small handheld computer. These measurements can be compared to the newly deployed sonde to ensure the sonde is taking proper readings. Once the sondes are in the water, data can be viewed regularly back at the EMDA offices while the sondes are deployed. If any problems are observed in the data, an attempt is made to troubleshoot and replace the sonde if necessary. Summer deployments are kept to a maximum of two weeks in the water due to fouling concerns. All field work information is recorded on a Field Sheet to aid in any troubleshooting during data editing.

Data Management

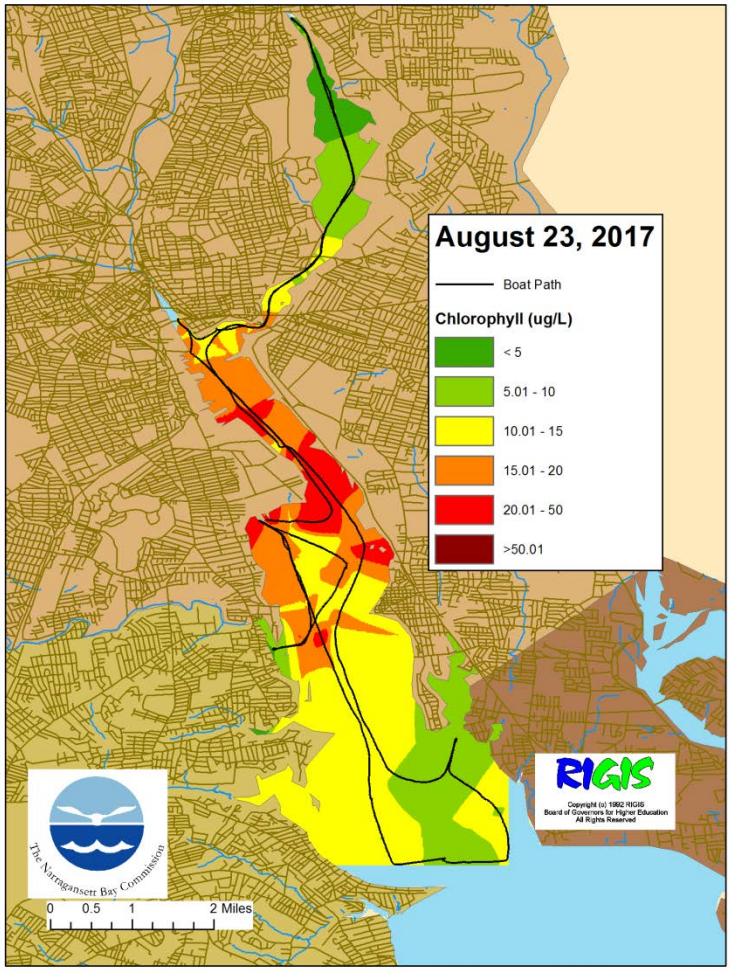
Currently, the Bullock Reach and Phillipsdale Landing sites are programmed to transmit data every hour to a computer at NBC. The data can be uploaded and viewed by EMDA staff anytime in order to assess and troubleshoot problems. The data are also available hourly to the public on the NBC Snapshot website: http://snapshot.narrabay.com/app/. Data files are also downloaded from sondes once back in the lab. A cursory review of the data is made until all data are synthesized at the end of the season, except when particular instances of hypoxia occur that warrant immediate and further evaluation. For Edgewood Shoals, data are not available on the NBC Snapshot website but can be requested directly from the NBC scientists.

During the summer months, the raw unedited data are also sent to the Fixed-Site Network coordinator to determine if the Bay is experiencing hypoxic conditions and to be posted on the DEM's BART website. At the conclusion of the season, all data is the Fixed-Site Network coordinator for further editing and correcting.

Fixed-site data are not included in paper format with this report as with the other tables due to the extensive nature of this sampling.

Bay Surface Mapping

In 2010, the NBC began a receiving waters monitoring effort to map surface water quality as the boat conducted Bay monitoring throughout the Seekonk and Providence Rivers. As the boat is underway, a pump draws surface water up and through a water quality sonde on the deck, which collects data every four seconds. This sonde is calibrated and maintained as described above for the fixed-site monitoring sondes. The sonde collects data on temperature, conductivity, dissolved oxygen, pH, and chlorophyll *a* concentration. The current focus of the monitoring effort is on the chlorophyll data, as a proxy for phytoplankton abundance. The data are analyzed to create maps of chlorophyll concentration along the boat track to illustrate presence and distribution of phytoplankton blooms. Chlorophyll a data are processed and mapped using the ArcGIS suite, interpolating values using an inverse distance weighted methodology looking at the 12 nearest neighbors. The interpolation of data all the way to the shoreline is for visual clarity, though is also highly artificial. In 2017, the NBC mapped surface water quality on 45 days.

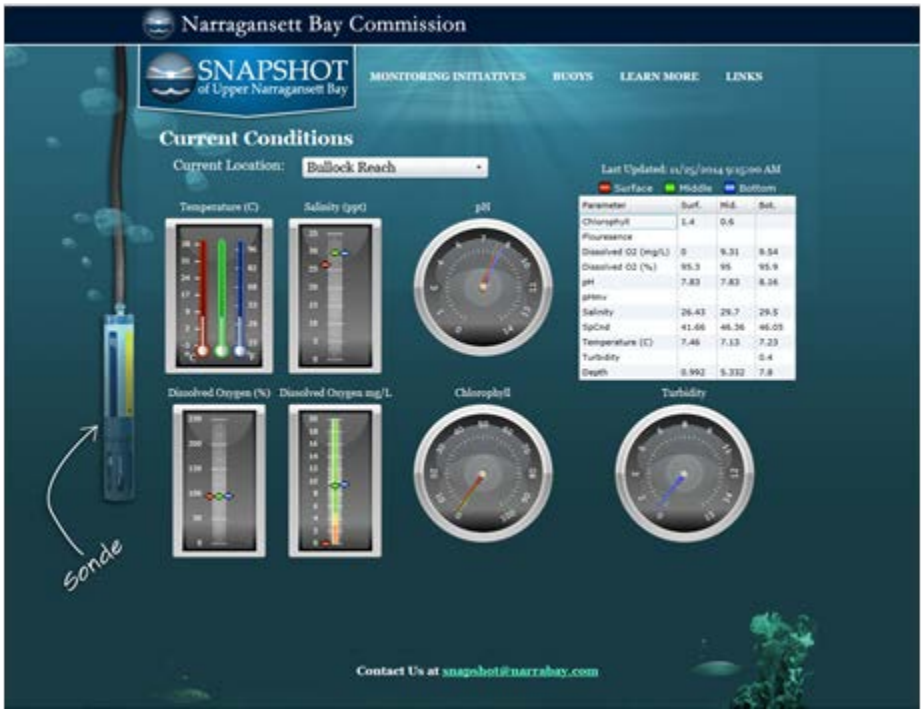


An example of a chlorophyll a *map from surface mapping on August 23, 2017*

NBC Snapshot of Upper Narragansett Bay Website

In 2011, a webpage was created by the NBC called "Snapshot of Upper Narragansett Bay" (http://snapshot.narrabay.com/app/) which was continually updated through 2017 with the most recent data from the receiving waters monitoring program. The webpage includes information and data for all of the NBC receiving waters monitoring, including a blog that is updated weekly with the most recent results of sampling events. Sampling procedures are described for each monitoring initiative and tables with up-to-date monitoring results can be downloaded. The most recent data at the fixed water quality monitoring stations is displayed through dials and gauges as shown in Figure 8 below. This display allows users to quickly assess current water quality conditions. An interactive chart wizard also allows users to choose which fixed-site water quality parameters to chart and display, and users can also choose parameters to display in table format, which can then be downloaded. The NBC Snapshot website represents a comprehensive look at water quality in upper Narragansett Bay by providing the general public with near real-time data and a wide range of information regarding water quality in Narragansett Bay. In 2012, the NBC received a National Association of Clean Water Agencies (NACWA) National Environmental Achievement Award for Excellence in Public Information and Education for the Snapshot website. NACWA's Public Information and Education Awards are presented for outstanding programs in video, printed publications, educational programs, or e-media.

Figure 8: NBC's "Snapshot of Upper Narragansett Bay" Website.



Field's Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD,and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL)	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
1/1/2017	4.0	2.00	30.07	111.33	146.79		3.30	2.12	<2.00
1/2/2017	3.0	2.00	34.58	134.00	191.81		3.43	2.39	<2.00
1/3/2017		2.00	58.97	138.00	127.22		9.20	4.05	4.26
1/4/2017	18.3	2.00	50.74	98.00	123.24		4.13	2.51	2.20
1/5/2017	5.1	2.00	34.71	134.67	156.74		4.03	2.27	2.36
1/6/2017	4.1	2.00	35.13	118.67	169.62		2.93	2.28	2.11
1/7/2017		2.00	32.97	113.33	159.94		3.77	2.58	2.53
1/8/2017		2.00	36.58	152.67	162.40		3.03	2.41	2.39
1/9/2017		2.00	33.63	139.33	181.72		3.17	2.66	2.75
1/10/2017		2.00	50.74	165.33	175.02		3.87	2.86	2.98
1/11/2017	85.7	3.73	57.43	124.00	129.64		4.89	4.12	2.87
1/12/2017	11.3	4.00	50.64	100.00	128.34		4.26	2.65	<2.00
1/13/2017	2.0	2.00	39.98	106.67	180.24		3.90	2.22	2.14
1/14/2017		2.00	37.16	116.67	158.46		3.96	2.58	2.45
1/15/2017	2.0	2.00	37.61	126.00	151.06		3.03	3.35	2.50
1/16/2017	6.2	2.00	36.93	128.67	165.84		3.10	2.52	2.14
1/17/2017		2.00	44.31	166.00	172.25		4.43	4.55	3.40
1/18/2017	7.4	2.00	40.73	114.00	140.38		2.47	2.35	2.41
1/19/2017	10.1	2.00	35.86	139.33	158.24		3.00	3.68	2.06
1/20/2017	1.0	2.00	35.44	151.33	170.74		3.20	2.77	<2.00
1/21/2017		2.00	37.05	139.33	153.14		3.87	2.76	2.42
1/22/2017		2.00	35.58	153.33	155.40		3.53	2.70	2.06
1/23/2017		2.00	52.90	182.00	161.76		4.03	2.90	3.12
1/24/2017		2.00	78.12	126.67	79.10		9.80	5.56	3.95
1/25/2017	1.0	2.00	67.29	70.00	104.07		4.57	3.165	2.40
1/26/2017	5.1	2.00	70.56	67.33	93.48		4.73	3.16	2.23
1/27/2017	4.1	2.00	65.16	78.00	99.67		4.98	3.08	2.54
1/28/2017		2.00	43.51	104.00	138.59		3.96	2.40	2.66
1/29/2017		2.00	43.27	117.33	134.41		3.64	3.00	2.38
1/30/2017		2.00	40.27	83.67	124.11		3.69	2.27	2.31
1/31/2017	1.0	2.00	39.37	128.67	151.21		3.50	2.67	2.38
2/1/2017	8.8	2.00	41.62	143.33	148.51		3.67	2.38	2.51
2/2/2017	7.0	2.00	41.17	120.00	136.70		3.77	3.76	2.26
2/3/2017	1.0	2.00	36.88	129.33	240.69		3.47	2.37	2.60
2/4/2017		2.00	38.74	110.67	146.83		3.87	2.74	3.07
2/5/2017		2.00	38.69	120.67	121.80		3.03	2.32	3.28
2/6/2017		2.00	36.57	142.67	193.03		2.87	3.05	2.23
2/7/2017		2.00	44.50	162.00	162.14		2.53	2.83	2.32
2/8/2017	5.2	2.00	38.09	116.67	173.46		2.60	2.88	2.66
2/9/2017	6.8	2.00	37.26	150.00	160.44		4.80	3.36	2.40
2/10/2017	14.5	2.00	37.17	124.67	157.41		4.07	3.04	2.61
2/11/2017		2.00	38.55	111.33	124.84		5.24	3.23	3.84
2/12/2017		2.00	38.31	132.67	157.19		4.07	4.18	2.79
2/13/2017		2.00	40.43	135.33	160.09		6.43	3.87	3.68
2/14/2017	7.5	2.00	37.97	140.00	176.02		7.47	4.28	3.35
2/15/2017	6.1	2.00	44.24	150.67	160.68		3.93	2.84	2.80
2/16/2017	7.3	2.00	39.00	116.67	158.55		4.75	3.84	3.11
2/17/2017	7.3	2.00	37.68	130.67	130.16		3.30	3.00	<2.00
2/18/2017		2.00	43.40	106.00	156.65		3.13	2.81	1.98
2/19/2017		2.00	50.20	99.33	129.91		2.93	2.74	2.60
2/20/2017		2.83	41.51	92.67	159.75		3.89	3.35	2.65
2/21/2017		2.00	41.79	115.33	159.77		3.43	2.12	3.39
2/22/2017	26.6	2.00	42.79	121.33	194.165		4.20	3.27	2.56
2/23/2017	8.8	2.00	42.47	150.00	137.88		4.07	2.79	2.41
2/24/2017	5.2	2.00	42.45	139.33	124.21		3.20	2.86	2.65
2/25/2017		2.00	45.62	148.67	166.13		4.84	2.26	<2.00
2/26/2017		2.00	40.67	105.33	129.15		4.58	2.86	2.81
2/27/2017		2.00	39.58	121.33	136.21		3.00	2.15	<2.00
2/28/2017	6.2	2.00	39.81	116.67	160.865		2.47	2.37	4.21
3/1/2017	2.5	2.00	41.30	149.33	163.64		2.17	3.43	2.82
3/2/2017	6.2	2.00	40.86	132.00	162.93		3.23	2.09	3.03
3/3/2017	4.1	2.00	36.59	144.67	173.49		3.41	2.78	2.47
3/4/2017		4.69	37.44	137.33	169.23		3.51	3.23	3.52
3/5/2017		2.00	38.00	144.00	162.83		3.37	3.17	<2.00
3/6/2017		2.00	36.26	150.00	181.28		3.23	2.77	2.29
3/7/2017		2.00	36.91	162.67	177.74		2.77	2.52	2.14
3/8/2017	2.0	2.00	37.32	149.33	176.56		2.57	2.60	2.63
3/9/2017	2.0	2.00	37.56	171.33	168.32		2.00	2.77	2.52
3/10/2017	5.1	2.00	38.93	160.00	179.94		3.40	3.26	2.54
3/11/2017		2.00	34.26	158.00	171.14		3.73	3.01	2.45
3/12/2017		2.00	36.10	168.67	181.58		3.17	2.99	2.58
3/13/2017		2.00	34.83	160.67	187.37		3.43	3.10	3.29
3/14/2017	32.0	2.00	56.04	208.67	151.88		6.03	3.24	2.73
3/15/2017	14.2	2.00	63.36	97.33	121.74		5.03	2.99	3.08
3/16/2017	4.1	2.00	47.38	136.67	152.97		3.82	3.19	3.07
3/17/2017	4.1	2.00	39.24	124.67	176.87		2.97	2.51	2.40
3/18/2017		2.00	39.68	120.00	168.40		3.23	3.06	2.74
3/19/2017		2.00	39.37	128.00	164.10		2.47	2.21	<2.00
3/20/2017		2.00	40.33	138.67	172.26		3.10	3.22	3.00
3/21/2017		2.00	38.61	134.67	164.22		3.23	2.61	<2.00
3/22/2017	19.3	2.00	39.08	152.67	157.97		4.77	2.23	<2.00
3/23/2017	2.0	2.00	37.70	152.67	165.69		2.97	2.51	<2.00
3/24/2017	2.0	2.83	37.68	147.33	243.58		2.47	2.99	2.12
3/25/2017		2.00	36.94	128.00	139.30		4.13	2.34	2.44

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017

Table 1: Field's Point BOD, CBOD, TSS, and Bacteria Data

Field's Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD,and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL)	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
3/26/2017		2.00	38.72	147.33	160.83		2.93	2.27	2.71
3/27/2017		2.00	51.83	166.67	151.54		3.13	2.53	<2.00
3/28/2017	16.3	2.00	53.52	120.00	132.85		3.23	2.79	<2.00
3/29/2017	6.5	2.00	48.24	88.00	130.11		2.00	2.16	<2.00
3/30/2017	3.9	2.00	39.32	120.00	154.16		2.30	2.19	<2.00
3/31/2017	2.0	2.00	62.05	121.33	118.89		4.10	2.64	2.85
4/1/2017		2.00	81.45	77.33	81.31		4.58	3.16	2.26
4/2/2017		2.00	71.31	54.67	80.41		9.78	6.33	3.84
4/3/2017		5.10	72.26	68.00	95.66		4.43	3.06	<2.00
4/4/2017		2.00	78.02	76.00	72.35		4.87	2.61	2.50
4/5/2017	35.0	2.00	72.69	55.00	74.03		4.60	3.11	2.15
4/6/2017	4.4	2.00	95.82	134.00	74.04		4.43	<2.00	2.12
4/7/2017	1.0	2.00	70.92	66.67	96.05		3.70	2.52	<2.00
4/8/2017		2.00	65.55	71.33	107.58		3.87	2.64	2.28
4/9/2017		2.00	67.63	82.67	98.01		4.47	3.06	2.40
4/10/2017		2.00	69.48	84.00	113.10		3.60	2.86	2.62
4/11/2017	6.3	2.00	63.91	92.67	109.25		4.73	3.60	3.00
4/12/2017	3.5	2.00	47.27	175.33	231.82		2.73	2.58	2.48
4/13/2017	5.1	2.00	46.78	99.00	140.48		2.60	2.82	2.46
4/14/2017	3.1	2.00	45.52	108.00	147.77		3.07	3.44	2.77
4/15/2017		2.83	44.82	124.67	148.54		3.82	2.53	2.42
4/16/2017		4.24	43.13	82.67	110.39		2.53	3.99	3.62
4/17/2017		2.00	43.26	163.33	163.87		<2.000	2.98	2.60
4/18/2017		2.00	41.69	107.00	161.92		2.07	2.52	<2.00
4/19/2017	4.1	2.00	42.50	129.33	166.27		2.47	2.03	<2.00
4/20/2017	2.0	2.00	42.29	120.00	163.73		2.53	2.49	<2.00
4/21/2017	3.1	2.00	56.78	139.33	145.87		5.47	3.70	2.87
4/22/2017		2.00	41.74	102.00	163.09		2.83	2.30	2.12
4/23/2017		2.00	39.62	121.33	146.01		2.53	2.54	2.39
4/24/2017		2.00	41.87	130.00	172.60		2.40	2.42	2.14
4/25/2017	5.2	2.83	69.25	144.00	122.91		9.20	5.92	3.82
4/26/2017	3.7	3.83	82.15	74.33	88.47		7.82	5.43	4.22
4/27/2017	1.0	2.83	67.81	72.00	114.24		4.50	4.91	2.85
4/28/2017	1.0	2.00	68.06	77.00	98.225		2.97	3.64	3.08
4/29/2017		3.74	65.61	67.33	104.52		2.07	4.44	4.49
4/30/2017		2.83	51.39	108.00	126.58		2.83	3.20	2.72
5/1/2017		2.00	49.98	154.67	150.49		4.60	3.37	2.68
5/2/2017		2.83	57.30	111.33	115.80		6.73	4.53	3.34
5/3/2017	2.0	2.00	54.89	112.00	130.23		4.13	3.10	2.42
5/4/2017	1.0	6.78	45.50	119.33	144.74		2.37	3.10	2.77
5/5/2017	1.0	2.83	79.15	127.33	108.53		5.23	3.80	3.14
5/6/2017		2.00	75.08	64.00	89.55		4.09	2.97	2.52
5/7/2017		4.00	70.74	94.67	98.79		4.62	3.15	2.94
5/8/2017		2.00	67.49	76.00	119.35		10.00	8.23	4.15
5/9/2017	9.5	4.00	64.23	106.67	122.625		9.67	7.13	4.17
5/10/2017	1.3	2.00	61.80	108.00	127.91		5.60	2.58	2.18
5/11/2017	1.0	2.83	54.50	108.00	122.11		5.40	2.91	2.16
5/12/2017	1.0	2.00	45.94	122.67	146.09		5.60	2.51	2.27
5/13/2017		2.00	58.26	135.33	110.39		7.80	4.23	3.40
5/14/2017		2.00	74.45	66.00	79.44		7.13	3.32	2.98
5/15/2017		2.83	67.27	90.00	83.80		5.67	3.20	3.26
5/16/2017		2.00	63.34	86.67	116.34		3.82	4.29	3.76
5/17/2017	1.0	2.52	63.86	97.33	121.70		5.27	4.36	4.13
5/18/2017	1.0	4.00	63.51	95.11	131.43		3.90	4.38	3.84
5/19/2017	1.0	4.00	56.61	90.00	135.46		3.93	4.20	3.89
5/20/2017		2.00	44.22	109.33	154.56		4.07	3.20	2.86
5/21/2017		2.00	46.17	143.33	141.11		3.10	2.52	2.08
5/22/2017		2.00	48.55	134.67	154.45		4.36	2.71	2.41
5/23/2017	2.0	2.00	43.18	125.33	142.79		3.57	2.37	2.05
5/24/2017	1.3	2.00	43.17	124.67	159.70		3.47	2.18	2.03
5/25/2017	2.5	5.10	60.47	142.67	139.68		4.33	2.52	2.07
5/26/2017	5.2	2.83	66.11	73.67	108.18		6.62	3.61	2.54
5/27/2017		3.46	66.98	76.67	101.44		3.56	3.31	2.51
5/28/2017	4.1	2.83	44.82	94.33	124.49		2.80	2.75	2.45
5/29/2017	1.0	2.00	44.90	108.67	148.96		3.47	2.48	<2.00
5/30/2017		2.00	43.01	120.00	143.64		3.73	2.59	2.21
5/31/2017		2.00	42.66	135.33	170.46		2.93	2.69	2.48
6/1/2017	1.0	4.69	47.79	122.00	148.67		2.63	3.08	2.93
6/2/2017	1.0	2.00	42.28	139.67	158.24		3.00	2.98	2.70
6/3/2017		2.00	39.01	107.33	137.88		3.30	2.68	2.56
6/4/2017		2.83	50.42	131.33	145.80		3.00	3.03	2.56
6/5/2017		2.83	57.02	122.67	165.06		4.13	2.62	2.29
6/6/2017	1.0	2.00	62.62	100.67	118.12		3.47	2.34	2.12
6/7/2017	1.0	2.00	68.35	69.33	88.64		2.20	2.26	2.09
6/8/2017	3.2	2.00	46.88	97.67	129.49		3.13	2.54	2.45
6/9/2017	1.0	4.00	43.64	114.00	137.33		2.70	2.76	2.77
6/10/2017		2.83	41.44	112.67	147.66		3.63	2.75	2.61
6/11/2017		2.00	44.51	112.00	123.87		2.27	3.80	3.67
6/12/2017		2.83	41.12	125.33	162.96		2.80	2.32	2.16
6/13/2017		3.46	41.33	132.67	150.93		2.40	2.02	<2.00
6/14/2017	1.0	2.52	39.19	122.00	159.74		2.63	3.10	2.76
6/15/2017	1.0	4.00	40.94	118.67	161.04		2.30	2.71	2.58
6/16/2017	1.0	4.90	67.60	145.33	129.07		23.35	14.63	7.45
6/17/2017		8.77	63.63	77.33	102.77		6.47	3.41	2.49

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017

Field's Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD,and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL)	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
6/18/2017		5.83	67.29	75.33	87.63		4.62	2.57	2.18
6/19/2017		5.29	66.50	119.33	114.09		4.00	2.84	2.21
6/20/2017	1.0	2.83	56.26	99.33	111.16		2.83	2.17	<2.00
6/21/2017	1.0	2.00	43.20	118.00	134.46		2.57	2.18	<2.00
6/22/2017	1.4	2.00	43.81	124.67	131.465		2.00	2.70	2.53
6/23/2017	3.0	2.00	41.49	149.33	154.39		2.57	3.42	3.16
6/24/2017		2.00	61.01	102.00	101.21		5.20	3.83	3.67
6/25/2017		2.00	49.11	90.67	115.30		<2.000	4.00	3.91
6/26/2017		2.00	40.96	132.67	149.36		2.30	3.97	3.84
6/27/2017		2.00	39.87	134.67	159.70		2.10	3.61	3.27
6/28/2017	3.1	2.00	38.58	126.00	172.52		2.37	3.76	3.31
6/29/2017	1.8	2.00	39.54	162.67	167.31		2.03	3.64	3.17
6/30/2017	2.0	2.00	41.82	160.67	179.76		3.60	4.41	3.99
7/1/2017		4.00	38.72	114.00	154.79		4.63	4.10	3.77
7/2/2017		2.00	37.67	145.33	122.56		2.83	4.65	4.29
7/3/2017	4.1	2.00	36.52	150.00	126.925		3.73	4.44	3.87
7/4/2017	1.0	2.00	34.78	146.00	151.71		2.23	3.28	2.53
7/5/2017	1.0	2.00	34.55	156.67	238.56		2.13	3.84	3.12
7/6/2017	1.4	6.78	39.56	146.00	169.15		2.97	3.19	3.05
7/7/2017	5.1	2.00	58.95	152.00	135.54		7.11	3.60	3.35
7/8/2017		2.00	57.26	111.33	96.36		2.90	2.87	2.90
7/9/2017		2.00	45.83	115.33	134.86		2.80	2.66	2.82
7/10/2017		2.00	36.38	154.67	176.69		3.40	3.16	2.90
7/11/2017		2.00	65.96	98.67	97.77		4.60	2.93	2.61
7/12/2017	1.0	5.04	64.74	96.00	97.32		22.00	7.02	5.21
7/13/2017	1.0	2.83	63.93	104.67	115.35		3.64	2.47	2.44
7/14/2017	2.0	2.00	49.14	100.00	140.04		4.43	2.15	2.05
7/15/2017		2.00	37.98	116.00	153.99		3.64	2.45	2.33
7/16/2017		2.00	39.33	122.67	142.33		3.03	2.82	2.77
7/17/2017		2.00	37.84	144.67	165.69		2.93	2.34	2.17
7/18/2017	3.0	2.00	40.41	191.33	163.46		3.87	2.32	2.46
7/19/2017	1.5	2.00	36.25	136.00	154.14		2.43	2.42	2.09
7/20/2017	1.0	2.83	41.64	166.00	161.28		2.63	2.86	2.76
7/21/2017	1.0	2.00	35.55	126.00	151.15		2.47	2.46	2.24
7/22/2017		2.00	34.09	122.67	178.43		2.33	2.25	2.16
7/23/2017		2.00	35.63	136.67	150.58		2.87	2.37	2.15
7/24/2017		2.00	54.90	156.00	133.79		5.37	2.52	2.18
7/25/2017		2.83	42.23	124.00	148.14		2.93	2.37	2.20
7/26/2017	2.0	2.00	33.95	147.33	161.13		2.63	3.21	3.11
7/27/2017	1.0	4.00	36.30	170.00	152.14		3.07	2.61	2.08
7/28/2017	1.0	2.83	33.41	142.67	162.38		2.37	3.74	3.82
7/29/2017		2.00	31.39	122.00	171.94		<2.000	2.58	2.28
7/30/2017		2.00	33.74	131.33	164.75		2.17	3.51	3.15
7/31/2017		2.83	33.27	152.67	191.35		2.93	3.61	2.89
8/1/2017	1.0	2.00	31.18	153.33	186.85		2.00	2.61	2.46
8/2/2017	2.2	2.00	33.40	196.00	191.44		2.60	2.88	2.82
8/3/2017	2.0	2.83	33.81	164.00	180.665		2.67	3.19	3.05
8/4/2017	1.0	2.00	31.85	161.33	184.03		2.27	3.20	3.01
8/5/2017		5.10	44.02	149.33	162.98		3.87	2.75	2.34
8/6/2017		2.83	34.86	138.67	176.19		2.30	2.39	2.09
8/7/2017		2.00	31.86	143.33	177.19		2.13	2.27	2.17
8/8/2017		2.00	32.16	140.00	170.43		2.70	2.36	2.14
8/9/2017	1.0	3.17	31.69	154.67	183.485		2.63	2.79	2.73
8/10/2017	1.0	2.00	33.48	167.33	168.88		2.13	2.45	2.36
8/11/2017	1.0	2.00	33.40	162.00	189.97		2.47	2.60	2.49
8/12/2017		2.00	32.01	147.33	187.01		2.27	2.30	2.16
8/13/2017	1.0	2.83	30.96	128.67	164.97		2.10	2.75	2.75
8/14/2017	1.0	2.00	31.73	169.33	189.165		2.67	2.37	2.25
8/15/2017		2.00	30.24	155.33	189.83		2.33	2.19	2.16
8/16/2017	1.0	3.17	31.73	152.67	189.83		2.20	2.55	2.54
8/17/2017	1.0	2.83	33.10	186.00	185.04		2.33	2.37	2.16
8/18/2017	1.0	2.00	36.75	189.33	208.77		3.23	2.52	2.35
8/19/2017		2.00	33.15	109.33	208.77		2.00	2.52	2.35
8/20/2017		4.69	30.79	138.67	171.05		2.43	2.33	2.14
8/21/2017		2.00	30.65	183.33	188.96		2.33	2.26	2.10
8/22/2017		2.83	31.08	153.33	182.07		<2.000	<2.00	<2.00
8/23/2017	2.0	3.17	30.50	151.33	188.98		2.10	<2.00	<2.00
8/24/2017	1.4	2.00	32.60	143.33	168.99		<2.000	2.25	<2.00
8/25/2017	4.1	2.00	29.59	180.00	204.30		2.23	2.37	2.46
8/26/2017		4.69	28.60	132.00	193.25		<2.000	2.28	<2.00
8/27/2017		2.00	30.62	164.67	203.92		<2.000	2.60	2.45
8/28/2017		2.00	30.50	169.33	204.84		2.13	2.71	2.33
8/29/2017	2.0	2.83	33.96	186.00	219.90		2.10	2.59	2.13
8/30/2017	1.6	4.70	30.23	134.67	176.82		2.07	2.32	2.23
8/31/2017	1.0	2.00	32.26	175.33	222.85		2.23	2.59	2.20
9/1/2017	1.0	2.00	28.76	181.33	210.78		<2.000	2.52	2.68
9/2/2017		2.83	29.16	164.00	199.34		2.40	2.74	2.76
9/3/2017	7.4	2.00	37.60	182.67	174.27		2.97	2.24	2.07
9/4/2017	2.0	2.00	28.05	153.33	204.48		2.83	2.95	2.77
9/5/2017		2.00	30.66	135.33	191.09		2.70	3.05	2.93
9/6/2017		2.00	45.87	266.00	203.21		3.30	2.93	2.88
9/7/2017	4.1	2.83	55.17	89.33	120.78		3.10	2.27	2.12
9/8/2017	2.0	2.00	45.91	102.67	139.28		2.37	2.27	2.22
9/9/2017		2.00	29.60	129.33	199.04		<2.000	2.39	2.17

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017

Table 1: Field's Point BOD, CBOD, TSS, and Bacteria Data

Field's Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD,and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL)	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
9/10/2017		2.83	31.02	122.00	194.79		<2.000	2.45	2.39
9/11/2017		2.00	28.66	154.67	194.03		2.10	2.49	2.44
9/12/2017	1.0	2.00	28.43	160.00	213.95		2.50	2.72	2.66
9/13/2017	1.0	3.53	28.31	180.67	223.96		2.20	2.64	2.60
9/14/2017	1.8	2.00	32.48	182.67	188.09		6.07	2.36	2.35
9/15/2017	8.4	2.00	29.51	171.33	200.89		3.10	2.14	2.17
9/16/2017		2.00	27.80	139.33	221.18		<2.000	2.92	2.89
9/17/2017		2.83	29.76	155.33	210.27		<2.000	2.57	2.60
9/18/2017		2.00	30.10	176.00	227.48		<2.000	2.32	2.07
9/19/2017	5.2	4.69	35.51	208.00	237.53		2.37	<2.00	<2.00
9/20/2017	1.3	2.00	31.11	138.67	207.15		<2.000	<2.00	<2.00
9/21/2017	3.5	2.00	31.58	172.00	219.25		<2.000	<2.00	<2.00
9/22/2017	1.0	2.00	36.64	177.33	184.84		3.07	2.05	<2.00
9/23/2017		2.83	29.95	122.67	212.36		2.00	2.16	<2.00
9/24/2017		2.00	32.07	120.67	176.70		2.13	2.43	2.12
9/25/2017		2.00	29.03	152.67	213.29		<2.000	2.72	2.37
9/26/2017	4.1	2.83	29.54	156.00	207.02		<2.000	2.70	2.35
9/27/2017	4.1	2.00	29.35	176.00	213.02		<2.000	3.42	2.82
9/28/2017	3.6	2.00	31.34	153.33	200.66		<2.000	2.64	2.305
9/29/2017	1.0	2.00	28.74	175.33	208.31		<2.000	2.41	2.22
9/30/2017		2.00	43.64	144.00	161.40		2.07	2.34	2.06
10/1/2017		2.00	41.24	88.00	164.90		<2.000	2.05	<2.00
10/2/2017		2.00	27.47	168.67	228.89		<2.000	2.29	2.38
10/3/2017		2.00	27.55	158.67	223.80		<2.000	2.28	2.40
10/4/2017	4.1	2.00	29.06	147.33	237.94		<2.000	2.13	2.05
10/5/2017	1.0	2.00	31.06	154.00	220.12		<2.000	2.05	<2.00
10/6/2017	1.0	2.00	28.45	168.67	218.07		<2.000	2.51	2.20
10/7/2017		2.00	28.09	141.33	200.78		<2.000	2.45	2.23
10/8/2017	3.1	2.00	43.82	164.67	165.95		3.03	2.82	2.46
10/9/2017	1.0	2.00	34.93	134.00	200.65		2.00	2.12	<2.00
10/10/2017		2.00	28.52	127.33	214.96		<2.000	2.05	<2.00
10/11/2017	1.0	2.00	29.13	162.67	217.50		<2.000	2.18	<2.00
10/12/2017	1.0	7.75	30.66	176.67	226.26		2.33	<2.00	<2.00
10/13/2017	1.0	2.83	28.37	188.67	219.62		2.27	2.14	<2.00
10/14/2017		2.00	27.33	153.33	222.38		<2.000	2.47	2.52
10/15/2017		2.00	31.42	140.67	202.54		<2.000	2.05	2.07
10/16/2017		4.00	28.09	173.33	233.29		2.03	<2.00	<2.00
10/17/2017		2.00	26.98	167.33	244.71		<2.000	<2.00	<2.00
10/18/2017	1.0	2.00	26.60	173.33	189.22	159.63	<2.000	2.22	2.14
10/19/2017	3.2	2.00	30.27	144.67	225.08		<2.000	<2.00	<2.00
10/20/2017	1.0	4.00	27.83	162.67	221.99		<2.000	<2.00	<2.00
10/21/2017		2.83	27.95	173.33	244.05	195.80	<2.000	2.06	<2.00
10/22/2017		2.00	28.12	162.67	217.57		<2.000	2.47	2.30
10/23/2017		2.00	30.45	186.67	258.47		<2.000	2.76	2.02
10/24/2017	10.9	62.45	46.93	189.33	231.10		3.83	3.20	2.85
10/25/2017	3.1	5.92	66.92	105.33	109.16	85.70	3.80	2.72	2.32
10/26/2017	2.0	5.29	60.18	79.33	100.58		2.20	2.21	<2.00
10/27/2017	1.0	3.74	40.92	105.33	164.24		<2.000	2.03	<2.00
10/28/2017		2.00	30.18	120.00	202.94	169.63	<2.000	2.36	2.18
10/29/2017		4.00	68.54	133.33	150.55		4.37	2.81	2.56
10/30/2017		5.66	69.91	60.00	99.02		4.10	2.26	<2.00
10/31/2017		9.38	62.12	79.33	106.89		3.90	<2.00	<2.00
11/1/2017	2.0	3.17	52.29	84.67	130.74	103.10	2.50	<2.00	<2.00
11/2/2017	2.0	2.83	35.04	129.33	191.05		<2.000	2.09	<2.00
11/3/2017	1.0	2.00	34.36	134.00	200.27		<2.000	2.08	<2.00
11/4/2017		2.83	34.58	129.33	184.45	163.97	<2.000	<2.00	<2.00
11/5/2017		3.74	36.77	136.00	164.46		<2.000	<2.00	<2.00
11/6/2017		2.00	33.42	174.00	253.31		<2.000	2.02	2.11
11/7/2017	5.1	2.00	37.18	147.33	186.07		2.07	2.08	2.25
11/8/2017	4.6	2.00	32.46	118.00	178.685	170.57	<2.000	2.15	2.05
11/9/2017	6.7	2.00	36.52	149.33	184.78		<2.000	2.09	<2.00
11/10/2017	2.0	2.00	31.73	138.67	219.725		3.13	2.25	<2.00
11/11/2017		2.00	31.55	155.33	212.72	172.20	3.97	2.33	2.08
11/12/2017		2.00	32.81	141.33	253.40		2.87	2.22	2.21
11/13/2017		2.00	38.20	163.33	180.22		<2.000	2.21	2.05
11/14/2017		2.00	31.41	124.67	192.56		<2.000	<2.00	<2.00
11/15/2017	1.0	2.52	34.15	141.33	195.38	159.000	2.27	<2.00	<2.00
11/16/2017	1.8	2.00	43.65	174.67	201.92		3.63	2.59	2.32
11/17/2017	6.3	2.00	31.64	134.00	214.68		2.57	2.14	2.74
11/18/2017		2.00	34.28	159.33	193.61	155.2	2.33	2.17	2.18
11/19/2017		2.83	50.58	107.33	140.68		2.90	2.28	2.38
11/20/2017		2.00	31.07	123.33	182.63		2.33	2.07	2.0
11/21/2017	4.1	2.00	34.13	162.00	173.95		2.53	<2.00	<2.00
11/22/2017	3.5	2.52	61.69	109.33	115.73		3.07	2.10	<2.00
11/23/2017	3.3	2.00	51.98	94.00	138.31		3.63	2.09	<2.00
11/24/2017	1.0	2.83	39.79	114.67	180.05		<2.000	<2.00	<2.00
11/25/2017		2.00	32.94	138.00	198.50	176.06	3.87	2.06	2.07
11/26/2017		2.83	32.38	108.00	160.84		<2.000	<2.00	2.02
11/27/2017		2.00	32.57	137.33	211.51		<2.000	2.13	<2.00
11/28/2017		5.66	34.84	146.00	178.86		2.27	2.06	<2.00
11/29/2017	4.1	2.00	31.56	145.33	192.69		2.00	<2.00	<2.00
11/30/2017	3.5	3.74	32.03	176.00	203.36		2.47	2.59	2.70
12/1/2017	4.3	2.00	31.64	172.67		180.44	<2.000		<2.00
12/2/2017	4.7	2.00	31.32	144.67		173.44	2.13		<2.00

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017

Table 1: Field's Point BOD, CBOD, TSS, and Bacteria Data

Field's Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD,and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL)	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
12/3/2017	6.2	6.00	34.00	144.00		132.17	3.73		<2.00
12/4/2017	4.1	2.00	31.50	158.67		167.80	<2.000		<2.00
12/5/2017	8.7	2.00	50.45	215.33		155.47	3.47		2.04
12/6/2017	3.4	2.00	50.86	82.67		197.70	2.87		<2.00
12/7/2017	2.0	4.00	37.20	126.67		173.61	3.38		<2.00
12/8/2017	3.5	2.00	31.80	123.33		171.09	2.57		<2.00
12/9/2017	1.0	2.00	34.17	158.67		175.75	3.53		<2.00
12/10/2017	5.9	2.00	37.65	130.00		141.82	4.62		2.47
12/11/2017	2.4	2.00	33.11	141.33		151.68	3.47		<2.00
12/12/2017	3.1	2.00	41.17	138.67		148.44	3.40		<2.00
12/13/2017	2.0	2.00	32.86	136.67		158.32	3.43		<2.00
12/14/2017	3.6	2.00	35.06	126.67		151.95	<2.000		<2.00
12/15/2017	2.5	2.00	30.85	148.67		197.51	3.57		2.01
12/16/2017	2.3	2.00	29.92	140.67		169.11	4.03		<2.00
12/17/2017	3.1	2.00	30.94	136.00		142.565	3.37		<2.00
12/18/2017	2.5	2.00	32.13	149.33		143.70	4.83		<2.00
12/19/2017	5.1	2.00	31.74	145.33		159.05	3.93		<2.00
12/20/2017	2.0	2.00	30.85	152.67		173.37	4.40		<2.00
12/21/2017	2.0	2.00	30.52	143.33		168.23	2.40		<2.00
12/22/2017	1.8	2.00	31.89	179.33		173.01	2.67		<2.00
12/23/2017	2.9	2.00	46.77	155.33		105.04	5.53		<2.00
12/24/2017	3.6	2.00	45.49	105.33		142.49	2.90		<2.00
12/25/2017	4.6	2.00	41.28	128.00		118.85	4.18		<2.00
12/26/2017	3.8	2.00	32.70	137.33		156.94	4.17		2.06
12/27/2017	3.0	2.00	31.11	137.33		146.34	3.82		<2.00
12/28/2017	7.8	2.00	31.01	139.33		148.74	2.57		<2.00
12/29/2017	5.7	4.00	31.82	154.67		158.95	2.90		<2.00
12/30/2017	1.4	2.00	30.51	138.00		131.34	3.53		<2.00
12/31/2017	2.4	2.00	33.06	134.00		169.59	3.57		<2.00

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017

Table 1: Field's Point BOD, CBOD, TSS, and Bacteria Data

Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
1/1/2017		4.45	15.01	150.00	253.55		4.53	2.44	
1/2/2017	7.9	3.06	14.25	146.00	221.16		5.20	3.10	
1/3/2017		4.98	31.32	182.67	220.50		6.60	5.63	
1/4/2017		3.03	16.73	132.67	139.26		4.20	3.48	
1/5/2017	2.1	3.64	15.12	167.33	212.69		4.10	4.91	
1/6/2017	2.4	5.15	14.99	154.00	224.39		3.87	3.94	
1/7/2017		3.36	14.75	119.33	227.05		4.27	5.92	
1/8/2017		2.83	14.35	138.67	228.45		4.20	4.36	
1/9/2017		3.36	15.04	164.67	236.465		5.11	3.52	
1/10/2017		7.21	19.17	194.67	248.43		9.56	8.07	
1/11/2017		7.98	29.70	162.67	151.86		7.96	6.10	
1/12/2017	16.3	2.00	25.58	120.00	148.66		4.67	4.02	
1/13/2017	2.0	2.38	15.61	183.33	169.16		4.13	3.99	
1/14/2017		3.36	16.09	136.67	196.94		4.13	<2.00	
1/15/2017		5.82	15.49	108.00	204.17		5.51	2.49	
1/16/2017	3.3	4.38	15.79	134.67	189.11		4.27	4.15	
1/17/2017		6.22	20.01	150.67	206.485		6.27	4.57	
1/18/2017		9.54	19.03	150.00	163.81		3.88	3.82	
1/19/2017	1.6	2.00	16.05	148.67	197.82		3.23	3.22	
1/20/2017	3.1	5.66	16.02	348.00	189.81		3.13	3.33	
1/21/2017		2.38	15.53	148.67	208.79		4.09	2.96	
1/22/2017		7.28	16.09	108.00	202.085		4.53	5.76	
1/23/2017		2.83	22.50	138.00	199.27		5.11	3.82	
1/24/2017		9.50	51.93	124.00	123.87		9.53	5.98	
1/25/2017		2.00	32.85	81.33	110.05		5.56	4.63	
1/26/2017	3.2	2.00	20.07	112.00	146.46		4.00	4.37	
1/27/2017	1.6	2.38	18.67	105.33	189.47		3.93	3.71	
1/28/2017		5.47	18.62	120.00	177.18		4.36	4.53	
1/29/2017		2.38	18.26	125.33	174.76		3.73	3.14	
1/30/2017		2.83	17.58	92.67	168.94		3.38	3.59	
1/31/2017		4.00	17.56	141.33	187.87		4.07	2.90	
2/1/2017	3.9	2.64	18.44	158.00	188.91		4.10	3.21	
2/2/2017	7.7	4.00	17.03	136.67	160.10		4.07	3.07	
2/3/2017	5.0	5.37	16.27	115.33	194.20		4.07	2.67	
2/4/2017		2.83	15.91	132.67	198.60		4.00	3.05	
2/5/2017		8.22	16.69	74.67	150.19		5.33	3.60	
2/6/2017		4.43	15.25	127.33	161.25		3.60	3.40	
2/7/2017		4.83	17.68	174.67	224.04		5.67	4.49	
2/8/2017		6.93	15.84	144.00	180.94		4.09	4.72	
2/9/2017	3.6	4.06	16.41	186.00	217.35		3.13	4.39	
2/10/2017	3.8	2.38	15.79	132.33	194.51		3.77	3.14	
2/11/2017		4.33	16.21	114.67	171.96		3.82	2.93	
2/12/2017		3.25	16.22	123.33	195.78		4.43	4.08	
2/13/2017		2.38	17.61	142.67	211.52		4.97	4.20	
2/14/2017		4.00	15.59	149.33	184.77		5.16	4.14	
2/15/2017	5.5	3.48	18.22	146.67	196.94		5.24	3.13	
2/16/2017	10.8	6.18	17.50	122.00	180.41		3.84	2.90	
2/17/2017	5.4	3.87	15.56	130.00	169.58		4.27	3.00	
2/18/2017		3.80	18.81	130.00	191.065		4.63	2.90	
2/19/2017		5.66	21.76	117.33	170.42		4.89	2.90	
2/20/2017		2.00	17.30	85.33	146.46		3.84	2.99	
2/21/2017		6.48	17.12	121.33	197.44		3.27	2.46	
2/22/2017		2.64	17.92	138.67	178.56		4.52	2.88	
2/23/2017	8.8	5.45	18.29	130.67	211.19		3.50	2.46	
2/24/2017	5.7	3.36	18.03	130.00	164.97		4.70	2.87	
2/25/2017		2.74	19.60	108.00	166.52		4.44	5.50	
2/26/2017		74.03	18.16	142.67	159.27		5.47	4.40	
2/27/2017		6.81	17.36	127.33	187.87		5.03	3.33	
2/28/2017		38.18	17.53	136.00	191.15		3.57	3.30	
3/1/2017	4.7	7.42	18.63	131.33	194.48		4.00	3.23	
3/2/2017	7.4	14.75	16.34	140.67	177.61		4.70	3.31	
3/3/2017	4.8	2.83	15.64	138.67	206.54		4.27	4.24	
3/4/2017		3.25	15.69	139.33	177.47		4.36	3.94	
3/5/2017		3.36	15.45	144.67	191.59		6.18	3.61	
3/6/2017		2.83	15.47	166.00	192.99		6.04	3.40	
3/7/2017		3.36	16.61	162.67	183.16		6.04	3.31	
3/8/2017		6.60	16.48	162.67	206.365		3.73	3.27	

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017.

Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
3/9/2017	3.9	3.25	15.04	149.33	199.42		4.40	3.33	
3/10/2017	5.8	2.38	18.06	131.33	175.64		4.20	3.04	
3/11/2017		2.00	15.09	132.00	202.55		4.18	3.94	
3/12/2017		4.76	14.77	153.33	202.80		4.58	3.75	
3/13/2017		2.38	14.51	135.33	203.67		4.80	3.21	
3/14/2017		2.83	32.03	155.33	207.21		10.18	5.43	
3/15/2017	5.5	3.89	18.94	134.00	143.44		4.80	3.65	
3/16/2017		2.00	16.45	129.33	181.96		4.93	3.60	
3/17/2017	5.6	2.74	16.02	139.33	174.73		4.63	3.52	
3/18/2017		5.66	16.35	116.00	175.56		4.04	4.18	
3/19/2017		4.33	16.26	112.00	171.27		5.20	3.32	
3/20/2017		2.00	15.68	146.67	177.64		5.24	3.105	
3/21/2017		3.36	16.02	176.67	201.94		4.13	2.99	
3/22/2017		2.30	15.80	172.00	199.90		6.71	3.34	
3/23/2017	5.8	5.55	15.38	140.67	194.065		5.20	4.00	
3/24/2017	5.7	2.83	16.63	136.67	202.00		5.56	4.99	
3/25/2017		2.38	16.62	140.67	221.55		6.87	3.97	
3/26/2017		5.66	16.37	154.00	189.22		5.87	2.90	
3/27/2017		2.83	26.33	185.33	189.21		6.53	5.50	
3/28/2017		2.83	22.23	126.00	170.04		7.16	4.20	
3/29/2017	4.2	3.03	25.27	121.33	147.17		5.56	3.06	
3/30/2017	1.4	2.00	16.24	134.00	166.32		4.04	2.51	
3/31/2017	5.9	2.38	27.87	128.67	169.03		10.93	5.38	
4/1/2017		5.82	64.09	83.33	99.36		6.20	3.65	
4/2/2017		3.72	22.96	92.00	130.69		6.40	3.24	
4/3/2017		4.45	21.77	92.67	133.42		3.70	2.47	
4/4/2017		2.38	45.66	78.67	109.45		39.82	9.15	
4/5/2017		2.00	24.61	92.67	94.29		6.53	2.94	
4/6/2017	2.1	2.38	48.88	100.33	119.565		6.13	2.90	
4/7/2017	2.2	2.83	27.46	85.33	87.88		6.50	3.44	
4/8/2017		2.74	25.08	85.33	119.40		6.60	4.11	
4/9/2017		2.38	23.04	78.00	94.88		5.33	2.68	
4/10/2017		5.15	23.00	79.00	141.61		3.97	2.45	
4/11/2017		2.00	21.96	98.67	128.34		3.13	<2.00	
4/12/2017	1.9	2.00	21.67	107.33	149.03		4.13	2.25	
4/13/2017	1.9	2.00	20.27	115.33	169.64		7.42	4.06	
4/14/2017	1.4	2.38	19.89	114.00	143.13		4.27	2.23	
4/15/2017		2.38	20.35	134.00	199.08		3.47	<2.00	
4/16/2017		2.00	19.51	104.67	161.20		3.73	2.00	
4/17/2017		2.00	19.12	101.33	144.10		2.87	<2.00	
4/18/2017		2.00	18.13	126.00	191.35		3.30	2.21	
4/19/2017		2.00	19.12	126.67	165.57		3.17	2.56	
4/20/2017	3.8	3.36	21.10	149.33	213.78		4.07	3.23	
4/21/2017	7.9	3.80	29.77	146.00	168.38		8.53	5.55	
4/22/2017		2.38	20.74	117.33	166.54		5.27	2.86	
4/23/2017		2.38	18.25	141.33	183.28		4.00	2.69	
4/24/2017		2.83	18.90	124.00	175.32		4.80	2.81	
4/25/2017		2.83	38.13	133.33	176.12		8.40	3.44	
4/26/2017	2.5	3.39	53.92	85.33	82.75		4.77	2.43	
4/27/2017	1.2	2.00	23.68	88.67	131.04		3.20	<2.00	
4/28/2017	2.7	2.38	22.61	212.00	145.29		3.13	<2.00	
4/29/2017		2.38	21.46	102.67	153.06		3.73	2.42	
4/30/2017		2.38	21.14	106.67	140.07		4.04	2.11	
5/1/2017		2.38	21.38	127.33	167.74		5.33	2.38	
5/2/2017		2.38	32.05	184.67	149.67		10.80	3.92	
5/3/2017		2.00	20.83	117.33	153.57		13.67	4.66	
5/4/2017	3.8	2.83	19.69	113.67	166.98		4.17	2.07	
5/5/2017	3.2	2.38	44.70	133.33	164.10		15.27	5.47	
5/6/2017		6.48	34.92	95.33	95.64		6.47	2.77	
5/7/2017		2.00	26.46	80.00	118.81		7.33	3.19	
5/8/2017		2.00	25.64	92.67	117.49		8.60	3.19	
5/9/2017		2.38	25.32	112.67	154.11		7.00	2.24	
5/10/2017	2.5	3.03	23.60	103.33	137.44		6.60	3.06	
5/11/2017	1.6	3.19	22.90	140.00	197.19		6.67	2.89	
5/12/2017	3.8	2.83	22.75	122.67	166.59		5.87	3.07	
5/13/2017		2.38	23.48	114.00	151.87		7.53	2.79	
5/14/2017		3.06	58.49	111.33	144.60		9.20	5.08	

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017.

Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
5/15/2017		4.52	33.14	91.33	Not Reportable		11.33	4.94	
5/16/2017		4.33	24.61	99.33	131.15		6.80	3.57	
5/17/2017		2.30	24.41	110.00	131.185		5.60	3.02	
5/18/2017	1.0	2.00	23.44	116.67	152.27		4.23	<2.00	
5/19/2017	1.2	3.36	23.25	120.00	149.24		2.70	<2.00	
5/20/2017		2.38	21.26	112.67	167.10		2.53	<2.00	
5/21/2017		2.38	21.08	88.67	118.96		4.36	<2.00	
5/22/2017		2.00	24.50	117.33	136.78		5.93	2.55	
5/23/2017		10.29	20.97	142.00	149.185		4.44	2.09	
5/24/2017	3.6	6.89	20.28	150.67	152.45		4.31	<2.00	
5/25/2017	7.9	66.12	24.78	118.00	153.00		5.97	2.29	
5/26/2017	3.4	15.41	43.51	124.67	134.60		6.36	2.75	
5/27/2017		13.03	21.45	104.00	131.83		3.42	<2.00	
5/28/2017		2.00	20.41	97.00	138.15		2.53	<2.00	
5/29/2017	1.0	2.00	21.62	125.33	140.32		4.04	2.03	
5/30/2017		2.00	20.20	134.67	168.085		5.13	2.16	
5/31/2017		2.00	20.15	140.00	164.21		3.51	<2.00	
6/1/2017		2.38	19.47	145.33	171.12		2.50	2.05	
6/2/2017	1.0	2.83	21.89	150.00	200.78		4.33	2.01	
6/3/2017		2.74	19.01	122.67	139.13		3.37	2.08	
6/4/2017		2.00	22.64	112.67	188.62		4.27	2.03	
6/5/2017		5.15	26.10	111.33	142.20		5.90	2.56	
6/6/2017		19.51	50.75	94.67	141.82		8.22	2.65	
6/7/2017	1.8	6.84	22.74	65.33	111.10		6.27	2.67	
6/8/2017	1.0	3.87	20.86	145.00	164.59		6.27	3.79	
6/9/2017	4.1	43.31	19.93	137.33	160.54		3.43	2.16	
6/10/2017		4.52	19.19	118.67	160.94		2.77	<2.00	
6/11/2017		2.00	18.72	151.33	166.06		2.10	<2.00	
6/12/2017		2.00	17.93	136.00	166.26		3.40	<2.00	
6/13/2017		2.00	17.46	120.00	246.31		3.07	<2.00	
6/14/2017		2.00	17.38	147.33	174.34		3.60	<2.00	
6/15/2017	1.2	4.76	17.91	134.00	192.35		3.03	<2.00	
6/16/2017	1.6	5.74	45.03	144.67	180.38		7.78	3.52	
6/17/2017		3.36	22.56	90.00	116.49		3.78	<2.00	
6/18/2017		2.00	21.07	97.33	126.99		3.23	2.08	
6/19/2017		2.38	21.22	120.00	142.97		3.69	<2.00	
6/20/2017		2.83	26.44	152.67	137.42		5.37	<2.00	
6/21/2017	1.5	2.64	19.59	116.00	130.15		3.33	<2.00	
6/22/2017	1.0	2.00	18.35	137.33	152.74		2.63	<2.00	
6/23/2017	1.4	2.00	18.93	141.33	184.79		4.40	<2.00	
6/24/2017		3.36	28.81	102.00	146.76		5.40	2.02	
6/25/2017		2.00	18.76	98.67	161.08		3.23	<2.00	
6/26/2017		2.38	17.86	127.33	181.28		3.50	<2.00	
6/27/2017		2.00	18.37	118.67	177.01		4.17	<2.00	
6/28/2017		2.64	17.42	136.67	165.52		3.97	<2.00	
6/29/2017	2.4	3.36	17.88	152.67	176.74		4.17	<2.00	
6/30/2017	2.1	6.97	20.88	158.67	168.08		4.80	2.36	
7/1/2017		5.47	17.52	154.00	155.52		4.43	2.20	
7/2/2017		2.38	15.96	118.67	144.70		5.13	2.09	
7/3/2017		6.39	15.86	121.33	152.92		5.47	2.40	
7/4/2017	4.8	5.53	14.63	131.33	149.385		7.20	2.42	
7/5/2017		5.17	15.36	121.33	139.50		8.80	3.47	
7/6/2017	3.4	6.83	15.95	169.33	178.35		14.13	5.26	
7/7/2017	5.3	13.77	31.35	189.33	193.78		12.07	3.92	
7/8/2017		5.47	17.16	124.00	155.74		12.53	7.45	
7/9/2017		16.38	15.38	142.67	218.32		17.60	4.14	
7/10/2017		10.26	15.63	154.67	177.73		24.53	5.18	
7/11/2017		24.45	33.41	184.67	145.80		28.67	7.31	
7/12/2017		18.73	36.20	156.00	174.76		30.53	7.39	
7/13/2017	8.7	41.70	25.42	104.67	130.81		33.33	6.74	
7/14/2017	32.3	19.76	20.19	100.67	132.885		37.67	7.39	
7/15/2017		19.03	19.24	102.67	166.66		35.33	8.87	
7/16/2017		31.52	17.41	132.00	148.96		43.00	8.65	
7/17/2017		101.14	17.85	119.33	163.79		41.33	8.86	
7/18/2017		79.16	21.10	170.00	182.96		46.33	9.24	
7/19/2017	18.7	63.20	17.87	162.00	172.19		39.00	7.68	
7/20/2017	14.1	21.63	16.44	126.67	158.51		34.00	7.55	

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Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
7/21/2017	12.1	18.13	16.00	142.00	158.39		31.11	7.88	
7/22/2017		7.28	15.89	126.67	186.61		23.67	6.90	
7/23/2017		30.78	15.43	137.33	197.78		22.22	6.60	
7/24/2017		14.87	29.56	131.33	166.30		24.22	6.91	
7/25/2017		22.86	17.67	118.00	151.33		18.00	5.82	
7/26/2017		15.17	15.94	134.67	171.74		16.83	5.24	
7/27/2017	3.3	10.68	16.69	162.00	345.00		18.50	6.70	
7/28/2017	1.3	6.39	15.84	152.00	189.79		12.00	4.88	
7/29/2017		4.00	16.17	146.00	204.16		8.73	3.97	
7/30/2017		5.74	14.66	140.67	183.86		8.56	2.66	
7/31/2017		3.36	15.03	136.00	209.79		6.73	2.43	
8/1/2017		4.00	14.99	187.33	219.24		5.33	<2.00	
8/2/2017	3.6	5.00	15.93	166.67	205.74		5.33	2.16	
8/3/2017	3.9	7.74	15.47	189.33	231.04		3.82	<2.00	
8/4/2017	2.5	4.00	15.25	166.00	185.88		3.93	<2.00	
8/5/2017		2.00	20.83	136.00	203.71		5.07	2.05	
8/6/2017		2.38	14.83	122.00	175.03		3.33	<2.00	
8/7/2017		2.38	15.41	135.33	172.12		2.80	<2.00	
8/8/2017		2.00	15.30	175.33	198.825		3.00	<2.00	
8/9/2017		4.70	14.24	180.00	209.79		2.70	<2.00	
8/10/2017	2.5	3.36	14.05	184.00	217.825		2.77	<2.00	
8/11/2017	1.9	4.06	13.99	164.00	271.17		2.70	<2.00	
8/12/2017		2.83	15.50	189.33	219.40		2.93	<2.00	
8/13/2017		3.64	13.53	152.67	188.21		2.47	<2.00	
8/14/2017	1.6	2.00	13.84	144.00	189.31		2.43	<2.00	
8/15/2017		2.00	14.66	150.67	209.10		2.57	<2.00	
8/16/2017		2.00	13.56	181.33	218.11		<2.000	<2.00	
8/17/2017	2.5	2.00	13.37	173.33	232.86		2.60	<2.00	
8/18/2017	1.7	2.83	14.82	198.67	246.00		2.70	<2.00	
8/19/2017		2.83	13.25	165.33	246.00		2.80	<2.00	
8/20/2017		2.38	12.97	159.33	218.02		3.13	<2.00	
8/21/2017		2.00	13.38	167.33	227.61		3.43	<2.00	
8/22/2017		4.52	13.98	190.00	239.17		3.87	<2.00	
8/23/2017		3.79	13.43	182.00	222.61		3.37	<2.00	
8/24/2017	2.0	11.66	12.93	177.33	212.63		3.57	<2.00	
8/25/2017	1.2	5.37	12.97	220.00	253.75		3.50	<2.00	
8/26/2017		2.00	12.96	164.67	253.27		2.70	2.03	
8/27/2017		5.47	12.72	132.67	320.17		2.90	<2.00	
8/28/2017		3.25	12.86	160.00	226.46		7.42	3.27	
8/29/2017		7.35	13.71	192.00	246.90		4.40	<2.00	
8/30/2017	3.1	10.75	16.50	203.33	230.95		3.63	<2.00	
8/31/2017	1.0	6.29	13.20	188.67	228.30		3.53	<2.00	
9/1/2017	1.9	6.13	12.53	166.00	236.04		2.77	<2.00	
9/2/2017		2.83	12.53	178.00	276.00		3.33	<2.00	
9/3/2017		4.00	18.08	170.67	226.10		3.53	<2.00	
9/4/2017	2.8	6.73	13.11	160.67	241.64		2.40	<2.00	
9/5/2017		2.38	13.16	180.00	229.75		2.73	<2.00	
9/6/2017		2.64	16.11	192.67	294.20		3.47	<2.00	
9/7/2017		8.87	24.55	159.33	174.31		2.33	<2.00	
9/8/2017	1.2	5.15	13.18	148.67	215.50		2.20	<2.00	
9/9/2017		2.00	12.72	142.00	220.05		<2.000	<2.00	
9/10/2017		2.83	12.65	127.33	233.89		<2.000	<2.00	
9/11/2017		2.00	12.34	152.67	238.88		<2.000	<2.00	
9/12/2017		2.00	12.48	183.33	277.67		2.00	<2.00	
9/13/2017	1.3	2.00	12.45	186.67	272.30		<2.000	<2.00	
9/14/2017	1.3	3.36	12.95	203.33	258.57		2.07	<2.00	
9/15/2017	1.2	2.00	12.54	196.67	234.26		2.13	<2.00	
9/16/2017		2.83	12.39	174.67	251.69		2.00	<2.00	
9/17/2017		3.36	12.73	128.00	284.29		<2.000	<2.00	
9/18/2017		2.83	13.21	165.33	273.37		<2.000	<2.00	
9/19/2017		2.00	14.20	202.00	235.26		3.20	<2.00	
9/20/2017	2.0	4.77	24.79	166.00	202.59		2.13	<2.00	
9/21/2017	1.0	7.71	13.42	142.67	219.93		2.43	<2.00	
9/22/2017	1.0	3.25	18.54	182.00	251.20		2.57	<2.00	
9/23/2017		2.38	13.83	134.67	204.89		<2.000	<2.00	
9/24/2017		2.38	12.15	146.00	216.51		<2.000	<2.00	
9/25/2017		2.00	12.42	246.67	264.03		2.00	<2.00	

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Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
9/26/2017		3.25	12.81	129.33	322.67		<2.000	<2.00	
9/27/2017	1.1	3.48	12.93	168.67	230.95		<2.000	<2.00	
9/28/2017	1.0	2.83	12.47	169.33	255.45		2.10	<2.00	
9/29/2017	1.2	2.83	11.87	152.00	283.13		<2.000	<2.00	
9/30/2017		2.00	15.93	155.33	277.37		2.20	<2.00	
10/1/2017		3.64	11.98	110.00	252.09		<2.000	<2.00	
10/2/2017		2.00	12.72	94.67	354.60		2.03	<2.00	
10/3/2017		2.83	13.18	149.33	292.40		2.03	<2.00	
10/4/2017		2.30	12.75	148.67	247.04		<2.000	<2.00	
10/5/2017	2.4	3.13	13.06	170.67	337.87		2.07	<2.00	
10/6/2017	1.6	2.38	12.07	179.33	284.76		2.27	<2.00	
10/7/2017		2.00	12.39	147.33	300.44		<2.000	<2.00	
10/8/2017		2.00	17.31	229.33	315.71		2.27	<2.00	
10/9/2017	1.4	2.38	15.57	118.67	220.81		2.30	<2.00	
10/10/2017		2.83	12.79	140.00	244.00		<2.000	<2.00	
10/11/2017		3.39	13.16	159.33	236.90		<2.000	<2.00	
10/12/2017	1.2	2.38	12.14	163.33	249.26		<2.000	<2.00	
10/13/2017	1.4	2.00	11.83	160.00	196.17		<2.000	<2.00	
10/14/2017		2.38	12.73	182.00	259.71		2.20	<2.00	
10/15/2017		2.00	13.03	153.33	271.87		<2.000	<2.00	
10/16/2017		5.32	13.07	140.67	290.10		<2.000	<2.00	
10/17/2017		2.74	12.09	176.67	282.63		<2.000	<2.00	
10/18/2017		2.30	12.19	172.67	265.04	217.80	<2.000	<2.00	<2.00
10/19/2017	1.4	2.74	12.64	164.00	237.19		<2.000	<2.00	
10/20/2017	1.4	2.00	11.82	172.00	247.48		<2.000	<2.00	
10/21/2017		2.00	11.52	183.33	291.99	225.15	<2.000	<2.00	<2.00
10/22/2017		2.00	11.82	148.00	294.91		<2.000	<2.00	
10/23/2017		2.00	12.42	156.67	268.68		<2.000	<2.00	
10/24/2017		2.00	19.10	208.67	246.49		2.77	<2.00	
10/25/2017	1.7	3.95	31.46	148.67	198.34	136.43	11.60	3.16	<2.00
10/26/2017	8.1	21.68	32.47	94.00	125.06		4.50	2.22	
10/27/2017	1.3	5.66	12.43	128.00	194.08		2.37	<2.00	
10/28/2017		2.38	12.81	141.33	262.46	212.7	2.90	<2.00	<2.00
10/29/2017		4.60	27.05	124.67	216.385		17.00	5.79	
10/30/2017		27.67	42.68	116.00	137.64		4.40	2.05	
10/31/2017		2.38	16.29	98.00	143.42		8.13	2.75	
11/1/2017		15.03	16.36	126.67	196.68	166.97	2.23	<2.00	<2.00
11/2/2017	1.0	2.38	15.35	154.67	223.20		2.70	<2.00	
11/3/2017	2.7	2.38	15.12	154.67	250.80		2.27	<2.00	
11/4/2017		2.38	14.62	148.00	206.91	177.97	2.83	<2.00	2.30
11/5/2017		2.38	15.27	136.67	196.49		2.93	<2.00	
11/6/2017		7.87	15.11	136.67	246.32		2.60	<2.00	
11/7/2017		5.32	15.17	153.33	191.18		4.50	2.41	
11/8/2017	3.7	17.87	15.20	146.67	191.89	165.80	4.43	2.33	<2.00
11/9/2017	3.0	9.06	13.71	145.33	204.57		3.80	<2.00	
11/10/2017	2.6	5.58	13.52	154.67	247.52		4.43	<2.00	
11/11/2017		2.83	13.54	146.67	244.88	205.95	4.90	<2.00	<2.00
11/12/2017		9.57	14.19	148.00	231.93		3.33	2.06	
11/13/2017		3.87	17.95	139.33	232.80		6.43	2.74	
11/14/2017		4.98	14.29	155.33	232.52		5.10	2.61	
11/15/2017		3.48	13.58	167.33	272.34	218.40	4.90	<2.00	<2.00
11/16/2017	5.0	4.52	20.12	176.00	286.67		5.90	3.31	
11/17/2017	4.5	12.63	13.43	130.67	191.36		4.63	2.14	
11/18/2017		5.47	14.72	150.67	283.94	229.95	5.38	2.75	2.14
11/19/2017		6.61	23.96	141.33	201.24		7.11	3.26	
11/20/2017		8.65	13.76	120.67	204.93		5.33	2.54	
11/21/2017		2.00	14.00	163.33	251.17		6.62	2.16	
11/22/2017	10.7	3.39	41.09	159.33	193.78		10.87	4.11	
11/23/2017	2.1	4.76	15.11	118.67	180.04		9.67	2.83	
11/24/2017	4.0	4.00	14.10	128.67	265.11		5.40	2.54	
11/25/2017		2.83	14.64	136.00	Not Reportable	235.80	5.20	2.73	2.09
11/26/2017		2.38	14.16	114.00	204.00		5.53	2.72	
11/27/2017		2.83	14.44	121.33	255.67		5.80	3.15	
11/28/2017		2.74	14.09	95.33	276.31		5.78	2.68	
11/29/2017		2.64	14.21	159.33	248.74		5.16	2.56	2.05
11/30/2017	6.8	5.19	14.59	172.00	248.19		6.98	4.43	
12/1/2017	11.0	8.00	14.10	155.33		230.81	6.83		2.48

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017.

Bucklin Point 2017 Wastewater Treatment Plant
TSS, BOD, CBOD, and Bacteria Data

Date	Enterococci Bacteria (MPN/100mL)	Fecal Coliform Bacteria (MPN/100mL	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Raw Influent CBOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)	Final Effluent CBOD (mg/L)
12/2/2017	2.0	2.00	14.36	143.33		285.06	6.80		2.29
12/3/2017	1.0	2.00	14.32	148.00		176.00	9.40		2.20
12/4/2017	4.4	8.00	13.51	116.67		209.50	6.73		2.17
12/5/2017	1.7	2.00	18.76	156.00		212.63	8.60		2.75
12/6/2017	4.1	5.66	27.88	160.00		180.03	9.27		3.63
12/7/2017	1.7	4.00	14.31	136.00		236.82	7.20		3.78
12/8/2017	1.0	8.94	14.60	145.33		210.54	6.70		2.32
12/9/2017	4.1	2.00	15.08	139.33		294.03	6.87		2.87
12/10/2017	3.6	17.00	15.90	143.33		196.32	8.20		2.48
12/11/2017	2.8	4.00	14.45	148.67		202.05	7.33		2.17
12/12/2017	5.5	80.00	19.03	158.00		215.44	7.53		2.93
12/13/2017	5.7	11.66	14.27	147.33		190.39	7.47		<2.00
12/14/2017	3.5	4.00	14.25	148.67		205.20	6.33		<2.00
12/15/2017	1.4	2.00	14.77	138.67		208.95	6.47		2.03
12/16/2017	1.4	2.00	14.39	144.67		212.66	6.27		<2.00
12/17/2017	4.9	2.00	14.43	148.67		185.71	6.67		<2.00
12/18/2017	3.1	2.00	14.84	152.67		192.53	5.27		<2.00
12/19/2017	2.0	2.00	14.67	177.33		214.02	5.27		<2.00
12/20/2017	3.9	14.87	14.19	180.00		222.23	4.49		<2.00
12/21/2017	2.0	2.00	13.78	164.67		214.53	3.33		<2.00
12/22/2017	2.3	2.00	14.56	192.67		221.38	3.43		<2.00
12/23/2017	2.9	2.00	28.96	225.33		246.66	6.20		2.20
12/24/2017	5.1	8.00	15.17	124.67		174.35	5.40		<2.00
12/25/2017	5.4	2.00	21.36	139.33		201.24	5.73		<2.00
12/26/2017	1.4	2.00	14.58	131.33		201.19	5.47		<2.00
12/27/2017	4.1	2.00	14.23	159.33		229.67	5.13		<2.00
12/28/2017	5.4	2.00	13.93	156.67		203.69	2.83		<2.00
12/29/2017	4.4	2.00	14.72	141.33		201.61	3.67		<2.00
12/30/2017	2.0	2.00	15.73	149.33		218.57	3.69		<2.00
12/31/2017	1.0	2.00	14.47	148.67		212.01	3.60		<2.00

Note: Due to new permit issuance, BOD monitoring replaced with CBOD as of December 1, 2017.

Table 2: Bucklin Point BOD, CBOD, TSS, and Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
1/1/2017	Sunday	2		<2			4.0
1/2/2017	Monday	2		<2	3.0		
1/3/2017	Tuesday	<2		<2			
1/4/2017	Wednesday	<2	<2	2			18.3
1/5/2017	Thursday	<2		<2	4.1		6.3
1/6/2017	Friday	<2		2	4.1		
1/7/2017	Saturday	<2		<2			
1/8/2017	Sunday	<2		<2			
1/9/2017	Monday	<2		<2			
1/10/2017	Tuesday	2		<2			
1/11/2017	Wednesday	<2	<2	13			85.7
1/12/2017	Thursday	8		<2	41.1		3.1
1/13/2017	Friday	<2		<2	2.0		
1/14/2017	Saturday	<2		<2			
1/15/2017	Sunday	<2		<2			2.0
1/16/2017	Monday	<2		<2	6.2		
1/17/2017	Tuesday	<2		<2			
1/18/2017	Wednesday	<2	<2	<2			7.4
1/19/2017	Thursday	<2		<2	10.6		9.6
1/20/2017	Friday	<2		<2	<1		
1/21/2017	Saturday	<2		2			
1/22/2017	Sunday	<2		<2			
1/23/2017	Monday	<2		<2			
1/24/2017	Tuesday	<2		<2			
1/25/2017	Wednesday	<2	2	2			<1
1/26/2017	Thursday	<2		2	1.0		25.7
1/27/2017	Friday	<2		<2	4.1		
1/28/2017	Saturday	<2		<2			
1/29/2017	Sunday	<2		<2			
1/30/2017	Monday	<2		<2			
1/31/2017	Tuesday	<2		<2			1.0
2/1/2017	Wednesday	<2	<2	<2	8.4	5.2	15.6
2/2/2017	Thursday	<2		<2	15.6		3.1
2/3/2017	Friday	<2		<2	1.0		
2/4/2017	Saturday	<2		2			
2/5/2017	Sunday	<2		<2			
2/6/2017	Monday	<2		<2			
2/7/2017	Tuesday	<2		<2			
2/8/2017	Wednesday	<2	<2	<2			5.2
2/9/2017	Thursday	<2		2	7.4		6.3
2/10/2017	Friday	<2		<2	14.5		
2/11/2017	Saturday	2		<2			
2/12/2017	Sunday	<2		<2			
2/13/2017	Monday	<2		<2			
2/14/2017	Tuesday	2		<2			7.5
2/15/2017	Wednesday	<2	<2	<2	4.1	7.5	7.3
2/16/2017	Thursday	<2		<2	8.4		6.3
2/17/2017	Friday	2		<2	7.3		
2/18/2017	Saturday	<2		2			
2/19/2017	Sunday	<2		<2			
2/20/2017	Monday	4		<2			

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
2/21/2017	Tuesday	<2		<2			
2/22/2017	Wednesday	<2	2	2			26.6
2/23/2017	Thursday	<2		<2	10.8		7.2
2/24/2017	Friday	<2		<2	5.2		
2/25/2017	Saturday	<2		<2			
2/26/2017	Sunday	<2		2			
2/27/2017	Monday	<2		<2			
2/28/2017	Tuesday	<2		<2			6.2
3/1/2017	Wednesday	<2	<2	<2	2.0	2.0	4.1
3/2/2017	Thursday	<2		<2	7.4		5.2
3/3/2017	Friday	<2		<2	4.1		
3/4/2017	Saturday	11		<2			
3/5/2017	Sunday	<2		<2			
3/6/2017	Monday	<2		2			
3/7/2017	Tuesday	<2		<2			
3/8/2017	Wednesday	<2	<2	<2			2.0
3/9/2017	Thursday	<2		<2	2.0		2.0
3/10/2017	Friday	<2		<2	5.1		
3/11/2017	Saturday	<2		2			
3/12/2017	Sunday	2		<2			
3/13/2017	Monday	<2		<2			
3/14/2017	Tuesday	<2		<2			32.0
3/15/2017	Wednesday	<2	<2	<2	13.2	15.3	
3/16/2017	Thursday	<2		<2			4.1
3/17/2017	Friday	<2		<2	4.1		
3/18/2017	Saturday	<2		<2			
3/19/2017	Sunday	<2		2			
3/20/2017	Monday	<2		2			
3/21/2017	Tuesday	<2		<2			
3/22/2017	Wednesday	<2	2	2			19.3
3/23/2017	Thursday	<2		<2	2.0		2.0
3/24/2017	Friday	<2		4	2.0		
3/25/2017	Saturday	<2		<2			
3/26/2017	Sunday	<2		<2			
3/27/2017	Monday	<2		<2			
3/28/2017	Tuesday	2		<2			16.3
3/29/2017	Wednesday	<2	<2	2	10.8	8.3	3.0
3/30/2017	Thursday	<2		<2	2.0		7.5
3/31/2017	Friday	<2		<2	2.0		
4/1/2017	Saturday	<2		2			
4/2/2017	Sunday	2		<2			
4/3/2017	Monday	13		<2			
4/4/2017	Tuesday	<2		<2			
4/5/2017	Wednesday	<2	<2	<2			35.0
4/6/2017	Thursday	<2		<2	9.7		2.0
4/7/2017	Friday	<2		<2	1.0		
4/8/2017	Saturday	<2		2			
4/9/2017	Sunday	<2		<2			
4/10/2017	Monday	2		<2			
4/11/2017	Tuesday	<2		<2			6.3
4/12/2017	Wednesday	<2	<2	2	4.1	2.0	5.2

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
4/13/2017	Thursday	<2		<2	6.3		4.1
4/14/2017	Friday	2		<2	3.1		
4/15/2017	Saturday	<2		4			
4/16/2017	Sunday	9		<2			
4/17/2017	Monday	<2		<2			
4/18/2017	Tuesday	<2		2			
4/19/2017	Wednesday	<2	<2	<2			4.1
4/20/2017	Thursday	<2		2	1.0		4.1
4/21/2017	Friday	<2		<2	3.1		
4/22/2017	Saturday	<2		2			
4/23/2017	Sunday	<2		<2			
4/24/2017	Monday	<2		<2			
4/25/2017	Tuesday	<2		4			5.2
4/26/2017	Wednesday	7	4	2	4.1	6.3	2.0
4/27/2017	Thursday	4		<2	1.0		<1
4/28/2017	Friday	2		2	1.0		
4/29/2017	Saturday	2		7			
4/30/2017	Sunday	4		<2			
5/1/2017	Monday	2		<2			
5/2/2017	Tuesday	4		2			
5/3/2017	Wednesday	2	2	2			2.0
5/4/2017	Thursday	2		23	1.0		<1
5/5/2017	Friday	<2		4	1.0		
5/6/2017	Saturday	2		2			
5/7/2017	Sunday	2		8			
5/8/2017	Monday	<2		<2			
5/9/2017	Tuesday	8		<2			9.5
5/10/2017	Wednesday	<2	<2	2	1.0	2.0	<1
5/11/2017	Thursday	2		4	<1		<1
5/12/2017	Friday	<2		2	<1		
5/13/2017	Saturday	<2		<2			
5/14/2017	Sunday	2		2			
5/15/2017	Monday	2		4			
5/16/2017	Tuesday	2		2			
5/17/2017	Wednesday	<2	<2	4			1.0
5/18/2017	Thursday	<2		8	<1		<1
5/19/2017	Friday	4		4	<1		
5/20/2017	Saturday	2		2			
5/21/2017	Sunday	<2		<2			
5/22/2017	Monday	2		2			
5/23/2017	Tuesday	2		<2			2.0
5/24/2017	Wednesday	2	2	<2	1.0	<1	2.0
5/25/2017	Thursday	<2		13	3.1		2.0
5/26/2017	Friday	4		<2	5.2		
5/27/2017	Saturday	<2		6			
5/28/2017	Sunday	4		2			4.1
5/29/2017	Monday	<2		<2	<1		
5/30/2017	Tuesday	2		<2			
5/31/2017	Wednesday	<2	<2	2			
6/1/2017	Thursday	<2		11			<1
6/2/2017	Friday	<2		<2	<1		

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
6/3/2017	Saturday	<2		<2			
6/4/2017	Sunday	<2		4			
6/5/2017	Monday	4		2			
6/6/2017	Tuesday	2		<2			1.0
6/7/2017	Wednesday	<2	<2	2	<1	1.0	1.0
6/8/2017	Thursday	<2		<2	2.0		5.2
6/9/2017	Friday	8		2	<1		
6/10/2017	Saturday	2		4			
6/11/2017	Sunday	2		2			
6/12/2017	Monday	4		2			
6/13/2017	Tuesday	<2		6			
6/14/2017	Wednesday	<2	4	2			<1
6/15/2017	Thursday	4		4	<1		<1
6/16/2017	Friday	6		4	<1		
6/17/2017	Saturday	7		11			
6/18/2017	Sunday	<2		17			
6/19/2017	Monday	4		7			
6/20/2017	Tuesday	4		<2			<1
6/21/2017	Wednesday	<2	<2	<2	1.0	1.0	1.0
6/22/2017	Thursday	<2		<2	<1		2.0
6/23/2017	Friday	<2		<2	3.0		
6/24/2017	Saturday	<2		2			
6/25/2017	Sunday	2		<2			
6/26/2017	Monday	<2		<2			
6/27/2017	Tuesday	<2		<2			
6/28/2017	Wednesday	<2	2	2			3.1
6/29/2017	Thursday	<2		2	3.1		<1
6/30/2017	Friday	<2		2	2.0		
7/1/2017	Saturday	2		8			
7/2/2017	Sunday	2		2			
7/3/2017	Monday	2		<2			4.1
7/4/2017	Tuesday	<2		2	<1		
7/5/2017	Wednesday	<2	<2	<2			<1
7/6/2017	Thursday	23		2	<1		2.0
7/7/2017	Friday	<2		<2	5.1		
7/8/2017	Saturday	<2		<2			
7/9/2017	Sunday	2		2			
7/10/2017	Monday	<2		<2			
7/11/2017	Tuesday	<2		<2			
7/12/2017	Wednesday	4	8	4			1.0
7/13/2017	Thursday	4		<2	1.0		<1
7/14/2017	Friday	<2		<2	2.0		
7/15/2017	Saturday	<2		<2			
7/16/2017	Sunday	<2		<2			
7/17/2017	Monday	2		<2			
7/18/2017	Tuesday	2		<2			3.0
7/19/2017	Wednesday	<2	2	2	3.1	1.0	<1
7/20/2017	Thursday	4		<2	<1		1.0
7/21/2017	Friday	<2		<2	1.0		
7/22/2017	Saturday	<2		2			
7/23/2017	Sunday	<2		2			

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
7/24/2017	Monday	2		<2			
7/25/2017	Tuesday	4		<2			
7/26/2017	Wednesday	2	<2	2			2.0
7/27/2017	Thursday	4		4	1.0		1.0
7/28/2017	Friday	<2		4	1.0		
7/29/2017	Saturday	2		2			
7/30/2017	Sunday	2		<2			
7/31/2017	Monday	2		4			
8/1/2017	Tuesday	2		<2			<1
8/2/2017	Wednesday	<2	<2	<2	11.0	1.0	<1
8/3/2017	Thursday	4		<2	4.1		<1
8/4/2017	Friday	<2		<2	1.0		
8/5/2017	Saturday	2		13			
8/6/2017	Sunday	4		<2			
8/7/2017	Monday	<2		<2			
8/8/2017	Tuesday	2		2			
8/9/2017	Wednesday	2	8	<2			1.0
8/10/2017	Thursday	<2		2	1.0		1.0
8/11/2017	Friday	<2		<2	<1		
8/12/2017	Saturday	<2		<2			
8/13/2017	Sunday	2		4			<1
8/14/2017	Monday	2		<2	<1		
8/15/2017	Tuesday	2		2			
8/16/2017	Wednesday	<2	2	8			<1
8/17/2017	Thursday	2		4	<1		<1
8/18/2017	Friday	2		<2	<1		
8/19/2017	Saturday	<2		<2			
8/20/2017	Sunday	<2		11			
8/21/2017	Monday	<2		<2			
8/22/2017	Tuesday	<2		4			
8/23/2017	Wednesday	4	4	<2			2.0
8/24/2017	Thursday	<2		<2	<1		2.0
8/25/2017	Friday	<2		<2	4.1		
8/26/2017	Saturday	2		11			
8/27/2017	Sunday	<2		<2			
8/28/2017	Monday	<2		2			
8/29/2017	Tuesday	2		4			2.0
8/30/2017	Wednesday	13	4	<2	<1	4.1	<1
8/31/2017	Thursday	<2		<2	1.0		1.0
9/1/2017	Friday	2		<2	1.0		
9/2/2017	Saturday	4		<2			
9/3/2017	Sunday	2		<2			7.4
9/4/2017	Monday	2		2	2.0		
9/5/2017	Tuesday	<2		<2			
9/6/2017	Wednesday	<2	<2	<2			
9/7/2017	Thursday	<2		4			4.1
9/8/2017	Friday	<2		2	2.0		
9/9/2017	Saturday	<2		<2			
9/10/2017	Sunday	4		<2			
9/11/2017	Monday	<2		<2			
9/12/2017	Tuesday	2		2			<1

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
9/13/2017	Wednesday	2	2	11	1.0	1.0	1.0
9/14/2017	Thursday	2		<2	1.0		3.1
9/15/2017	Friday	<2		<2	8.4		
9/16/2017	Saturday	2		2			
9/17/2017	Sunday	4		2			
9/18/2017	Monday	2		2			
9/19/2017	Tuesday	<2		11			5.2
9/20/2017	Wednesday	<2	<2	<2	1.0	<1	2.0
9/21/2017	Thursday	2		<2	2.0		6.2
9/22/2017	Friday	<2		<2	<1		
9/23/2017	Saturday	<2		4			
9/24/2017	Sunday	2		<2			
9/25/2017	Monday	2		<2			
9/26/2017	Tuesday	2		4			4.1
9/27/2017	Wednesday	<2	2	<2	4.1	2.0	8.6
9/28/2017	Thursday	<2		2	13.2		<1
9/29/2017	Friday	<2		<2	<1		
9/30/2017	Saturday	<2		<2			
10/1/2017	Sunday	2		<2			
10/2/2017	Monday	<2		<2			
10/3/2017	Tuesday	2		2			
10/4/2017	Wednesday	<2	<2	2			4.1
10/5/2017	Thursday	2		2	<1		<1
10/6/2017	Friday	<2		2	<1		
10/7/2017	Saturday	<2		2			
10/8/2017	Sunday	<2		2			3.1
10/9/2017	Monday	2		<2	<1		
10/10/2017	Tuesday	2		2			
10/11/2017	Wednesday	<2	2	2			<1
10/12/2017	Thursday	2		30	<1		1.0
10/13/2017	Friday	4		<2	<1		
10/14/2017	Saturday	<2		<2			
10/15/2017	Sunday	2		<2			
10/16/2017	Monday	8		2			
10/17/2017	Tuesday	<2		<2			
10/18/2017	Wednesday	<2	<2	<2			1.0
10/19/2017	Thursday	<2		2	2.0		5.2
10/20/2017	Friday	4		4	<1		
10/21/2017	Saturday	2		4			
10/22/2017	Sunday	<2		2			
10/23/2017	Monday	2		2			
10/24/2017	Tuesday	130		30			10.9
10/25/2017	Wednesday	13	4	4	3.1	3.1	
10/26/2017	Thursday	4		7	1.0		4.1
10/27/2017	Friday	7		<2	1.0		
10/28/2017	Saturday	2		2			
10/29/2017	Sunday	<2		8			
10/30/2017	Monday	8		4			
10/31/2017	Tuesday	11		8			
11/1/2017	Wednesday	4	4	2			2.0
11/2/2017	Thursday	4		<2	2.0		2.0

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

Date	Day of the Week	Fecal Coliform			Enterococci		
		Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)	Grab 1 (08:00*)	Grab 1 Duplicate (08:00*)	Grab 2 (04:00*)
11/3/2017	Friday	<2		<2	1.0		
11/4/2017	Saturday	<2		4			
11/5/2017	Sunday	7		<2			
11/6/2017	Monday	<2		<2			
11/7/2017	Tuesday	2		<2			5.1
11/8/2017	Wednesday	<2	<2	<2	6.3	5.1	3.0
11/9/2017	Thursday	2		<2	14.5		3.1
11/10/2017	Friday	<2		<2	2.0		
11/11/2017	Saturday	<2		<2			
11/12/2017	Sunday	2		<2			
11/13/2017	Monday	2		<2			
11/14/2017	Tuesday	<2		<2			
11/15/2017	Wednesday	2	2	4			1.0
11/16/2017	Thursday	<2		2	1.0		3.1
11/17/2017	Friday	<2		<2	6.3		
11/18/2017	Saturday	2		<2			
11/19/2017	Sunday	2		4			
11/20/2017	Monday	2		2			
11/21/2017	Tuesday	<2		<2			4.1
11/22/2017	Wednesday	<2	4	<2	4.1	5.2	2.0
11/23/2017	Thursday	2		<2	11.0		1.0
11/24/2017	Friday	4		<2	<1		
11/25/2017	Saturday	<2		<2			
11/26/2017	Sunday	4		<2			
11/27/2017	Monday	<2		2			
11/28/2017	Tuesday	4		8			
11/29/2017	Wednesday	2	<2	2			4.1
11/30/2017	Thursday	7		2	6.3		2.0
12/1/2017	Friday	<2			6.2		3.0
12/2/2017	Saturday	<2			2.0		11.0
12/3/2017	Sunday	6			5.2		7.5
12/4/2017	Monday	<2			4.1		4.1
12/5/2017	Tuesday	<2			5.2		14.6
12/6/2017	Wednesday	2	<2		2.0	6.3	3.1
12/7/2017	Thursday	4			<1		4.1
12/8/2017	Friday	<2			6.1		2.0
12/9/2017	Saturday	<2			1.0		1.0
12/10/2017	Sunday	<2			4.1		8.4
12/11/2017	Monday	2			3.0		2.0
12/12/2017	Tuesday	<2			3.1		3.1
12/13/2017	Wednesday	<2	<2		1.0	2.0	4.1
12/14/2017	Thursday	2			4.1		3.1
12/15/2017	Friday	<2			3.1		2.0
12/16/2017	Saturday	<2			5.2		1.0
12/17/2017	Sunday	<2			3.1		3.1
12/18/2017	Monday	2			3.1		2.0
12/19/2017	Tuesday	<2			4.1		6.3
12/20/2017	Wednesday	<2	<2		4.1	<1	2.0
12/21/2017	Thursday	<2			1.0		4.1
12/22/2017	Friday	<2			3.1		1.0
12/23/2017	Saturday	<2			4.1		2.0

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Field's Point Bacteria Data 2017

all results are in MPN/100 mL

		Fecal Coliform			Enterococci		
Date	**Day of the Week**	**Grab 1 (08:00*)**	**Grab 1 Duplicate (08:00*)**	**Grab 2 (04:00*)**	**Grab 1 (08:00*)**	**Grab 1 Duplicate (08:00*)**	**Grab 2 (04:00*)**
12/24/2017	Sunday	<2			3.1		4.1
12/25/2017	Monday	2			5.2		4.1
12/26/2017	Tuesday	2			7.4		2.0
12/27/2017	Wednesday	<2	<2		3.0	3.0	3.0
12/28/2017	Thursday	<2			6.3		9.7
12/29/2017	Friday	4			5.2		6.3
12/30/2017	Saturday	2			2.0		1.0
12/31/2017	Sunday	<2			2.0		3.0

*Sample times are approximate

Table 3: Field's Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
1/1/2017	Sunday	<2		2		14		7					
1/2/2017	Monday	11	29.5	2	3	<2	4.1	2	10.9				
1/3/2017	Tuesday	11		4		7		2					
1/4/2017	Wednesday	8		<2		<2		4		<2	Grab 4		
1/5/2017	Thursday	2	1	<2	2	11	5.2	4	2				
1/6/2017	Friday	4	3	4	1	4	<1	11	10.9				
1/7/2017	Saturday	<2		4		2		8					
1/8/2017	Sunday	2		<2		4		4					
1/9/2017	Monday	4		<2		4		4					
1/10/2017	Tuesday	<2		13		13		8					
1/11/2017	Wednesday	8		23		22		2		4	Grab 4		
1/12/2017	Thursday	2	29.5	2	29.2	2	10.8	2	7.5				
1/13/2017	Friday	2	2	2	1	<2	4.1	4	2				
1/14/2017	Saturday	<2		4		2		8					
1/15/2017	Sunday	11		13		2		4					
1/16/2017	Monday	<2	2	4	4.1	<2	1	23	14.2				
1/17/2017	Tuesday	11		17		4		<2					
1/18/2017	Wednesday	9		13		13		4		13	Grab 4		
1/19/2017	Thursday	2	<1	<2	3.1	<2	<1	<2	2				
1/20/2017	Friday	8	3.1	8	1	8	2	2	14.6				
1/21/2017	Saturday	<2		2		4		<2					
1/22/2017	Sunday	8		4		8		11					
1/23/2017	Monday	4		4		2		2					
1/24/2017	Tuesday	2		17		30		8					
1/25/2017	Wednesday	<2		2		<2		<2		<2	Grab 4		
1/26/2017	Thursday	2	5.2	<2	5.1	2	4.1	2	1				
1/27/2017	Friday	2	<1	2	<1	4	2	2	3.1				
1/28/2017	Saturday	8		8		7		2					
1/29/2017	Sunday	4		<2		<2		<2					
1/30/2017	Monday	4		4		2		2					
1/31/2017	Tuesday	4		4		2		8					
2/1/2017	Wednesday	<2	1	2	2	4	13.2	4	12.1	2	Grab 4	3	Grab 4
2/2/2017	Thursday	8	13.4	2	5.2	4	5.2	4	9.7				
2/3/2017	Friday	<2	4.1	8	7.3	4	4.1	13	5.2				
2/4/2017	Saturday	4		<2		2		4					
2/5/2017	Sunday	11		4		13		8					
2/6/2017	Monday	8		6		<2		4					
2/7/2017	Tuesday	17		<2		2		8					
2/8/2017	Wednesday	2		7		8		11		13	Grab 4		
2/9/2017	Thursday	17	5.2	2	4.1	4	2	2	4.1				
2/10/2017	Friday	2	5.2	2	1	4	9.6	<2	4.1				
2/11/2017	Saturday	2		4		2		22					
2/12/2017	Sunday	<2		2		4		7					
2/13/2017	Monday	2		4		<2		<2					
2/14/2017	Tuesday	<2		4		8		4					
2/15/2017	Wednesday	4	12.2	<2	<1	4	8.5	4	6.3	4	Grab 4	7.5	Grab 4
2/16/2017	Thursday	13	9.7	2	10.7	7	9.6	8	13.5				
2/17/2017	Friday	<2	4.1	7	12.2	<2	4.1	8	4.1				
2/18/2017	Saturday	4		2		13		2					
2/19/2017	Sunday	8		4		8		4					
2/20/2017	Monday	2		<2		<2		<2					
2/21/2017	Tuesday	<2		4		13		17					
2/22/2017	Wednesday	4		2		2		4		<2	Grab 4		
2/23/2017	Thursday	13	13.4	17	13.4	2	6.3	<2	5.2				
2/24/2017	Friday	2	2	4	9.7	<2	7.5	8	7.5				
2/25/2017	Saturday	2		2		7		2					
2/26/2017	Sunday	110		130		70		30					
2/27/2017	Monday	11		7		4		7					
2/28/2017	Tuesday	50		50		50		17					
3/1/2017	Wednesday	4	7.5	8	5.2	8	7.5	8	4.1	11	Grab 4	2	Grab 4
3/2/2017	Thursday	13	6.3	70	8.5	4	7.3	13	7.5				
3/3/2017	Friday	2	4.1	4	5.2	4	4.1	<2	6.3				

Table 4: Bucklin Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
3/4/2017	Saturday	<2		4		7		<2					
3/5/2017	Sunday	<2		4		4		4					
3/6/2017	Monday	2		4		4		<2					
3/7/2017	Tuesday	2		4		4		4					
3/8/2017	Wednesday	14		4		8		4		7	Grab 4		
3/9/2017	Thursday	2	1	<2	5.2	4	5.2	7	8.4				
3/10/2017	Friday	4	7.4	2	5.2	2	3.1	2	9.5				
3/11/2017	Saturday	<2		2		2		<2					
3/12/2017	Sunday	4		4		4		8					
3/13/2017	Monday	<2		4		2		2					
3/14/2017	Tuesday	<2		4		<2		4					
3/15/2017	Wednesday	2	6.3	4	7.5	4	4.1	7	8.6	4	Grab 4	3.1	Grab 4
3/16/2017	Thursday	<2		<2		2		2					
3/17/2017	Friday	2	3.1	7	4.1	<2	10.8	2	7.4				
3/18/2017	Saturday	4		8		4		8					
3/19/2017	Sunday	2		<2		11		8					
3/20/2017	Monday	<2		2		2		2					
3/21/2017	Tuesday	<2		4		<2		8					
3/22/2017	Wednesday	2		2		4		2		2	Grab 4		
3/23/2017	Thursday	4	7.3	17	9.6	<2	3.1	7	5.2				
3/24/2017	Friday	4	4.1	4	4.1	2	9.7	<2	6.3				
3/25/2017	Saturday	<2		4		<2		2					
3/26/2017	Sunday	4		8		4		8					
3/27/2017	Monday	2		8		2		<2					
3/28/2017	Tuesday	8		2		2		<2					
3/29/2017	Wednesday	4	5.2	8	8.4	2	4.1	<2	1	2	Grab 4	7.4	Grab 4
3/30/2017	Thursday	2	1	2	4.1	2	1	2	<1				
3/31/2017	Friday	2	5.2	2	5.2	2	7.3	4	6.1				
4/1/2017	Saturday	<2		4		11		13					
4/2/2017	Sunday	4		4		6		2					
4/3/2017	Monday	7		4		2		7					
4/4/2017	Tuesday	<2		2		4		<2					
4/5/2017	Wednesday	2		<2		2		2		2	Grab 4		
4/6/2017	Thursday	2	5.2	<2	1	2	2	4	2				
4/7/2017	Friday	4	<1	<2	4.1	2	3.1	4	2				
4/8/2017	Saturday	7		2		<2		2					
4/9/2017	Sunday	4		2		<2		<2					
4/10/2017	Monday	44		<2		4		<2					
4/11/2017	Tuesday	2		<2		2		2					
4/12/2017	Wednesday	2	2	<2	3.1	2	2	<2	1	<2	Grab 4	2	Grab 4
4/13/2017	Thursday	<2	2	2	<1	<2	2	2	3.1				
4/14/2017	Friday	<2	2	2	2	4	<1	<2	<1				
4/15/2017	Saturday	<2		2		4		<2					
4/16/2017	Sunday	2		2		2		2					
4/17/2017	Monday	<2		<2		2		2					
4/18/2017	Tuesday	<2		2		<2		<2					
4/19/2017	Wednesday	<2		2		<2		<2		2	Grab 4		
4/20/2017	Thursday	4	6.3	4	5.2	<2	2	4	3.1				
4/21/2017	Friday	2	5.2	<2	7.5	4	7.5	13	13.1				
4/22/2017	Saturday	4		2		<2		2					
4/23/2017	Sunday	2		4		2		2					
4/24/2017	Monday	2		4		4		2					
4/25/2017	Tuesday	4		4		2		<2					
4/26/2017	Wednesday	4	4.1	2	6.3	7	4.1	4	1	2	Grab 4	1	Grab 4
4/27/2017	Thursday	<2	1	<2	2	<2	<1	<2	<1				
4/28/2017	Friday	2	3.1	<2	2	4	2	<2	4.1				
4/29/2017	Saturday	4		2		2		2					
4/30/2017	Sunday	2		<2		<2		4					
5/1/2017	Monday	<2		2		4		<2					
5/2/2017	Tuesday	2		<2		<2		4					
5/3/2017	Wednesday	<2		<2		2		2		<2	Grab 4		
5/4/2017	Thursday	2	5.2	4	7.5	4	5.2	<2	<1				

Table 4: Bucklin Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
5/5/2017	Friday	4	5.2	2	2	<2	3.1	2	3.1				
5/6/2017	Saturday	7		9		4		7					
5/7/2017	Sunday	2		<2		2		2					
5/8/2017	Monday	2		<2		2		2					
5/9/2017	Tuesday	2		2		4		2					
5/10/2017	Wednesday	4	2	2	1	2	3.1	4	4.1	4	Grab 4	4.1	Grab 4
5/11/2017	Thursday	2	2	<2	3.1	13	1	2	1				
5/12/2017	Friday	4	4.1	2	8.6	4	2	2	3.1				
5/13/2017	Saturday	2		2		4		2					
5/14/2017	Sunday	2		2		11		2					
5/15/2017	Monday	8		2		<2		13					
5/16/2017	Tuesday	8		11		<2		2					
5/17/2017	Wednesday	4		2		2		2		2	Grab 4		
5/18/2017	Thursday	2	1	<2	<1	<2	1	<2	<1				
5/19/2017	Friday	8	2	2	1	<2	1	4	<1				
5/20/2017	Saturday	2		4		<2		<2					
5/21/2017	Sunday	<2		2		2		4					
5/22/2017	Monday	2		2		<2		2					
5/23/2017	Tuesday	11		17		30		<2					
5/24/2017	Wednesday	11	6.3	11	7.4	8	2	4	2	4	Grab 4	3.1	Grab 4
5/25/2017	Thursday	130	19.5	70	7.4	70	5.1	30	5.2				
5/26/2017	Friday	11	1	8	4.1	8	4.1	80	8.4				
5/27/2017	Saturday	11		14		11		17					
5/28/2017	Sunday	2		2		<2		<2					
5/29/2017	Monday	2	1	<2	1	<2	<1	<2	<1				
5/30/2017	Tuesday	<2		<2		<2		<2					
5/31/2017	Wednesday	2		<2		<2		<2		<2	Grab 4		
6/1/2017	Thursday	<2		2		4		2					
6/2/2017	Friday	2	<1	2	1	2	1	8	1				
6/3/2017	Saturday	2		<2		7		2					
6/4/2017	Sunday	2		2		2		2					
6/5/2017	Monday	4		22		<2		4					
6/6/2017	Tuesday	23		30		30		7					
6/7/2017	Wednesday	2	2	8	2	8	5.2	13	<1	9	Grab 4	<1	Grab 4
6/8/2017	Thursday	4	<1	7	1	<2	<1	4	<1				
6/9/2017	Friday	80	9.6	8	3.1	50	1	110	9.7				
6/10/2017	Saturday	2		8		13		2					
6/11/2017	Sunday	<2		<2		2		2					
6/12/2017	Monday	2		<2		2		2					
6/13/2017	Tuesday	<2		<2		<2		<2					
6/14/2017	Wednesday	2		<2		2		2		2	Grab 4		
6/15/2017	Thursday	8	2	4	<1	8	<1	2	1				
6/16/2017	Friday	17	3.1	4	1	8	2	<2	<1				
6/17/2017	Saturday	4		4		2		4					
6/18/2017	Sunday	<2		2		<2		<2					
6/19/2017	Monday	<2		<2		4		2					
6/20/2017	Tuesday	4		2		4		2					
6/21/2017	Wednesday	<2	1	4	2	4	<1	2	1	2	Grab 4	4.1	Grab 4
6/22/2017	Thursday	2	1	<2	1	2	1	<2	1				
6/23/2017	Friday	<2	<1	<2	2	<2	2	<2	<1				
6/24/2017	Saturday	<2		4		4		4					
6/25/2017	Sunday	<2		2		<2		<2					
6/26/2017	Monday	<2		4		<2		<2					
6/27/2017	Tuesday	2		<2		<2		<2					
6/28/2017	Wednesday	2		2		8		2		<2	Grab 4		
6/29/2017	Thursday	<2	1	2	3	4	5.2	8	2				
6/30/2017	Friday	13	3	2	2	13	1	7	3.1				
7/1/2017	Saturday	4		7		8		4					
7/2/2017	Sunday	4		2		2		<2					
7/3/2017	Monday	4		4		13		8					
7/4/2017	Tuesday	2	3	13	10.9	9	5.2	4	3.1				
7/5/2017	Wednesday	2		4		21		2		11	Grab 4		

Table 4: Bucklin Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
7/6/2017	Thursday	8	5.2	8	5.2	17	5.2	2	<1.0				
7/7/2017	Friday	4	4.1	17	4.1	23	6.3	23	7.4				
7/8/2017	Saturday	8		4		4		7					
7/9/2017	Sunday	23		23		17		8					
7/10/2017	Monday	21		8		6		11					
7/11/2017	Tuesday	11		50		13		50					
7/12/2017	Wednesday	22		7		23		50		13	Grab 4		
7/13/2017	Thursday	110	13.4	11	6.3	50	6.3	50	10.7				
7/14/2017	Friday	17	>2419.6	13	9.8	23	6.3	30	7.3				
7/15/2017	Saturday	13		22		17		27					
7/16/2017	Sunday	30		23		130		11					
7/17/2017	Monday	50		130		230		70					
7/18/2017	Tuesday	70		110		170		30					
7/19/2017	Wednesday	280	32.7	50	24.6	30	18.9	30	17.5	80	Grab 4	8.5	Grab 4
7/20/2017	Thursday	17	23.5	70	20.9	23	9.6	8	8.5				
7/21/2017	Friday	17	19.7	17	9.7	22	13.2	17	8.5				
7/22/2017	Saturday	4		8		11		8					
7/23/2017	Sunday	50		23		26		30					
7/24/2017	Monday	13		17		17		13					
7/25/2017	Tuesday	30		14		13		50					
7/26/2017	Wednesday	17		11		23		17		11	Grab 4		
7/27/2017	Thursday	13	3.1	13	5.2	11	7.4	7	1				
7/28/2017	Friday	13	1	8	3	8	1	2	<1				
7/29/2017	Saturday	4		8		2		4					
7/30/2017	Sunday	17		8		4		<2					
7/31/2017	Monday	8		<2		4		2					
8/1/2017	Tuesday	<2		4		4		8					
8/2/2017	Wednesday	4	3.1	7	3.1	8	4.1	2	2	7	Grab 4	7.4	Grab 4
8/3/2017	Thursday	8	2	4	7.3	14	5.2	8	3				
8/4/2017	Friday	8	3.1	4	1	2	4.1	4	3.1				
8/5/2017	Saturday	<2		2		2		<2					
8/6/2017	Sunday	4		2		2		2					
8/7/2017	Monday	2		4		2		2					
8/8/2017	Tuesday	<2		2		2		2					
8/9/2017	Wednesday	9		4		4		8		<2	Grab 4		
8/10/2017	Thursday	4	2	4	2	4	3.1	2	3				
8/11/2017	Friday	17	3.1	2	4.1	<2	1	4	<1				
8/12/2017	Saturday	<2		8		<2		2					
8/13/2017	Sunday	<2		11		2		4					
8/14/2017	Monday	<2	3.1	2	1	2	<1	<2	2				
8/15/2017	Tuesday	2		2		<2		2					
8/16/2017	Wednesday	<2		2		2		<2		2	Grab 4		
8/17/2017	Thursday	<2	3.1	2	2	2	2	2	3				
8/18/2017	Friday	4	2	<2	<1	4	2	2	2				
8/19/2017	Saturday	8		<2		2		2					
8/20/2017	Sunday	<2		4		2		2					
8/21/2017	Monday	2		<2		2		<2					
8/22/2017	Tuesday	2		4		4		13					
8/23/2017	Wednesday	7		2		7		2		4	Grab 4		
8/24/2017	Thursday	8	1	8	4.1	17	2	17	2				
8/25/2017	Friday	2	2	4	<1	8	1	13	<1				
8/26/2017	Saturday	<2		<2		<2		2					
8/27/2017	Sunday	7		4		8		4					
8/28/2017	Monday	7		2		4		2					
8/29/2017	Tuesday	4		7		8		13					
8/30/2017	Wednesday	80	3	8	6.3	8	2	4	4.1	7	Grab 4	2	Grab 4
8/31/2017	Thursday	7	<1	4	<1	7	<1	8	<1				
9/1/2017	Friday	8	2	4	2	2	1	22	3.1				
9/2/2017	Saturday	2		2		8		2					
9/3/2017	Sunday	4		8		<2		4					
9/4/2017	Monday	8	5.2	8	3	4	2	8	2				
9/5/2017	Tuesday	2		4		<2		2					

Table 4: Bucklin Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
9/6/2017	Wednesday	2		4		2		4		2	Grab 4		
9/7/2017	Thursday	4		7		17		13					
9/8/2017	Friday	4	2	<2	<1	8	<1	11	<1				
9/9/2017	Saturday	2		<2		<2		<2					
9/10/2017	Sunday	4		4		<2		2					
9/11/2017	Monday	<2		2		<2		2					
9/12/2017	Tuesday	<2		2		2		<2					
9/13/2017	Wednesday	2	2	<2	<1	2	<1	<2	2	<2	Grab 4	1	Grab 4
9/14/2017	Thursday	<2	1	8	<1	<2	3	4	<1				
9/15/2017	Friday	<2	2	<2	1	2	<1	<2	1				
9/16/2017	Saturday	4		<2		4		<2					
9/17/2017	Sunday	4		8		<2		<2					
9/18/2017	Monday	2		4		2		4					
9/19/2017	Tuesday	2		2		<2		2					
9/20/2017	Wednesday	<2	<1	<2	1	4	2	14	3.1	11	Grab 4	5.2	Grab 4
9/21/2017	Thursday	2	<1	8	1	17	<1	13	1				
9/22/2017	Friday	7	<1	<2	<1	4	<1	2	<1				
9/23/2017	Saturday	4		<2		2		<2					
9/24/2017	Sunday	4		<2		2		<2					
9/25/2017	Monday	2		<2		<2		2					
9/26/2017	Tuesday	7		4		<2		2					
9/27/2017	Wednesday	4	1	8	2	2	1	<2	1	4	Grab 4	1	Grab 4
9/28/2017	Thursday	4	1	4	1	2	1	<2	1				
9/29/2017	Friday	8	1	2	1	2	1	<2	2				
9/30/2017	Saturday	<2		<2		2		2					
10/1/2017	Sunday	<2		4		<2		11					
10/2/2017	Monday	2		2		<2		2					
10/3/2017	Tuesday	2		4		4		2					
10/4/2017	Wednesday	4		<2		2		<2		<2	Grab 4		
10/5/2017	Thursday	4	3	6	<1	<2	5.1	<2	2				
10/6/2017	Friday	2	1	<2	<1	2	2	4	3.1				
10/7/2017	Saturday	2		<2		<2		2					
10/8/2017	Sunday	<2		<2		2		<2					
10/9/2017	Monday	2	2	4	2	<2	1	2	<1				
10/10/2017	Tuesday	8		2		<2		<2					
10/11/2017	Wednesday	2		2		2		8		7	Grab 4		
10/12/2017	Thursday	<2	2	<2	1	4	<1	2	<1				
10/13/2017	Friday	2	1	<2	2	2	<1	<2	2				
10/14/2017	Saturday	4		<2		2		<2					
10/15/2017	Sunday	2		<2		<2		2					
10/16/2017	Monday	50		4		2		2					
10/17/2017	Tuesday	<2		7		2		<2					
10/18/2017	Wednesday	2		<2		2		2		4	Grab 4		
10/19/2017	Thursday	<2	2	2	<1	7	2	2	<1				
10/20/2017	Friday	<2	<1	2	2	2	2	<2	<1				
10/21/2017	Saturday	<2		<2		2		<2					
10/22/2017	Sunday	<2		<2		2		2					
10/23/2017	Monday	<2		2		2		2					
10/24/2017	Tuesday	2		<2		<2		2					
10/25/2017	Wednesday	<2	2	<2	2	<2	1	30	2	4	Grab 4	2	Grab 4
10/26/2017	Thursday	4	5.1	23	12.2	30	6.3	80	10.8				
10/27/2017	Friday	8	3.1	2	1	8	1	8	1				
10/28/2017	Saturday	<2		2		<2		4					
10/29/2017	Sunday	4		4		4		7					
10/30/2017	Monday	50		30		23		17					
10/31/2017	Tuesday	2		2		4		<2					
11/1/2017	Wednesday	8		8		50		8		30	Grab 4		
11/2/2017	Thursday	2	<1	2	<1	2	1	4	1				
11/3/2017	Friday	<2	1	4	4.1	<2	4.1	2	3				
11/4/2017	Saturday	<2		2		<2		4					
11/5/2017	Sunday	<2		2		2		4					
11/6/2017	Monday	4		4		8		30					

Table 4: Bucklin Point Bacteria Data

Bucklin Point Bacteria Data 2017

all results are in MPN/100 mL

		Grab 1		Grab 2		Grab 3		Grab 4					
Date	**Day of the Week**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Coliform**	**Entero-cocci**	**Fecal Duplicate**	**Associated Grab**	**Entero-cocci Duplicate**	**Associated Grab**
11/7/2017	Tuesday	50		2		2		4					
11/8/2017	Wednesday	11	3.1	23	5.2	30	5.2	8	4.1	30	Grab 4	2	Grab 4
11/9/2017	Thursday	4	5.2	11	5.2	17	3	9	1				
11/10/2017	Friday	11	2	2	2	11	3	4	4.1				
11/11/2017	Saturday	2		<2		4		4					
11/12/2017	Sunday	13		14		23		2					
11/13/2017	Monday	4		4		2		7					
11/14/2017	Tuesday	2		7		11		4					
11/15/2017	Wednesday	4		2		4		4		4	Grab 4		
11/16/2017	Thursday	13	5.1	2	3	4	6.3	4	6.3				
11/17/2017	Friday	17	6.3	11	2	17	6.2	8	5.2				
11/18/2017	Saturday	4		8		4		7					
11/19/2017	Sunday	7		17		<2		8					
11/20/2017	Monday	50		7		4		4					
11/21/2017	Tuesday	2		2		2		2					
11/22/2017	Wednesday	7	15	4	17.2	<2	5	2	11.6	4	Grab 4	9.4	Grab 4
11/23/2017	Thursday	8	2	4	3	8	3.1	<2	<1				
11/24/2017	Friday	8	8	<2	5.1	4	2	4	3				
11/25/2017	Saturday	4		<2		4		<2					
11/26/2017	Sunday	<2		2		<2		4					
11/27/2017	Monday	4		<2		2		4					
11/28/2017	Tuesday	2		<2		<2		7					
11/29/2017	Wednesday	<2		4		4		2		<2	Grab 4		
11/30/2017	Thursday	<2	4.1	4	6.1	13	7.2	7	11.9				
12/1/2017	Friday		29.5	8	4.1								
12/2/2017	Saturday		2	<2	2								
12/3/2017	Sunday		1	<2	<1								
12/4/2017	Monday		6.3	8	3.1								
12/5/2017	Tuesday		3	2	1								
12/6/2017	Wednesday		8.4	8	4.1					4	Grab 2	2	Grab 2
12/7/2017	Thursday		3	4	1								
12/8/2017	Friday		<1	<2	<1	40							
12/9/2017	Saturday		4.1	2	4.1								
12/10/2017	Sunday		4.1	17	3.1								
12/11/2017	Monday		2	4	4								
12/12/2017	Tuesday		3.1	80	9.8								
12/13/2017	Wednesday		4.1	17	6.2					8	Grab 2	7.4	Grab 2
12/14/2017	Thursday		3	4	4.1								
12/15/2017	Friday		2	<2	1								
12/16/2017	Saturday		2	<2	<1								
12/17/2017	Sunday		12	<2	2								
12/18/2017	Monday		9.7	<2	1								
12/19/2017	Tuesday		4.1	<2	1								
12/20/2017	Wednesday		2	13	7.4					17	Grab 2	4.1	Grab 2
12/21/2017	Thursday		4.1	2	<1								
12/22/2017	Friday		5.1	<2	<1								
12/23/2017	Saturday		2	<2	4.1								
12/24/2017	Sunday		6.3	8	4.1								
12/25/2017	Monday		2	<2	14.6								
12/26/2017	Tuesday		1	2	2								
12/27/2017	Wednesday		8.6	2	4.1					<2	Grab 2	2	Grab 2
12/28/2017	Thursday		9.8	<2	3								
12/29/2017	Friday		9.8	<2	2								
12/30/2017	Saturday		2	2	2								
12/31/2017	Sunday		<1	<2	<1								

Table 4: Bucklin Point Bacteria Data

Field's Point Influent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
1/3/2017	Tuesday	58.97	<2.5	<10.000	37.51	18.20	0.03850	23.46	<4.0	122.4	8.130	<4.00
1/4/2017	Wednesday	50.74	<2.5	<10.000	39.01	<10.000	0.02980	35.26	<4.0	82.20	21.40	<4.00
1/10/2017	Tuesday	50.74	<2.5	<10.000	40.46	15.28	0.03020	25.14	<4.0	137.4	18.30	<4.00
1/11/2017	Wednesday	57.43	<2.5	<10.000	33.14	17.10	0.02910	21.24	<4.0	145.2	20.90	<4.00
1/17/2017	Tuesday	44.31	<2.5	<10.000	38.95	<10.000	0.03520	24.39	<4.0	102.5	8.92	<4.00
1/18/2017	Wednesday	40.73	<2.5	<10.000	24.36	<10.000	0.03880	22.16	<4.0	62.61	8.47	<4.00
1/24/2017	Tuesday	78.12	<2.5	12.99	38.92	16.73	0.02830	15.53	<4.0	111.5	11.20	<8.00
1/25/2017	Wednesday	67.29	<2.5	<10.000	26.56	<10.000	0.04270	18.68	<4.0	58.87	14.20	<8.00
1/31/2017	Tuesday	39.37	<2.5	<10.000	26.20	10.57	0.04070	20.16	<4.0	77.84	11.20	<4.00
2/1/2017	Wednesday	41.62	<2.5	<10.000	29.92	<10.000	0.02890	16.58	<4.0	89.14	9.800	<4.00
2/7/2017	Tuesday	44.50	<2.5	<10.000	41.40	16.19	0.04580	20.38	<4.0	159.3	12.80	<4.00
2/8/2017	Wednesday	38.09	<2.5	<10.000	31.70	<10.000	0.02920	26.86	<4.0	95.69	7.090	<4.00
2/14/2017	Tuesday	37.97	<2.5	<10.000	29.28	<10.000	0.03100	21.97	<4.0	110.1	9.740	<8.00
2/15/2017	Wednesday	44.24	<2.5	<10.000	60.25	<10.000	0.04660	19.48	<4.0	127.4	11.80	<8.00
2/21/2017	Tuesday	41.79	<2.5	<10.000	31.69	<10.000	0.01660	18.52	<4.0	89.04	12.10	<4.00
2/22/2017	Wednesday	42.79	<2.5	<10.000	28.70	<10.000	0.02480	18.03	<4.0	90.31	<8.00	<8.00
2/28/2017	Tuesday	39.81	<2.5	<10.000	23.47	<10.000	0.03040	15.68	<4.0	84.50	7.110	<8.00
3/1/2017	Wednesday	41.30	<2.5	<10.000	32.38	13.20	0.04070	13.53	<4.0	118.4	10.80	<8.00
3/7/2017	Tuesday	36.91	<2.5	<10.000	37.02	<10.000	0.02620	17.44	<4.0	79.20	10.90	<8.00
3/8/2017	Wednesday	37.32	<2.5	10.72	34.06	<10.000	0.02510	22.31	<4.0	86.06	12.80	<8.00
3/14/2017	Tuesday	56.04	<2.5	<10.000	30.69	22.70	0.02790	13.81	<4.0	124.4	25.70	<8.00
3/15/2017	Wednesday	63.36	<2.5	<10.000	20.57	10.79	0.01700	14.87	<4.0	71.79	14.10	<8.00
3/21/2017	Tuesday	38.61	<2.5	<10.000	24.30	<10.000	0.02430	23.47	<4.0	72.28	9.88	<8.00
3/22/2017	Wednesday	39.08	<2.5	<10.000	25.95	<10.000	0.02550	20.80	<4.0	71.93	9.210	<8.00
3/28/2017	Tuesday	53.52	<2.5	<10.000	27.60	11.69	0.01910	13.17	<4.0	87.08	11.50	<8.00
3/29/2017	Wednesday	48.24	<2.5	<10.000	28.32	<10.000	0.01520	14.69	<4.0	64.01	8.820	<8.00
4/4/2017	Tuesday	78.02	<2.5	<10.000	25.88	30.59	0.02340	19.19	<4.0	88.27	27.10	<8.00
4/5/2017	Wednesday	72.69	<2.5	<10.000	21.75	<10.000	0.03070	13.60	<4.0	44.40	32.30	10.9
4/11/2017	Tuesday	63.91	<2.5	<10.000	35.43	<10.000	0.02770	12.22	<4.0	70.92	7.350	<8.00
4/12/2017	Wednesday	47.27	<2.5	<10.000	42.31	32.14	0.07170	15.11	<4.0	133.9	6.890	<8.00
4/18/2017	Tuesday	41.69	<2.5	<10.000	37.07	<10.000	0.03280	15.19	<4.0	99.83	5.520	<8.00
4/19/2017	Wednesday	42.50	<2.5	<10.000	55.31	<10.000	0.03290	19.00	<4.0	96.05	5.930	<8.00
4/25/2017	Tuesday	69.25	<2.5	<10.000	55.85	20.05	0.06450	11.20	<4.0	108.6	4.350	<8.00
4/26/2017	Wednesday	82.15	<2.5	<10.000	25.58	<10.000	0.02890	<10.000	<4.0	53.70	4.360	<8.00
5/2/2017	Tuesday	57.30	<2.5	<10.000	40.85	10.06	0.02760	28.11	<4.0	101.7	5.340	<4.00
5/3/2017	Wednesday	54.89	<2.5	<10.000	25.90	<10.000	0.02100	19.52	<4.0	63.2	5.380	<4.00
5/9/2017	Tuesday	64.23	<2.5	<10.000	28.02	<10.000	0.02050	15.37	<4.0	73.9	5.220	<4.00

Table 5: Field's Point Influent Metals (Cd-CN)

Field's Point Influent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
5/10/2017	Wednesday	61.80	<2.5	<10.000	30.33	<10.000	0.1630	15.65	<4.0	68.9	<4.00	<4.00
5/16/2017	Tuesday	63.34	<2.5	<10.000	23.88	<10.000	0.01850	15.25	<4.0	55.27	6.110	<8.00
5/17/2017	Wednesday	63.86	<2.5	<10.000	28.09	<10.000	0.02590	14.18	<4.0	61.25	10.90	<8.00
5/23/2017	Tuesday	43.18	<2.5	96.10	44.37	<10.000	0.01450	31.56	<4.0	310.2	8.370	<8.00
5/24/2017	Wednesday	43.17	<2.5	10.61	27.17	<10.000	0.02460	18.00	<4.0	81.36	6.550	<8.00
5/30/2017	Tuesday	43.01	<2.5	<10.000	41.5	<10.000	0.1020	27.71	<4.0	80.1	13.00	<4.00
5/31/2017	Wednesday	42.66	<2.5	<10.000	31.1	<10.000	0.03930	23.60	<4.0	93.0	4.930	<4.00
6/6/2017	Tuesday	62.62	<2.5	18.86	34.15	<10.000	0.03080	33.81	<4.0	100.3	5.310	<8.00
6/7/2017	Wednesday	68.35	<2.5	<10.000	24.32	<10.000	0.02230	16.09	<4.0	54.16	8.970	<8.00
6/13/2017	Tuesday	41.33	<2.5	<10.000	31.41	<10.000	0.02480	13.97	<4.0	88.70	<8.00	<8.00
6/14/2017	Wednesday	39.19	<2.5	16.91	35.70	<10.000	0.03430	15.60	<4.0	107.8	<8.00	<8.00
6/20/2017	Tuesday	56.26	<2.5	<10.000	30.75	16.27	0.09140	12.41	<4.0	145.5	<10.000	<10.000
6/21/2017	Wednesday	43.20	<2.5	22.60	28.51	<10.000	0.02300	16.50	<4.0	112.9	<10.000	<10.000
6/27/2017	Tuesday	39.87	<2.5	<10.000	49.80	11.13	0.02710	19.87	<4.0	116.7	5.510	<4.00
6/28/2017	Wednesday	38.58	<2.5	<10.000	35.44	<10.000	0.02770	16.97	<4.0	86.41	12.10	<4.00
7/4/2017	Tuesday	34.78	<2.5	<10.000	43.13	11.87	0.03800	<10.000	<4.0	111.1	5.820	<8.00
7/5/2017	Wednesday	34.55	<2.5	<10.000	65.74	21.41	0.1320	15.79	<4.0	118.5	7.930	<8.00
7/11/2017	Tuesday	65.96	<2.5	<10.000	44.66	20.08	0.02610	11.59	<4.0	110.4	9.820	<8.00
7/12/2017	Wednesday	64.74	<2.5	<10.000	53.22	27.69	0.05690	13.92	<4.0	116.1	13.60	<8.00
7/18/2017	Tuesday	40.41	<2.5	<10.000	48.22	<10.000	0.05830	28.91	<4.0	158.0	7.410	<4.00
7/19/2017	Wednesday	36.25	<2.5	<10.000	66.11	11.40	0.03450	39.67	<4.0	133.7	9.370	<4.00
7/25/2017	Tuesday	42.23	<2.5	12.98	44.84	15.15	0.03090	28.03	<4.0	150.9	10.80	<4.00
7/26/2017	Wednesday	33.95	<2.5	<10.000	39.78	<10.000	0.03160	34.04	<4.0	117.8	16.70	<4.00
8/1/2017	Tuesday	31.18	<2.5	15.75	42.92	<10.000	0.02820	32.98	<4.0	221.4	7.980	<8.00
8/2/2017	Wednesday	33.40	<2.5	<10.000	49.49	<10.000	0.04730	29.59	<4.0	203.8	6.870	<8.00
8/8/2017	Tuesday	32.16	<2.5	<10.000	42.20	<10.000	0.02310	24.09	<4.0	157.6	7.360	<8.00
8/9/2017	Wednesday	31.69	<2.5	<10.000	43.35	<10.000	0.02040	30.63	<4.0	151.7	9.410	<8.00
8/15/2017	Tuesday	30.24	<2.5	<10.000	59.47	<10.000	0.03220	21.17	5.036	134.1	8.840	<4.00
8/16/2017	Wednesday	31.73	<2.5	<10.000	46.38	12.35	0.1230	22.46	<4.0	138.1	4.980	<4.00
8/22/2017	Tuesday	31.08	<2.5	11.07	46.53	33.02	0.03890	21.12	<4.0	163.7	7.250	<8.00
8/23/2017	Wednesday	30.50	<2.5	<10.000	47.10	13.38	0.01840	18.87	<4.0	146.2	8.710	<8.00
8/29/2017	Tuesday	33.96	<2.5	18.94	66.26	12.61	0.05060	29.20	<4.0	223.5	10.9	<8.00
8/30/2017	Wednesday	30.23	<2.5	<10.000	55.09	<10.000	0.04920	20.48	<4.0	171.9	13.8	<8.00
9/5/2017	Tuesday	30.66	<2.5	<10.000	37.03	<10.000	0.06440	17.88	<4.0	111.1	5.91	<8.00
9/6/2017	Wednesday	45.87	<2.5	<10.000	68.41	50.60	0.08460	20.29	<4.0	218.2	<8.00	<8.00
9/12/2017	Tuesday	28.43	<2.5	15.85	57.14	<10.000	0.08070	22.73	<4.0	155.3	7.860	<8.00
9/13/2017	Wednesday	28.31	<2.5	24.93	32.93	<10.000	0.03500	23.85	<4.0	110.0	7.040	<8.00

Table 5: Field's Point Influent Metals (Cd-CN)

Field's Point Influent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
9/19/2017	Tuesday	35.51	<2.5	<10.000	118.0	21.81	0.06470	33.94	<4.0	198.8	14.40	<8.00
9/20/2017	Wednesday	31.11	<2.5	<10.000	65.45	<10.000	0.03880	22.28	<4.0	92.58	8.550	<8.00
9/26/2017	Tuesday	29.54	<2.5	14.18	90.45	<10.000	0.04860	36.25	<4.0	157.7	13.90	<4.00
9/27/2017	Wednesday	29.35	<2.5	11.10	89.19	<10.000	0.03530	35.00	<4.0	140.9	15.50	<4.00
10/3/2017	Tuesday	27.55	<2.5	<10.000	47.04	<10.000	0.03280	18.89	<4.0	94.44	6.730	<4.00
10/4/2017	Wednesday	29.06	<2.5	14.09	56.61	<10.000	0.05350	19.94	<4.0	98.75	7.530	<4.00
10/10/2017	Tuesday	28.52	<2.5	<10.000	46.91	<10.000	0.01680	26.26	<4.0	116.1	8.580	<4.00
10/11/2017	Wednesday	29.13	<2.5	11.33	82.53	<10.000	0.04770	22.51	<4.0	154.2	6.260	<4.00
10/17/2017	Tuesday	26.98	<2.5	<10.000	45.41	<10.000	0.03310	20.35	<4.0	110.0	64.90	36.6
10/18/2017	Wednesday	26.60	<2.5	14.33	54.56	<10.000	0.04310	26.75	<4.0	135.6	7.170	<4.00
10/24/2017	Tuesday	46.93	<2.5	<10.000	63.87	27.78	0.03900	31.42	<4.0	165.8	6.450	<4.00
10/25/2017	Wednesday	66.92	<2.5	<10.000	43.33	19.48	0.03410	19.76	<4.0	122.0	9.630	<4.00
10/31/2017	Tuesday	62.12	<2.5	<10.000	24.35	<10.000	0.02690	12.82	<4.0	42.26	9.200	<4.00
11/1/2017	Wednesday	52.29	<2.5	<10.000	32.70	<10.000	0.03070	12.97	<4.0	51.84	5.840	<4.00
11/7/2017	Tuesday	37.18	<2.5	<10.000	55.39	22.59	0.04900	22.87	<4.0	132.4	7.400	<4.00
11/8/2017	Wednesday	32.46	<2.5	<10.000	39.49	<10.000	0.02500	21.46	<4.0	70.96	6.410	<4.00
11/14/2017	Tuesday	31.41	<2.5	<10.000	53.15	<10.000	0.02220	21.54	<4.0	91.37	7.460	<4.00
11/15/2017	Wednesday	34.15	<2.5	<10.000	37.13	<10.000	0.03400	25.42	<4.0	83.39	6.560	<4.00
11/21/2017	Tuesday	34.13	<2.5	23.78	47.80	12.52	0.04340	29.51	<4.0	175.5	6.750	<8.00
11/22/2017	Wednesday	61.69	<2.5	<10.000	58.17	30.06	0.05640	18.84	<4.0	97.51	23.90	<8.00
11/28/2017	Tuesday	34.84	<2.5	<10.000	32.98	<10.000	0.03300	17.19	<4.0	79.88	11.70	<8.00
11/29/2017	Wednesday	31.56	<2.5	<10.000	71.53	<10.000	0.03280	23.43	<4.0	100.5	15.00	<8.00
12/5/2017	Tuesday	50.45	1.094	12.589	36.584	14.051	0.009230	18.531	0.948	124.908	6.250	<4.00
12/6/2017	Wednesday	50.86	0.197	6.892	55.198	7.023		17.449	0.754	71.723	5.560	<4.00
12/12/2017	Tuesday	41.17	0.208	4.598	31.970	10.761		18.175	0.548	96.325	16.40	<4.00
12/13/2017	Wednesday	32.86	0.200	3.784	26.475	3.275		20.127	0.518	83.424	9.080	<4.00
12/15/2017	Friday	30.85									10.10	<4.00
12/16/2017	Saturday	29.92									9.720	<4.00
12/19/2017	Tuesday	31.74	0.194	6.012	45.858	4.258		46.987	1.155	121.456	8.260	<4.00
12/20/2017	Wednesday	30.85	0.199	4.220	33.220	3.622		27.535	0.556	93.222	10.00	<4.00
12/26/2017	Tuesday	32.70	0.190	2.427	21.701	5.049		12.963	0.206	71.418	11.50	<4.00
12/27/2017	Wednesday	31.11	0.278	11.055	47.813	4.645		17.461	1.553	83.874	10.80	<4.00

Table 5: Field's Point Influent Metals (Cd-CN)

Field's Point Influent Metals, Al-Mo, 2017
all analyses in ppb

Date	Day of the Week	Influent Flow	Al	Fe	Se	As	Mo
1/3/2017	Tuesday	58.97	518.2	2033.0000	2.097	2.157	3.829
1/4/2017	Wednesday	50.74	214.8	1235.0000		1.488	
1/10/2017	Tuesday	50.74	624.1	2332.0000	2.307	2.449	3.668
1/11/2017	Wednesday	57.43	585.1	1876.0000		2.452	
1/17/2017	Tuesday	44.31	478.4	1750.0000	1.846	2.220	20.944
1/18/2017	Wednesday	40.73	200.7	1386.0000		2.540	
1/24/2017	Tuesday	78.12	403.2	1553.0000	1.005	1.770	1.941
1/25/2017	Wednesday	67.29	200.2	1196.0000		1.968	
1/31/2017	Tuesday	39.37	263.8	1877.0000	3.968	2.398	3.211
2/1/2017	Wednesday	41.62	290.7	1715.0000		3.035	
2/7/2017	Tuesday	44.50	575.9	2378.0000	2.121	2.086	3.272
2/8/2017	Wednesday	38.09	209.8	1439.0000		1.860	
2/14/2017	Tuesday	37.97	212.9	1594.0000	1.675	2.090	2.664
2/15/2017	Wednesday	44.24	382.0	1920.0000		1.699	
2/21/2017	Tuesday	41.79	222.3	1483.0000	4.344	1.674	4.621
2/22/2017	Wednesday	42.79	260.7	1572.0000		1.976	
2/28/2017	Tuesday	39.81	231.1	1535.0000	4.206	1.757	6.654
3/1/2017	Wednesday	41.30	568.2	2180.0000		2.211	
3/7/2017	Tuesday	36.91	265.7	1651.0000	3.018	1.960	3.477
3/8/2017	Wednesday	37.32	353.3	1777.0000		2.293	
3/14/2017	Tuesday	56.04	684.0	2566.0000	3.291	2.393	4.443
3/15/2017	Wednesday	63.36	253.9	1257.0000		2.215	
3/21/2017	Tuesday	38.61	212.9	1418.0000	4.389	2.193	4.381
3/22/2017	Wednesday	39.08	205.3	1501.0000		2.129	
3/28/2017	Tuesday	53.52	326.7	1518.0000	1.993	1.911	4.530
3/29/2017	Wednesday	48.24	193.1	1437.0000		1.756	
4/4/2017	Tuesday	78.02	378.4	1325.0000	1.821	1.481	2.339
4/5/2017	Wednesday	72.69	169.5	954.1		1.218	
4/11/2017	Tuesday	63.91	263.7	1046.0000	2.558	1.665	3.806
4/12/2017	Wednesday	47.27	793.2	2002.0000		2.513	
4/18/2017	Tuesday	41.69	223.5	1526.0000	3.927	2.302	5.217
4/19/2017	Wednesday	42.50	228.3	1484.0000		1.855	
4/25/2017	Tuesday	69.25	541.4	1621.0000	2.142	1.678	3.746
4/26/2017	Wednesday	82.15	305.2	1001.0000		1.516	
5/2/2017	Tuesday	57.30	277.1	1496.0000	2.275	1.517	3.846
5/3/2017	Wednesday	54.89	171.9	1158.0000		1.471	
5/9/2017	Tuesday	64.23	161.5	1247.0000	1.333	1.431	2.073
5/10/2017	Wednesday	61.80	186.4	1308.0000		1.468	
5/16/2017	Tuesday	63.34	153.3	971.9	1.022	1.344	1.932
5/17/2017	Wednesday	63.86	166.5	1169.0000		1.527	
5/23/2017	Tuesday	43.18	330.9	1548.0000	2.817	1.854	5.119
5/24/2017	Wednesday	43.17	183.7	1319.0000		1.725	
5/30/2017	Tuesday	43.01	183.1	1405.0000	3.608	1.640	9.206
5/31/2017	Wednesday	42.66	226.2	1218.0000		1.531	
6/6/2017	Tuesday	62.62	236.6	1056.0000	1.878	1.660	3.891
6/7/2017	Wednesday	68.35	403.2	1316.0000		1.492	
6/13/2017	Tuesday	41.33	226.9	1247.0000	1.522	1.779	4.454
6/14/2017	Wednesday	39.19	213.5	1219.0000		1.726	
6/20/2017	Tuesday	56.26	336.6	1200.0000	1.697	1.636	4.708
6/21/2017	Wednesday	43.20	212.6	1228.0000		1.749	
6/27/2017	Tuesday	39.87	223.2	1394.0000	1.467	1.970	4.170
6/28/2017	Wednesday	38.58	180.3	1098.0000		1.901	
7/4/2017	Tuesday	34.78	274.9	1670.0000	<1.000	1.848	3.168
7/5/2017	Wednesday	34.55	272.6	2033.0000		2.005	
7/11/2017	Tuesday	65.96	439.3	1264.0000	<1.000	1.477	2.932
7/12/2017	Wednesday	64.74	601.7	1654.0000		1.596	
7/18/2017	Tuesday	40.41	352.4	1782.0000	1.969	2.075	5.076

Table 6: Field's Point Influent Metals (Al-Mo)

Field's Point Influent Metals, Al-Mo, 2017
all analyses in ppb

Date	Day of the Week	Influent Flow	Al	Fe	Se	As	Mo
7/19/2017	Wednesday	36.25	240.4	1449.0000		2.104	
7/25/2017	Tuesday	42.23	250.5	1299.0000	1.876	2.101	3.833
7/26/2017	Wednesday	33.95	200.8	1250.0000		1.901	
8/1/2017	Tuesday	31.18	244.3	1493.0000	3.159	1.776	8.417
8/2/2017	Wednesday	33.40	251.9	1576.0000		1.802	
8/8/2017	Tuesday	32.16	191.7	1229.0000	2.849	1.762	7.695
8/9/2017	Wednesday	31.69	192.4	1234.0000		1.982	
8/15/2017	Tuesday	30.24	269.6	1425.0000	2.454	2.709	7.316
8/16/2017	Wednesday	31.73	283.2	1403.0000		2.494	
8/22/2017	Tuesday	31.08	274.2	1501.0000	4.549	2.615	4.995
8/23/2017	Wednesday	30.50	257.8	1446.0000		2.545	
8/29/2017	Tuesday	33.96	378.3	1986.0000	5.191	2.494	6.520
8/30/2017	Wednesday	30.23	310.1	1503.0000		2.254	
9/5/2017	Tuesday	30.66	242.6	1307.0000	2.099	2.665	4.123
9/6/2017	Wednesday	45.87	973.2	3166.0000		2.964	
9/12/2017	Tuesday	28.43	304.1	1450.0000	2.235	1.994	4.506
9/13/2017	Wednesday	28.31	237.6	1354.0000		1.960	
9/19/2017	Tuesday	35.51	440.0	2741.0000	2.415	2.097	5.413
9/20/2017	Wednesday	31.11	244.1	1356.0000		1.949	
9/26/2017	Tuesday	29.54	231.3	1441.0000	2.819	1.862	14.024
9/27/2017	Wednesday	29.35	227.9	1351.0000		1.596	
10/3/2017	Tuesday	27.55	232.0	1419.0000	4.129	1.909	5.388
10/4/2017	Wednesday	29.06	217.6	1404.0000		1.888	
10/10/2017	Tuesday	28.52	185.1	1413.0000	1.885	2.044	5.911
10/11/2017	Wednesday	29.13	197.6	1483.0000		1.889	
10/17/2017	Tuesday	26.98	256.5	1864.0000	1.785	1.812	4.388
10/18/2017	Wednesday	26.60	296.5	1672.0000		2.202	
10/24/2017	Tuesday	46.93	504.2	2105.0000	3.309	2.228	6.323
10/25/2017	Wednesday	66.92	396.6	1369.0000		1.847	
10/31/2017	Tuesday	62.12	162.6	982.4	1.359	1.428	2.694
11/1/2017	Wednesday	52.29	203.0	1311.0000		1.552	
11/7/2017	Tuesday	37.18	279.4	1562.0000	2.590	2.471	4.708
11/8/2017	Wednesday	32.46	140.1	2005.0000		2.445	
11/14/2017	Tuesday	31.41	173.1	1332.0000	3.587	2.041	5.390
11/15/2017	Wednesday	34.15	188.1	1364.0000		2.165	
11/21/2017	Tuesday	34.13	253.3	1607.0000	2.459	2.005	31.292
11/22/2017	Wednesday	61.69	391.5	1312.0000		1.549	
11/28/2017	Tuesday	34.84	244.7	1620.0000	2.371	1.900	3.484
11/29/2017	Wednesday	31.56	214.0	1564.0000		2.013	
12/5/2017	Tuesday	50.45	441.723	1684.589	3.024	1.974	3.869
12/6/2017	Wednesday	50.86	239.217		2.905	1.826	4.425
12/12/2017	Tuesday	41.17	417.466		1.460	1.899	4.437
12/13/2017	Wednesday	32.86	166.535		3.097	1.937	7.913
12/19/2017	Tuesday	31.74	214.034		4.863	1.979	5.882
12/20/2017	Wednesday	30.85	181.994		1.839	1.961	3.070
12/26/2017	Tuesday	32.70	209.856		<1.000	2.410	2.611
12/27/2017	Wednesday	31.11	190.441		<1.000	1.852	5.366

Table 6: Field's Point Influent Metals (Al-Mo)

Field's Point Effluent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
1/3/2017	Tuesday	58.97	0.024	1.304	3.203	0.600	0.004180	12.439	0.037	26.097	9.200	<4.00
1/4/2017	Wednesday	50.74	<0.020	0.912	2.519	0.403	0.004080	16.168	0.024	26.569	5.650	<4.00
1/10/2017	Tuesday	50.74	0.023	1.265	2.704	0.522	0.002250	14.025	0.032	29.269	11.20	<4.00
1/11/2017	Wednesday	57.43	0.021	1.245	3.810	0.579	0.003020	12.697	0.045	34.210	10.30	<4.00
1/17/2017	Tuesday	44.31	0.021	1.156	2.876	0.468	0.002440	17.638	0.046	26.350	6.96	<4.00
1/18/2017	Wednesday	40.73	<0.020	1.055	2.651	0.416	<0.0020	17.769	0.038	26.370	7.32	<4.00
1/24/2017	Tuesday	72.41	0.020	0.893	3.094	0.542	0.002860	10.587	0.038	27.765	7.330	<4.00
1/25/2017	Wednesday	67.29	0.023	0.844	2.724	0.535	0.003690	12.399	0.040	26.139	9.910	<4.00
1/31/2017	Tuesday	39.37	0.023	1.408	2.257	<0.300	<0.0020	16.055	0.034	26.692	7.890	<4.00
2/1/2017	Wednesday	41.62	0.031	1.361	3.091	0.447	0.003960	15.568	0.037	30.037	4.990	<4.00
2/7/2017	Tuesday	44.50	0.021	1.206	2.789	0.411	<0.0020	14.584	0.030	32.121	8.620	<4.00
2/8/2017	Wednesday	38.09	0.022	1.225	3.010	0.352	0.002010	17.764	0.036	32.781	6.120	<4.00
2/14/2017	Tuesday	37.97	0.032	1.246	3.247	0.426	0.003820	16.873	0.039	37.880	8.190	<4.00
2/15/2017	Wednesday	44.24	0.030	0.981	3.489	0.402	0.004760	15.255	0.038	33.045	7.030	<4.00
2/21/2017	Tuesday	41.79	0.029	2.076	3.367	0.371	0.002920	14.048	0.036	35.969	8.010	<4.00
2/22/2017	Wednesday	42.79	0.034	1.416	3.896	0.429	0.004050	14.977	0.051	31.716	9.73	<4.00
2/28/2017	Tuesday	39.81	0.026	1.158	2.455	0.308	<0.0020	13.504	0.026	31.956	5.380	<4.00
3/1/2017	Wednesday	41.30	0.027	0.984	2.193	0.400	<0.0020	11.998	0.029	33.257	5.720	<4.00
3/7/2017	Tuesday	36.91	0.024	1.504	2.301	<0.300	0.002410	12.240	0.034	29.473	5.730	<4.00
3/8/2017	Wednesday	37.32	0.027	1.207	2.429	<0.300	0.002160	13.464	0.030	32.102	4.870	<4.00
3/14/2017	Tuesday	56.04	0.028	0.842	2.469	0.361	0.003610	8.344	0.034	28.392	8.970	<4.00
3/15/2017	Wednesday	63.36	0.029	1.397	2.545	0.405	0.002270	8.975	0.032	31.393	5.270	<4.00
3/21/2017	Tuesday	38.61	0.025	1.787	2.426	0.308	0.003180	15.620	0.033	31.258	6.690	<4.00
3/22/2017	Wednesday	39.08	0.026	1.478	2.390	<0.300	0.003390	14.694	0.031	30.635	4.480	<8.00
3/28/2017	Tuesday	53.52	0.028	1.489	2.434	0.384	0.004120	9.651	0.029	27.698	5.790	<4.00
3/29/2017	Wednesday	48.24	0.025	1.313	2.245	0.315	0.002050	10.268	0.026	30.956	4.670	<4.00
4/4/2017	Tuesday	75.60	0.033	0.826	2.778	0.464	0.003540	11.840	0.028	29.318	5.370	<4.00
4/5/2017	Wednesday	72.69	0.038	0.813	2.919	0.458	0.004570	10.623	0.033	27.356	5.470	<4.00
4/11/2017	Tuesday	63.91	0.027	0.925	2.687	0.500	0.002450	11.300	0.034	23.093	6.090	<4.00
4/12/2017	Wednesday	47.27	<0.020	0.919	1.938	0.356	0.002230	11.775	0.025	20.938	8.450	<4.00
4/18/2017	Tuesday	41.69	0.020	1.153	2.322	0.373	<0.0020	11.746	0.025	21.983	5.000	<4.00
4/19/2017	Wednesday	42.50	0.021	1.207	2.508	0.332	0.002120	11.718	0.024	21.321	5.910	<4.00
4/25/2017	Tuesday	69.25	0.041	1.269	5.282	1.106	0.004450	8.504	0.080	24.891	4.420	<4.00
4/26/2017	Wednesday	72.10	0.028	0.956	3.686	0.678	0.004810	8.990	0.045	24.587	<4.00	<4.00
5/2/2017	Tuesday	57.30	0.024	0.924	2.833	0.494	0.002690	10.340	0.030	20.969	<4.00	<4.00
5/3/2017	Wednesday	54.89	0.020	0.957	2.579	0.410	0.002650	10.314	0.029	20.480	4.410	<4.00
5/9/2017	Tuesday	64.23	0.020	0.750	2.543	0.467	0.002150	9.866	0.029	20.334	<4.00	<4.00
5/10/2017	Wednesday	61.80	0.021	1.098	2.580	0.492	0.008180	10.219	0.026	20.628	<4.00	<4.00

Table 7: Field's Point Effluent Metals (Cd-CN)

Field's Point Effluent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
5/16/2017	Tuesday	63.34	0.023	0.931	2.820	0.354	0.003690	11.327	0.023	21.798	<4.00	<4.00
5/17/2017	Wednesday	63.86	0.021	0.767	2.530	0.355	0.003700	10.889	0.024	21.077	<4.00	<4.00
5/23/2017	Tuesday	43.18	0.022	1.022	2.332	<0.300	0.002870	10.688	<0.020	20.502	5.480	<4.00
5/24/2017	Wednesday	43.17	0.023	0.994	2.236	<0.300	0.003510	11.636	0.021	20.452	4.600	<4.00
5/30/2017	Tuesday	43.01	0.022	0.657	2.517	<0.300	0.002820	13.372	<0.020	20.620	4.990	<4.00
5/31/2017	Wednesday	42.66	0.024	0.851	2.346	0.319	0.003270	12.984	<0.020	24.450	4.340	<4.00
6/6/2017	Tuesday	62.62	0.020	1.087	2.242	0.352	0.002690	17.953	<0.020	21.813	<4.00	<4.00
6/7/2017	Wednesday	68.35	0.023	0.879	1.930	0.301	0.002800	13.615	<0.020	19.536	<4.00	<4.00
6/13/2017	Tuesday	41.33	0.028	0.966	2.159	<0.300	0.003040	11.162	0.021	21.382	<4.00	<4.00
6/14/2017	Wednesday	39.19	0.021	0.909	2.201	<0.300	<0.0020	10.918	<0.020	24.462	<4.00	<4.00
6/20/2017	Tuesday	56.26	<0.020	0.759	1.747	0.349	<0.0020	10.615	<0.020	24.455	<10.000	<10.000
6/21/2017	Wednesday	43.20	<0.020	0.846	1.963	0.330	0.002150	11.875	0.020	26.891	<10.000	<10.000
6/27/2017	Tuesday	39.87	<0.020	0.826	2.052	0.346	0.003200	12.962	0.020	22.612	5.470	<4.00
6/28/2017	Wednesday	38.58	<0.020	0.867	2.065	0.308	0.002630	13.254	0.022	23.481	5.090	<4.00
7/4/2017	Tuesday	34.78	<0.020	0.562	1.752	<0.300	0.002390	10.702	<0.020	20.773	6.710	<4.00
7/5/2017	Wednesday	34.55	<0.020	0.710	2.144	0.326	0.003090	9.741	<0.020	23.367	6.890	<4.00
7/11/2017	Tuesday	65.96	<0.020	0.667	1.972	0.474	0.002390	8.678	0.021	25.551	7.220	<4.00
7/12/2017	Wednesday	64.74	0.044	1.499	5.922	1.837	0.005580	8.865	0.117	32.108	7.610	<4.00
7/18/2017	Tuesday	40.41	0.021	0.801	1.971	0.505	0.002070	15.497	<0.020	25.111	8.980	<4.00
7/19/2017	Wednesday	36.25	<0.020	0.770	1.831	0.368	<0.0020	17.306	<0.020	24.587	6.020	<4.00
7/25/2017	Tuesday	42.23	0.021	1.468	2.066	0.425	0.002120	14.753	0.023	28.436	10.10	<4.00
7/26/2017	Wednesday	33.95	<0.020	1.539	1.691	0.328	<0.0020	17.949	<0.020	26.668	6.450	<4.00
8/1/2017	Tuesday	31.18	<0.020	6.763	1.417	<0.300	<0.0020	17.642	<0.020	27.896	<4.00	<4.00
8/2/2017	Wednesday	33.40	<0.020	3.750	1.704	0.323	<0.0020	18.050	<0.020	28.089	5.880	<4.00
8/8/2017	Tuesday	32.16	<0.020	2.263	1.769	0.314	<0.0020	17.673	<0.020	28.569	4.230	<4.00
8/9/2017	Wednesday	31.69	<0.020	1.625	1.914	0.333	0.002260	17.952	<0.020	29.187	4.580	<4.00
8/15/2017	Tuesday	30.24	<0.020	0.946	1.901	0.305	0.002130	14.106	0.103	29.165	7.170	<4.00
8/16/2017	Wednesday	31.73	<0.020	1.167	1.934	<0.300	<0.0020	15.609	<0.020	25.737	5.990	<4.00
8/22/2017	Tuesday	31.08	<0.020	1.733	2.062	0.461	0.002340	18.120	<0.020	28.320	5.67	<8.00
8/23/2017	Wednesday	30.50	<0.020	1.533	1.836	0.348	0.002020	15.132	<0.020	25.612	4.34	<4.00
8/29/2017	Tuesday	33.96	<0.020	5.585	2.182	0.314	0.002280	17.501	<0.020	27.607	3.68	<4.00
8/30/2017	Wednesday	30.23	<0.020	2.825	2.192	<0.300	0.002120	15.721	<0.020	29.154	4.65	<4.00
9/5/2017	Tuesday	30.66	<0.020	1.251	2.141	0.301	<0.0020	14.263	0.020	31.267	4.47	<4.00
9/6/2017	Wednesday	45.87	<0.020	1.485	2.060	0.351	0.002430	12.029	0.036	23.550	4.27	<4.00
9/12/2017	Tuesday	28.43	<0.020	1.539	1.958	0.303	0.003660	14.805	<0.020	26.691	5.320	<4.00
9/13/2017	Wednesday	28.31	<0.020	3.249	1.850	0.319	0.002490	15.700	0.026	26.743	5.380	<4.00
9/19/2017	Tuesday	35.51	<0.020	1.105	2.326	<0.300	<0.0020	17.549	<0.020	22.055	5.260	<4.00
9/20/2017	Wednesday	31.11	<0.020	1.299	2.527	<0.300	<0.0020	16.445	<0.020	26.159	8.060	<4.00

Table 7: Field's Point Effluent Metals (Cd-CN)

Field's Point Effluent Metals, Cd-CN, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
9/26/2017	Tuesday	29.54	<0.020	1.878	3.197	<0.300	<0.0020	20.783	<0.020	27.549	7.320	<4.00
9/27/2017	Wednesday	29.35	<0.020	3.003	3.268	<0.300	<0.0020	23.608	<0.020	31.164	8.470	<8.00
10/3/2017	Tuesday	27.55	<0.020	1.468	2.807	0.312	<0.0020	16.958	0.026	29.717	4.560	<4.00
10/4/2017	Wednesday	29.06	<0.020	1.564	2.546	<0.300	0.002280	16.138	0.024	28.344	4.770	<4.00
10/10/2017	Tuesday	28.52	<0.020	1.687	2.421	0.315	0.002150	14.416	<0.020	25.622	6.600	<4.00
10/11/2017	Wednesday	29.13	0.090	1.524	2.872	0.314	0.002110	16.331	<0.020	29.757	6.820	<4.00
10/17/2017	Tuesday	26.98	<0.020	3.873	2.173	<0.300	0.002030	13.945	<0.020	26.639	<4.00	<4.00
10/18/2017	Wednesday	26.60	<0.020	2.348	2.255	0.335	0.002610	15.602	<0.020	27.037	<4.00	<4.00
10/24/2017	Tuesday	46.93	<0.020	1.379	2.960	0.358	0.002330	14.159	0.030	22.905	7.550	<4.00
10/25/2017	Wednesday	66.92	<0.020	1.204	3.304	0.348	<0.0020	13.780	0.026	34.314	<4.00	<4.00
10/31/2017	Tuesday	62.12	<0.020	0.838	2.725	0.394	0.002170	10.094	0.026	26.562	5.200	<4.00
11/1/2017	Wednesday	52.29	<0.020	1.057	2.298	0.314	<0.0020	10.278	0.020	25.200	<4.00	<8.00
11/7/2017	Tuesday	37.18	<0.020	1.983	2.685	0.348	<0.0020	18.351	0.022	28.008	6.050	<8.00
11/8/2017	Wednesday	32.46	<0.020	1.600	2.422	0.348	<0.0020	17.173	0.023	27.531	5.980	<4.00
11/14/2017	Tuesday	31.41	<0.020	1.770	2.804	<0.300	<0.0020	16.718	0.021	29.034	<4.00	<4.00
11/15/2017	Wednesday	34.15	<0.020	1.420	2.662	<0.300	<0.0020	17.071	0.024	27.083	6.330	<4.00
11/21/2017	Tuesday	34.13	<0.020	2.111	2.856	0.310	0.003160	17.258	0.024	29.409	6.160	<4.00
11/22/2017	Wednesday	61.69	<0.020	1.237	2.981	0.406	0.002900	12.480	0.031	30.470	5.340	<4.00
11/28/2017	Tuesday	34.84	<0.020	1.415	2.299	<0.300	0.002600	15.087	0.031	27.784	4.830	<4.00
11/29/2017	Wednesday	31.56	<0.020	0.969	2.414	<0.300	0.002270	15.479	0.034	24.569	8.210	<4.00
12/5/2017	Tuesday	50.45	<0.020	2.432	2.618	0.346	0.003180	13.698	0.037	27.185	5.000	<4.00
12/6/2017	Wednesday	50.86	<0.020	2.547	2.119	<0.300		13.581	0.022	29.404	7.090	<4.00
12/12/2017	Tuesday	41.17	<0.020	1.011	2.440	0.367		14.116	0.024	30.024	8.330	<4.00
12/13/2017	Wednesday	32.86	<0.020	1.145	2.625	0.342		15.977	0.026	34.871	7.150	<4.00
12/15/2017	Friday	30.85									13.20	<4.00
12/16/2017	Saturday	29.92									11.80	<4.00
12/19/2017	Tuesday	31.74	<0.020	1.338	2.619	0.330		29.906	0.038	31.680	10.10	<4.00
12/20/2017	Wednesday	30.85	<0.020	1.126	2.654	0.320		27.200	0.028	33.236	5.930	<4.00
12/26/2017	Tuesday	32.70	<0.020	0.925	2.566	0.365		15.445	0.022	33.268	11.70	<4.00
12/27/2017	Wednesday	31.11	<0.020	1.157	3.047	0.353		17.539	0.024	34.522	9.720	<4.00

Table 7: Field's Point Effluent Metals (Cd-CN)

Field's Point Effluent Metals, Al - Mo, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Al	Fe	Se	As	Mo
1/3/2017	Tuesday	58.97	22.497	181.398		1.250	
1/4/2017	Wednesday	50.74	12.735	109.878		1.178	
1/10/2017	Tuesday	50.74	16.508	175.914	1.345	1.666	3.181
1/11/2017	Wednesday	57.43	19.114	141.469		1.432	
1/17/2017	Tuesday	44.31	14.664	129.423		1.608	
1/18/2017	Wednesday	40.73	10.383	112.658		1.679	
1/24/2017	Tuesday	72.41	17.184	130.687		1.195	
1/25/2017	Wednesday	67.29	17.609	136.492		1.253	
1/31/2017	Tuesday	39.37	9.494	92.891		1.884	
2/1/2017	Wednesday	41.62	16.041	135.659		1.927	
2/7/2017	Tuesday	44.50	11.067	99.845	1.248	1.460	2.841
2/8/2017	Wednesday	38.09	11.395	105.973		1.625	
2/14/2017	Tuesday	37.97	14.536	141.042		1.376	
2/15/2017	Wednesday	44.24	12.167	122.606		1.238	
2/21/2017	Tuesday	41.79	15.217	112.709		1.438	
2/22/2017	Wednesday	42.79	12.857	128.881		1.614	
2/28/2017	Tuesday	39.81	8.350	92.716		1.597	
3/1/2017	Wednesday	41.30	9.971	101.401		1.395	
3/7/2017	Tuesday	36.91	7.613	86.989	1.961	1.529	3.870
3/8/2017	Wednesday	37.32	8.474	91.587		1.487	
3/14/2017	Tuesday	56.04	15.072	122.456		1.130	
3/15/2017	Wednesday	63.36	14.629	121.916		1.402	
3/21/2017	Tuesday	38.61	9.935	93.681		1.556	
3/22/2017	Wednesday	39.08	9.034	82.534		1.535	
3/28/2017	Tuesday	53.52	12.383	95.981		1.263	
3/29/2017	Wednesday	48.24	9.299	72.668		1.090	
4/4/2017	Tuesday	75.60	16.371	109.939	1.199	0.817	2.882
4/5/2017	Wednesday	72.69	15.906	116.314		0.815	
4/11/2017	Tuesday	63.91	16.555	126.614		1.092	
4/12/2017	Wednesday	47.27	9.151	101.057		1.073	
4/18/2017	Tuesday	41.69	10.388	102.846		1.834	
4/19/2017	Wednesday	42.50	8.875	87.207		1.748	
4/25/2017	Tuesday	69.25	38.037	282.976		1.265	
4/26/2017	Wednesday	72.10	24.089	170.677		1.076	
5/2/2017	Tuesday	57.30	13.575	125.974		1.222	
5/3/2017	Wednesday	54.89	10.681	105.906		0.962	
5/9/2017	Tuesday	64.23	12.553	114.280	<1.000	1.185	1.648
5/10/2017	Wednesday	61.80	12.672	112.672		1.000	
5/16/2017	Tuesday	63.34	11.322	98.121		1.234	
5/17/2017	Wednesday	63.86	10.477	92.592		1.119	
5/23/2017	Tuesday	43.18	7.741	108.939		1.394	
5/24/2017	Wednesday	43.17	7.702	104.946		1.408	
5/30/2017	Tuesday	43.01	6.960	106.647		1.433	
5/31/2017	Wednesday	42.66	8.000	108.102		1.274	
6/6/2017	Tuesday	62.62	10.049	88.446	1.623	1.179	3.173
6/7/2017	Wednesday	68.35	9.254	87.797		1.012	
6/13/2017	Tuesday	41.33	6.562	77.821		1.315	

Table 8: Field's Point Effluent Metals (Al-Mo)

Field's Point Effluent Metals, Al - Mo, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Al	Fe	Se	As	Mo
6/14/2017	Wednesday	39.19	7.254	82.428		1.558	
6/20/2017	Tuesday	56.26	7.697	109.526		1.004	
6/21/2017	Wednesday	43.20	7.054	105.080		1.239	
6/27/2017	Tuesday	39.87	8.583	106.503		1.428	
6/28/2017	Wednesday	38.58	8.787	94.286		1.408	
7/4/2017	Tuesday	34.78	7.441	75.472		1.388	
7/5/2017	Wednesday	34.55	7.827	94.726		1.483	
7/11/2017	Tuesday	65.96	9.608	118.207	<1.000	1.028	2.642
7/12/2017	Wednesday	64.74	47.154	502.409		1.161	
7/18/2017	Tuesday	40.41	9.656	145.655		1.502	
7/19/2017	Wednesday	36.25	7.039	94.137		1.354	
7/25/2017	Tuesday	42.23	10.625	113.498		1.518	
7/26/2017	Wednesday	33.95	9.384	96.210		1.547	
8/1/2017	Tuesday	31.18	7.223	79.759		1.664	
8/2/2017	Wednesday	33.40	7.194	79.412		1.541	
8/8/2017	Tuesday	32.16	6.931	76.703	2.200	1.481	5.933
8/9/2017	Wednesday	31.69	7.590	84.478		1.475	
8/15/2017	Tuesday	30.24	6.107	84.798		1.749	
8/16/2017	Wednesday	31.73	7.747	82.699		1.772	
8/22/2017	Tuesday	31.08	6.878	80.463		1.823	
8/23/2017	Wednesday	30.50	6.375	73.256		1.646	
8/29/2017	Tuesday	33.96	7.489	93.637		1.767	
8/30/2017	Wednesday	30.23	6.731	77.509		1.524	
9/5/2017	Tuesday	30.66	10.384	99.521		1.863	
9/6/2017	Wednesday	45.87	8.697	116.440		1.765	
9/12/2017	Tuesday	28.43	8.996	85.061	1.501	1.673	3.825
9/13/2017	Wednesday	28.31	7.051	87.532		1.667	
9/19/2017	Tuesday	35.51	8.430	103.880		1.290	
9/20/2017	Wednesday	31.11	6.796	80.930		1.370	
9/26/2017	Tuesday	29.54	6.233	85.429		1.288	
9/27/2017	Wednesday	29.35	6.211	87.220		1.393	
10/3/2017	Tuesday	27.55	8.170	96.352	2.821	1.472	4.557
10/4/2017	Wednesday	29.06	8.097	84.044		1.332	
10/10/2017	Tuesday	28.52	7.104	102.639		1.437	
10/11/2017	Wednesday	29.13	8.063	109.338		1.550	
10/17/2017	Tuesday	26.98	6.738	94.749		1.380	
10/18/2017	Wednesday	26.60	9.735	109.152		1.380	
10/24/2017	Tuesday	46.93	12.918	135.220		1.278	
10/25/2017	Wednesday	66.92	10.303	86.042		1.088	
10/31/2017	Tuesday	62.12	11.103	94.523		1.040	
11/1/2017	Wednesday	52.29	8.904	85.312		1.061	
11/7/2017	Tuesday	37.18	9.602	112.440	1.790	1.864	4.204
11/8/2017	Wednesday	32.46	7.279	91.537		1.774	
11/14/2017	Tuesday	31.41	8.115	90.246		1.737	
11/15/2017	Wednesday	34.15	9.587	113.126		1.619	
11/21/2017	Tuesday	34.13	8.644	111.133		1.619	
11/22/2017	Wednesday	61.69	10.654	99.735		1.205	

Table 8: Field's Point Effluent Metals (Al-Mo)

Field's Point Effluent Metals, Al - Mo, 2017
all analyses in ppb

Date	Day of the Week	Total Eff Flow	Al	Fe	Se	As	Mo
11/28/2017	Tuesday	34.84	7.359	109.845		1.587	
11/29/2017	Wednesday	31.56	7.429	115.039		1.525	
12/5/2017	Tuesday	50.45	9.095	127.904	1.881	1.443	3.572
12/6/2017	Wednesday	50.86	8.445		1.410	1.180	2.563
12/12/2017	Tuesday	41.17	13.678		1.072	1.396	4.877
12/13/2017	Wednesday	32.86	10.164		2.037	1.480	5.768
12/19/2017	Tuesday	31.74	7.911		3.137	1.609	5.467
12/20/2017	Wednesday	30.85	9.020		1.410	1.581	3.751
12/26/2017	Tuesday	32.70	13.729		<1.000	1.852	3.191
12/27/2017	Wednesday	31.11	11.484		<1.000	1.800	4.830

Table 8: Field's Point Effluent Metals (Al-Mo)

Bucklin Point Influent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
1/3/2017	Tuesday	31.32	<2.5	<10.000	33.00	59.06	<10.000	0.03420	<10.000	<4.0	116.7	5.660	<4.00
1/4/2017	Wednesday	16.73	<2.5	<10.000	37.00	53.03	12.71	0.03210	11.09	<4.0	96.68	4.660	<4.00
1/10/2017	Tuesday	19.17	<2.5	105.2	39.00	73.37	<10.000	0.03040	63.24	<4.0	111.0		
1/11/2017	Wednesday	29.70	<2.5	24.31	27.00	49.49	14.33	0.01350	28.80	<4.0	134.6	14.80	<4.00
1/12/2017	Thursday	25.58										8.050	<4.00
1/17/2017	Tuesday	20.01	<2.5	<10.000	45.00	39.00	<10.000	0.03340	10.13	<4.0	80.66	7.19	<4.00
1/18/2017	Wednesday	19.03	<2.5	34.01	30.00	46.29	<10.000	0.04300	27.68	<4.0	89.45	6.46	<4.00
1/24/2017	Tuesday	51.93	<2.5	18.75	31.00	48.94	<10.000	0.02900	26.75	<4.0	95.36	6.490	<4.00
1/25/2017	Wednesday	32.85	<2.5	<10.000	18.00	31.12	<10.000	0.02500	<10.000	<4.0	65.25	5.720	<4.00
1/31/2017	Tuesday	17.56	<2.5	<10.000	34.00	44.08	<10.000	0.02840	12.97	<4.0	83.57	5.920	<4.00
2/1/2017	Wednesday	18.44	<2.5	<10.000	33.00	47.33	<10.000	0.03000	19.47	<4.0	88.05	9.380	<4.00
2/7/2017	Tuesday	17.68	<2.5	<10.000	32.00	63.06	<10.000	0.05400	12.33	<4.0	122.2	8.130	<4.00
2/8/2017	Wednesday	15.84	<2.5	<10.000	26.00	38.26	<10.000	0.02960	12.95	<4.0	135.4	7.790	<4.00
2/14/2017	Tuesday	15.59	<2.5	<10.000	41.00	49.21	<10.000	0.02750	<10.000	<4.0	108.4	9.220	<4.00
2/15/2017	Wednesday	18.22	<2.5	<10.000	35.00	65.13	<10.000	0.03720	15.53	<4.0	132.6	6.160	<4.00
2/21/2017	Tuesday	17.12	<2.5	<10.000	35.00	32.61	<10.000	0.02050	<10.000	<4.0	72.65	8.07	<4.00
2/22/2017	Wednesday	17.92	<2.5	<10.000	35.00	33.73	<10.000	0.02710	<10.000	<4.0	81.82	5.120	<4.00
2/28/2017	Tuesday	17.53	<2.5	47.65	29.00	70.23	<10.000	0.02360	92.42	<4.0	76.06	4.530	<4.00
3/1/2017	Wednesday	18.63	<2.5	78.75	31.00	85.68	<10.000	0.02690	163.6	<4.0	88.87	4.740	<4.00
3/7/2017	Tuesday	16.61	<2.5	<10.000	36.00	71.53	<10.000	0.04250	19.26	<4.0	94.91	4.770	<4.00
3/8/2017	Wednesday	16.48	<2.5	15.50	34.00	57.72	<10.000	0.06540	27.28	<4.0	108.6	6.360	<4.00
3/14/2017	Tuesday	32.03	<2.5	<10.000	34.00	42.53	<10.000	0.03410	<10.000	<4.0	80.04	5.720	<4.00
3/15/2017	Wednesday	18.94	<2.5	12.76	16.00	36.85	10.66	0.04640	22.34	<4.0	102.9	11.70	<4.00
3/21/2017	Tuesday	16.02	<2.5	<10.000	34.00	44.42	<10.000	0.05170	17.56	<4.0	83.77	5.400	<4.00
3/22/2017	Wednesday	15.80	<2.5	17.70	42.00	56.87	<10.000	0.04520	45.59	<4.0	82.34	6.000	<4.00
3/28/2017	Tuesday	22.23	<2.5	13.32	30.00	76.03	<10.000	0.03350	25.34	<4.0	94.19	7.140	<4.00
3/29/2017	Wednesday	25.27	<2.5	49.85	35.00	80.12	<10.000	0.03380	78.36	<4.0	89.00	9.590	<4.00
4/4/2017	Tuesday	45.66	<2.5	19.90	31.00	46.92	<10.000	0.02660	47.71	<4.0	66.05	4.960	<4.00
4/5/2017	Wednesday	24.61	<2.5	<10.000	14.00	33.63	<10.000	0.02110	14.91	<4.0	68.56	6.210	<4.00
4/11/2017	Tuesday	21.96	<2.5	<10.000	28.00	76.28	<10.000	0.03850	44.07	<4.0	80.34	6.090	<4.00
4/12/2017	Wednesday	21.67	<2.5	<10.000	25.00	87.21	<10.000	0.02800	61.01	<4.0	80.46	4.700	<4.00
4/18/2017	Tuesday	18.13	<2.5	<10.000	41.00	58.10	<10.000	0.1050	15.65	<4.0	94.11		
4/19/2017	Wednesday	19.12	<2.5	19.40	35.00	78.42	<10.000	0.05950	76.21	<4.0	96.67	5.190	<4.00
4/20/2017	Thursday	21.10										6.290	<4.00
4/25/2017	Tuesday	38.13	<2.5	11.82	22.00	57.00	<10.000	0.1050	47.98	<4.0	93.86	4.620	<4.00
4/26/2017	Wednesday	53.92	<2.5	26.13	10.00	51.74	<10.000	0.03140	65.43	<4.0	73.60	<4.00	<4.00
5/2/2017	Tuesday	32.05	<2.5	<10.000	14.00	67.45	11.83	0.06200	39.86	<4.0	116.9	4.620	<4.00
5/3/2017	Wednesday	20.83	<2.5	<10.000	16.00	39.34	<10.000	0.03550	14.47	<4.0	81.2	4.560	<4.00
5/9/2017	Tuesday	25.32	<2.5	<10.000	15.00	42.66	<10.000	0.01880	<10.000	<4.0	83.8	5.920	<4.00
5/10/2017	Wednesday	23.60	<2.5	<10.000	27.00	42.18	<10.000	0.03260	<10.000	<4.0	84.6	4.020	<4.00
5/16/2017	Tuesday	24.61	<2.5	<10.000	14.00	39.79	<10.000	0.03420	<10.000	<4.0	76.28	<4.00	<4.00
5/17/2017	Wednesday	24.41	<2.5	<10.000	17.00	79.89	<10.000	0.03550	67.72	<4.0	72.65	5.160	<4.00
5/23/2017	Tuesday	20.97	<2.5	<10.000	17.00	66.41	<10.000	0.03930	16.37	<4.0	105.5	5.170	<4.00

Table 9: Bucklin Point Influent Metals (Cd-CN)

Bucklin Point Influent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
5/24/2017	Wednesday	20.28	<2.5	<10.000	28.00	61.71	<10.000	0.04250	11.80	<4.0	103.2	6.000	<4.00
5/30/2017	Tuesday	20.20	<2.5	<10.000	30.00	33.9	<10.000	0.03440	<10.000	<4.0	86.2	4.590	<4.00
5/31/2017	Wednesday	20.15	<2.5	<10.000	26.00	50.5	<10.000	0.04090	22.88	<4.0	85.7	4.450	<4.00
6/6/2017	Tuesday	50.75	<2.5	<10.000	17.00	29.04	<10.000	0.03130	<10.000	<4.0	68.67	4.130	<4.00
6/7/2017	Wednesday	22.74	<2.5	<10.000	14.00	21.93	<10.000	0.03080	<10.000	<4.0	47.09	4.120	<4.00
6/13/2017	Tuesday	17.46	<2.5	<10.000	23.00	28.99	<10.000	0.02130	<10.000	<4.0	72.64	<4.00	<4.00
6/14/2017	Wednesday	17.38	<2.5	<10.000	26.00	41.18	<10.000	0.03160	13.10	<4.0	84.97	<4.00	<4.00
6/20/2017	Tuesday	26.44	<2.5	<10.000	30.00	47.53	<10.000	0.04310	<10.000	<4.0	87.8	<10.000	<10.000
6/21/2017	Wednesday	19.59	<2.5	<10.000	29.00	51.80	<10.000	0.08750	<10.000	<4.0	77.8	<10.000	<10.000
6/27/2017	Tuesday	18.37	<2.5	<10.000	26.00	34.37	<10.000	0.03070	<10.000	<4.0	68.64	5.620	<4.00
6/28/2017	Wednesday	17.42	<2.5	<10.000	29.00	37.56	<10.000	0.05280	<10.000	<4.0	74.87	5.870	<4.00
7/4/2017	Tuesday	14.63	<2.5	<10.000	20.00	46.41	<10.000	0.02780	<10.000	<4.0	79.6	5.400	<4.00
7/5/2017	Wednesday	15.36	<2.5	<10.000	24.00	34.33	<10.000	0.02750	<10.000	<4.0	57.4	4.580	<4.00
7/11/2017	Tuesday	33.41	<2.5	<10.000	30.00	60.09	17.10	0.04050	13.51	<4.0	124.7	7.130	<4.00
7/12/2017	Wednesday	36.20	<2.5	<10.000	32.00	54.43	<10.000	0.04510	<10.000	<4.0	115.8	7.790	<4.00
7/18/2017	Tuesday	21.10	<2.5	<10.000	63.00	52.80	<10.000	0.06490	<10.000	<4.0	112.1	7.390	<4.00
7/19/2017	Wednesday	17.87	<2.5	<10.000	180.000	62.18	<10.000	0.03730	11.80	<4.0	133.0	6.830	<4.00
7/23/2017	Sunday	15.43	<2.5	<10.000		34.93	<10.000		<10.000	<4.0	82.27		
7/24/2017	Monday	29.56	<2.5	<10.000		39.63	<10.000		<10.000	<4.0	105.2		
7/25/2017	Tuesday	17.67	<2.5	<10.000	29.00	40.96	<10.000	0.02720	<10.000	<4.0	94.54	6.760	<4.00
7/26/2017	Wednesday	15.94	<2.5	<10.000	31.00	56.36	<10.000	0.05080	<10.000	<4.0	108.2	5.950	<4.00
7/27/2017	Thursday	16.69	<2.5	<10.000		55.29	<10.000		12.60	<4.0	133.2		
7/28/2017	Friday	15.84	<2.5	<10.000		52.11	<10.000		<10.000	<4.0	123.5		
7/29/2017	Saturday	16.17	<2.5	<10.000		50.45	<10.000		13.98	<4.0	123.9		
7/30/2017	Sunday	14.66	<2.5	<10.000		37.54	<10.000		<10.000	<4.0	96.25		
7/31/2017	Monday	15.03	<2.5	<10.000		31.78	<10.000		<10.000	<4.0	91.25		
8/1/2017	Tuesday	14.99	<2.5	<10.000	48.00	58.31	<10.000	0.04530	<10.000	<4.0	139.9	5.620	<4.00
8/2/2017	Wednesday	15.93	<2.5	27.87	40.00	50.11	<10.000	0.05710	37.84	<4.0	128.5	6.260	<4.00
8/8/2017	Tuesday	15.30	<2.5	<10.000	47.00	50.69	<10.000	0.05600	15.36	<4.0	125.2	5.370	<4.00
8/9/2017	Wednesday	14.24	<2.5	23.82	37.00	51.60	<10.000	0.06090	32.05	<4.0	118.1	5.180	<4.00
8/15/2017	Tuesday	14.66	<2.5	<10.000	44.00	42.58	<10.000	0.04950	<10.000	<4.0	107.2	6.370	<4.00
8/16/2017	Wednesday	13.56	<2.5	<10.000	44.00	58.42	<10.000	0.04820	10.41	<4.0	131.5	6.980	<4.00
8/22/2017	Tuesday	13.98	<2.5	<10.000	61.00	56.81	<10.000	0.05230	<10.000	<4.0	146.8	6.880	<4.00
8/23/2017	Wednesday	13.43	<2.5	<10.000	49.00	55.69	<10.000	0.06480	11.32	<4.0	146.4	5.290	<4.00
8/29/2017	Tuesday	13.71	<2.5	<10.000	45.00	78.24	<10.000	0.08150	17.51	<4.0	156.3	5.47	<4.00
8/30/2017	Wednesday	16.50	<2.5	20.47	48.00	75.58	<10.000	0.06440	40.31	<4.0	164.8	5.37	<4.00
9/5/2017	Tuesday	13.16	<2.5	<10.000	67.00	42.09	<10.000	0.03390	<10.000	<4.0	114.0	5.15	<4.00
9/6/2017	Wednesday	16.11	<2.5	<10.000	54.00	65.22	12.08	0.1120	12.82	<4.0	153.4	4.27	<4.00
9/12/2017	Tuesday	12.48	<2.5	<10.000	40.00	60.40	<10.000	0.05100	<10.000	<4.0	106.5		
9/13/2017	Wednesday	12.45	<2.5	11.74	50.00	69.03	<10.000	0.05050	31.95	<4.0	101.5	4.600	<4.00
9/14/2017	Thursday	12.95										6.460	<4.00
9/19/2017	Tuesday	14.20	<2.5	<10.000	50.00	77.26	<10.000	0.05560	<10.000	<4.0	125.7	4.980	<4.00
9/20/2017	Wednesday	24.79	<2.5	<10.000	28.00	58.85	<10.000	0.05890	10.10	<4.0	131.3	5.280	<4.00

Table 9: Bucklin Point Influent Metals (Cd-CN)

Bucklin Point Influent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
9/26/2017	Tuesday	12.81	<2.5	<10.000	45.00	49.19	<10.000	0.04490	<10.000	<4.0	92.06	5.580	<4.00
9/27/2017	Wednesday	12.93	<2.5	<10.000	54.00	52.56	<10.000	0.09020	11.78	<4.0	91.70	5.280	<4.00
10/3/2017	Tuesday	13.18	<2.5	<10.000	36.00	74.98	<10.000	0.03360	13.84	<4.0	125.9	5.770	<4.00
10/4/2017	Wednesday	12.75	<2.5	<10.000	47.00	55.40	<10.000	0.04450	14.57	4.525	100.2	6.680	<4.00
10/10/2017	Tuesday	12.79	<2.5	<10.000	66.00	46.27	<10.000	0.03800	<10.000	<4.0	98.78	5.260	<4.00
10/11/2017	Wednesday	13.16	<2.5	<10.000	48.00	46.52	<10.000	0.06790	10.69	<4.0	93.44	5.330	<4.00
10/17/2017	Tuesday	12.09	<2.5	<10.000	37.00	65.60	<10.000	0.04460	32.56	<4.0	124.4	5.610	<4.00
10/18/2017	Wednesday	12.19	<2.5	<10.000	44.00	65.35	<10.000	0.05330	23.69	<4.0	135.0	6.110	<4.00
10/24/2017	Tuesday	19.10	<2.5	<10.000	33.00	73.04	25.29	0.03290	26.88	<4.0	156.0	4.860	<4.00
10/25/2017	Wednesday	31.46	<2.5	19.13	31.00	71.92	15.74	0.07690	39.80	<4.0	118.4	4.560	<4.00
10/31/2017	Tuesday	16.29	<2.5	<10.000	24.00	38.34	<10.000	0.02540	<10.000	<4.0	67.65	5.680	<4.00
11/1/2017	Wednesday	16.36	<2.5	<10.000	25.00	66.39	<10.000	0.04340	11.27	<4.0	87.08	4.910	<4.00
11/7/2017	Tuesday	15.17	<2.5	<10.000	33.00	59.33	<10.000	0.03930	<10.000	<4.0	95.03	5.470	<4.00
11/8/2017	Wednesday	15.20	<2.5	<10.000	34.00	55.56	<10.000	0.03470	<10.000	<4.0	106.2	4.490	<4.00
11/14/2017	Tuesday	14.29	<2.5	<10.000	30.00	61.67	<10.000	0.05350	18.42	<4.0	118.4	<4.00	<4.00
11/15/2017	Wednesday	13.58	<2.5	<10.000	40.00	68.84	<10.000	0.04140	14.14	<4.0	117.0	5.790	<4.00
11/21/2017	Tuesday	14.00	<2.5	<10.000	36.00	61.14	<10.000	0.03440	<10.000	<4.0	93.31	6.150	<4.00
11/22/2017	Wednesday	41.09	<2.5	<10.000	32.00	59.82	<10.000	0.05590	14.17	<4.0	114.0	4.510	<4.00
11/28/2017	Tuesday	14.09	<2.5	<10.000	43.00	52.17	<10.000	0.02430	<10.000	<4.0	65.29	36.20	5.80
11/29/2017	Wednesday	14.21	<2.5	<10.000	41.00	50.13	<10.000	0.04490	<10.000	<4.0	85.93	6.400	<4.00
12/5/2017	Tuesday	18.76	0.143	6.577	42.00	46.947	3.223	0.01750	17.719	3.441	93.770	6.370	<4.00
12/6/2017	Wednesday	27.88	0.188	15.162		52.005	9.428		25.636	2.403	115.350	5.280	<4.00
12/12/2017	Tuesday	19.03	0.192	4.384		64.581	4.065		10.494	2.317	110.489	7.460	<4.00
12/13/2017	Wednesday	14.27	0.166	4.175		35.379	6.419		8.303	1.319	96.456	8.330	<4.00
12/19/2017	Tuesday	14.67	0.248	4.336		57.006	5.021		6.556	2.343	107.280	5.820	<4.00
12/20/2017	Wednesday	14.19	0.176	4.694		49.238	5.078		18.498	1.916	105.028	4.560	<4.00
12/26/2017	Tuesday	14.58	0.144	1.069		24.256	2.594		2.744	0.222	69.240	8.530	<4.00
12/27/2017	Wednesday	14.23	0.149	2.355		43.449	2.923		7.534	1.361	98.314	8.860	<4.00

Table 9: Bucklin Point Influent Metals (Cd-CN)

Bucklin Point Influent Metals, Al-Sn, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Al	Fe	Se	As	Mo	Sn
1/3/2017	Tuesday	31.32	698.3	1362.0000	<1.000	1.133	1.420	<5.00
1/4/2017	Wednesday	16.73	461.1	1283.0000				<5.00
1/10/2017	Tuesday	19.17	328.1	1397.0000	<1.000	1.213	2.874	<5.00
1/11/2017	Wednesday	29.70	886.7	1955.0000				<5.00
1/17/2017	Tuesday	20.01	216.9	1067.0000	<1.000	1.028	1.718	<5.00
1/18/2017	Wednesday	19.03	346.1	1203.0000				<5.00
1/24/2017	Tuesday	51.93	480.0	1085.0000	<1.000	0.994	1.730	<5.00
1/25/2017	Wednesday	32.85	381.0	1112.0000				<5.00
1/31/2017	Tuesday	17.56	256.2	1092.0000	<1.000	1.101	4.656	<5.00
2/1/2017	Wednesday	18.44	454.2	1249.0000				<5.00
2/7/2017	Tuesday	17.68	367.1	1436.0000	<1.000	1.012	2.258	<5.00
2/8/2017	Wednesday	15.84	535.4	1560.0000				<5.00
2/14/2017	Tuesday	15.59	351.2	1389.0000	<1.000	1.063	2.169	<5.00
2/15/2017	Wednesday	18.22	296.2	1160.0000				<5.00
2/21/2017	Tuesday	17.12	248.9	1050.0000	<1.000	0.969	12.496	<5.00
2/22/2017	Wednesday	17.92	259.9	1070.0000				<5.00
2/28/2017	Tuesday	17.53	230.5	1065.0000	<1.000	0.990	3.803	<5.00
3/1/2017	Wednesday	18.63	267.8	1100.0000				<5.00
3/7/2017	Tuesday	16.61	291.3	1279.0000	<1.000	1.134	2.067	<5.00
3/8/2017	Wednesday	16.48	490.6	1450.0000				<5.00
3/14/2017	Tuesday	32.03	233.6	1137.0000	<1.000	1.205	3.174	<5.00
3/15/2017	Wednesday	18.94	594.0	1503.0000				<5.00
3/21/2017	Tuesday	16.02	275.9	1123.0000	<1.000	0.996	5.175	<5.00
3/22/2017	Wednesday	15.80	262.6	1050.0000				<5.00
3/28/2017	Tuesday	22.23	754.4	1610.0000	<1.000	1.182	2.115	<5.00
3/29/2017	Wednesday	25.27	376.5	1160.0000				<5.00
4/4/2017	Tuesday	45.66	281.9	883.6	<1.000	0.888	2.030	<5.00
4/5/2017	Wednesday	24.61	359.3	999.6				<5.00
4/11/2017	Tuesday	21.96	418.9	652.7	<1.000	0.936	4.624	<5.00
4/12/2017	Wednesday	21.67	263.9	633.3				<5.00
4/18/2017	Tuesday	18.13	249.6	1020.0000	<1.000	1.083	4.561	<5.00
4/19/2017	Wednesday	19.12	254.3	929.6				<5.00
4/25/2017	Tuesday	38.13	353.4	976.9	<1.000	1.126	1.442	<5.00
4/26/2017	Wednesday	53.92	509.2	901.9				<5.00
5/2/2017	Tuesday	32.05	488.4	1301.0000	<1.000	0.987	2.419	5.778
5/3/2017	Wednesday	20.83	247.2	788.0				<5.00
5/9/2017	Tuesday	25.32	240.2	859.1	<1.000	0.731	1.183	<5.00
5/10/2017	Wednesday	23.60	217.7	996.8				<5.00
5/16/2017	Tuesday	24.61	242.6	869.1	<1.000	0.949	2.278	<5.00
5/17/2017	Wednesday	24.41	221.7	900.8				<5.00

Table 10: Bucklin Point Influent Metals (Al-Sn)

Bucklin Point Influent Metals, Al-Sn, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Al	Fe	Se	As	Mo	Sn
5/23/2017	Tuesday	20.97	717.8	1028.0000	<1.000	1.120	2.200	<5.00
5/24/2017	Wednesday	20.28	286.1	1140.0000				<5.00
5/30/2017	Tuesday	20.20	221.8	931.7	<1.000	0.938	1.001	<5.00
5/31/2017	Wednesday	20.15	256.4	987.7				<5.00
6/6/2017	Tuesday	50.75	251.9	693.7	<1.000	0.929	2.021	<5.00
6/7/2017	Wednesday	22.74	217.1	723.1				<5.00
6/13/2017	Tuesday	17.46	175.0	723.7	1.192	0.756	3.130	<5.00
6/14/2017	Wednesday	17.38	240.7	838.7				<5.00
6/20/2017	Tuesday	26.44	397.2	1129.0000	<1.000	1.235	2.902	<5.00
6/21/2017	Wednesday	19.59	271.9	878.7				<5.00
6/27/2017	Tuesday	18.37	557.8	773.5	<1.000	1.079	2.372	<5.00
6/28/2017	Wednesday	17.42	184.7	833.8				<5.00
7/4/2017	Tuesday	14.63	194.4	1090.0000	<1.000	1.159	1.335	<5.00
7/5/2017	Wednesday	15.36	157.6	1010.0000				<5.00
7/11/2017	Tuesday	33.41	584.1	1266.0000	<1.000	1.324	3.076	<5.00
7/12/2017	Wednesday	36.20	655.7	1026.0000				<5.00
7/18/2017	Tuesday	21.10	243.0	1070.0000	<1.000	1.095	2.206	<5.00
7/19/2017	Wednesday	17.87	369.0	1208.0000				<5.00
7/23/2017	Sunday	15.43	183.3	979.0				<5.00
7/24/2017	Monday	29.56	264.2	1092.0000				<5.00
7/25/2017	Tuesday	17.67	237.1	988.0	<1.000	1.231	5.835	<5.00
7/26/2017	Wednesday	15.94	224.9	1035.0000				<5.00
7/27/2017	Thursday	16.69	283.1	1179.0000				<5.00
7/28/2017	Friday	15.84	296.0	1173.0000				<5.00
7/29/2017	Saturday	16.17	242.3	1092.0000				<5.00
7/30/2017	Sunday	14.66	196.0	996.8				<5.00
7/31/2017	Monday	15.03	200.3	1016.0000				<5.00
8/1/2017	Tuesday	14.99	293.2	1058.0000	<1.000	1.264	2.442	<5.00
8/2/2017	Wednesday	15.93	256.2	1065.0000				<5.00
8/8/2017	Tuesday	15.30	256.2	1135.0000	<1.000	1.203	2.456	<5.00
8/9/2017	Wednesday	14.24	236.6	988.4				<5.00
8/15/2017	Tuesday	14.66	263.3	1073.0000	<1.000	1.313	1.960	<5.00
8/16/2017	Wednesday	13.56	344.7	1232.0000				<5.00
8/22/2017	Tuesday	13.98	314.3	1157.0000	<1.000	1.430	2.562	<5.00
8/23/2017	Wednesday	13.43	323.3	1214.0000				<5.00
8/29/2017	Tuesday	13.71	334.8	1273.0000	<1.000	1.574	5.506	<5.00
8/30/2017	Wednesday	16.50	369.3	1416.0000				<5.00
9/5/2017	Tuesday	13.16	284.3	1166.0000	<1.000	1.365	1.322	<5.00
9/6/2017	Wednesday	16.11	478.6	1386.0000				<5.00

Table 10: Bucklin Point Influent Metals (Al-Sn)

Bucklin Point Influent Metals, Al-Sn, 2017

all analyses in ppb

Date	Day of the Week	Influent Flow	Al	Fe	Se	As	Mo	Sn
9/12/2017	Tuesday	12.48	1126.0000	1195.0000	<1.000	1.413	3.654	<5.00
9/13/2017	Wednesday	12.45	341.6	1201.0000				<5.00
9/19/2017	Tuesday	14.20	384.0	1266.0000	<1.000	1.444	7.150	<5.00
9/20/2017	Wednesday	24.79	462.1	1070.0000				<5.00
9/26/2017	Tuesday	12.81	242.0	991.2	<1.000	1.285	1.938	<5.00
9/27/2017	Wednesday	12.93	245.3	1057.0000				<5.00
10/3/2017	Tuesday	13.18	298.0	1125.0000	<1.000	1.231	2.989	<5.00
10/4/2017	Wednesday	12.75	264.4	1047.0000				<5.00
10/10/2017	Tuesday	12.79	223.9	1025.0000	<1.000	1.412	5.107	<5.00
10/11/2017	Wednesday	13.16	199.5	1074.0000				<5.00
10/17/2017	Tuesday	12.09	322.9	1383.0000	<1.000	1.415	3.567	<5.00
10/18/2017	Wednesday	12.19	907.5	1470.0000				<5.00
10/24/2017	Tuesday	19.10	426.3	1421.0000	<1.000	1.442	3.247	5.227
10/25/2017	Wednesday	31.46	484.7	1324.0000				<5.00
10/31/2017	Tuesday	16.29	221.9	1053.0000	<1.000	1.371	4.019	<5.00
11/1/2017	Wednesday	16.36	250.6	1222.0000				<5.00
11/7/2017	Tuesday	15.17	259.2	901.6	<1.000	0.919	3.742	<5.00
11/8/2017	Wednesday	15.20	309.8	854.5				<5.00
11/14/2017	Tuesday	14.29	344.9	1094.0000	<1.000	1.039	3.555	<5.00
11/15/2017	Wednesday	13.58	254.5	899.1				<5.00
11/21/2017	Tuesday	14.00	246.0	787.4	<1.000	0.761	1.693	<5.00
11/22/2017	Wednesday	41.09	320.1	696.7				<5.00
11/28/2017	Tuesday	14.09	177.0	821.9	<1.000	0.739	3.211	<5.00
11/29/2017	Wednesday	14.21	260.1	953.2				<5.00
12/5/2017	Tuesday	18.76	244.070	934.188	<1.000	0.930	3.126	<5.00
12/6/2017	Wednesday	27.88	455.734		<1.000	1.022	3.708	
12/12/2017	Tuesday	19.03	331.399		<1.000	0.993	4.451	
12/13/2017	Wednesday	14.27	390.674		<1.000	0.996	3.385	
12/19/2017	Tuesday	14.67	288.747		<1.000	0.928	2.527	
12/20/2017	Wednesday	14.19	884.055		<1.000	0.925	2.519	
12/26/2017	Tuesday	14.58	207.036		<1.000	0.921	0.906	
12/27/2017	Wednesday	14.23	244.869		<1.000	0.926	2.255	

Table 10: Bucklin Point Influent Metals (Al-Sn)

Bucklin Point Effluent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Effluent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
1/3/2017	Tuesday	28.88	0.024	1.017	<10.000	3.941	0.419	0.005210	3.414	0.111	31.937	8.810	<4.00
1/4/2017	Wednesday	16.73	0.020	1.718	<10.000	2.970	0.344	0.004020	8.258	0.072	34.635	6.470	<4.00
1/10/2017	Tuesday	19.17	0.032	6.208	<10.000	5.191	0.567	0.004930	7.503	0.127	38.826		
1/11/2017	Wednesday	27.36	0.021	4.738	<10.000	3.951	0.516	0.004640	6.308	0.102	32.303	6.640	<4.00
1/12/2017	Thursday	22.40										6.960	<4.00
1/17/2017	Tuesday	20.01	0.028	8.909	<10.000	3.897	0.483	0.002090	9.198	0.096	40.380	8.77	<4.0
1/18/2017	Wednesday	19.03	0.024	25.714	<10.000	3.212	0.399	0.002690	9.282	0.060	34.374	6.16	<4.00
1/24/2017	Tuesday	34.38	0.020	0.944	<10.000	4.447	0.421	0.004940	3.721	0.114	26.382	5.740	<4.00
1/25/2017	Wednesday	24.37	0.022	1.136	<10.000	3.788	0.358	0.003100	4.140	0.072	26.871	6.960	<4.00
1/31/2017	Tuesday	17.56	0.026	0.918	<10.000	3.754	0.367	0.003090	6.809	0.086	38.152	4.970	<4.00
2/1/2017	Wednesday	18.44	0.029	0.668	<10.000	4.123	0.353	0.002620	8.443	0.062	41.238	5.620	<4.00
2/7/2017	Tuesday	17.68	0.028	1.046	<10.000	3.822	0.388	0.003370	4.368	0.065	33.359	7.260	<4.00
2/8/2017	Wednesday	15.84	0.024	0.942	<10.000	3.721	0.351	0.002670	6.284	0.061	37.840	6.410	<4.00
2/14/2017	Tuesday	15.59	0.035	0.639	<10.000	4.360	0.348	0.004200	5.286	0.070	37.288	8.600	<4.00
2/15/2017	Wednesday	18.22	0.036	0.861	<10.000	4.327	0.365	0.002870	7.383	0.066	39.365	7.710	<4.00
2/21/2017	Tuesday	17.12	0.031	0.460	<10.000	3.282	0.339	0.002340	5.012	0.064	40.516	9.030	<4.00
2/22/2017	Wednesday	17.92	0.033	0.568	<10.000	3.486	0.330	0.002050	5.401	0.058	40.342	11.50	<4.00
2/28/2017	Tuesday	17.53	0.038	0.620	<10.000	4.859	0.340	0.002190	10.663	0.071	40.913	7.470	<4.00
3/1/2017	Wednesday	18.63	0.035	0.799	<10.000	4.321	0.327	<0.0020	16.000	0.075	38.872	8.970	<4.00
3/7/2017	Tuesday	16.61	0.036	0.696	10.00	4.591	0.400	0.002870	6.587	0.067	36.466	8.470	<4.00
3/8/2017	Wednesday	16.48	0.029	0.786	<10.000	3.814	0.317	0.003650	7.306	0.067	34.648	6.34	<4.00
3/14/2017	Tuesday	25.30	0.028	0.970	<10.000	5.099	0.500	0.004770	3.954	0.090	36.378	9.460	<4.00
3/15/2017	Wednesday	18.94	0.035	0.802	<10.000	3.569	0.308	0.003040	3.592	0.054	32.109	6.000	<4.00
3/21/2017	Tuesday	16.02	0.032	0.568	<10.000	3.773	0.375	0.003460	6.413	0.052	41.809	6.410	<4.00
3/22/2017	Wednesday	15.80	0.027	0.620	<10.000	3.683	0.375	0.003060	7.325	0.054	38.549	5.460	<4.00
3/28/2017	Tuesday	22.23	0.032	0.785	<10.000	4.682	0.415	0.005860	5.613	0.081	35.156	10.90	<4.00
3/29/2017	Wednesday	21.79	0.022	0.705	<10.000	3.219	<0.300	0.003510	6.293	0.048	31.576	6.040	<4.00
4/4/2017	Tuesday	34.34	0.054	3.131	<10.000	12.519	1.514	0.01150	8.657	0.247	40.464	6.370	<4.00
4/5/2017	Wednesday	24.61	0.020	0.771	<10.000	3.265	0.348	0.004270	7.953	0.038	32.782	5.130	<4.00
4/11/2017	Tuesday	21.96	0.022	0.642	<10.000	2.640	0.319	0.002870	8.400	<0.020	33.765	5.220	<4.00
4/12/2017	Wednesday	21.67	0.024	0.718	<10.000	3.131	0.357	0.002780	11.255	0.025	36.327	8.620	5.17
4/18/2017	Tuesday	18.13	0.030	0.521	<10.000	2.755	0.353	0.002120	9.674	0.022	35.534		
4/19/2017	Wednesday	19.12	0.024	0.634	<10.000	2.985	0.355	0.002820	11.311	0.026	35.782	8.190	<8.00
4/20/2017	Thursday	21.10										9.500	<8.00
4/25/2017	Tuesday	29.88	0.020	0.978	<10.000	3.745	0.504	0.004570	10.120	0.049	29.234	5.200	<4.00
4/26/2017	Wednesday	35.08	<0.020	1.045	<10.000	2.635	<0.300	0.003100	11.075	0.024	21.302	<4.00	<4.00
5/2/2017	Tuesday	29.03	0.023	1.147	<10.000	4.564	0.541	0.003720	10.710	0.106	27.270	6.590	<4.00
5/3/2017	Wednesday	20.83	0.028	1.325	<10.000	5.594	0.620	0.003910	11.552	0.109	31.772	5.540	<4.00
5/9/2017	Tuesday	25.32	0.022	0.785	<10.000	3.955	0.414	0.003730	7.312	0.034	35.154	<4.00	<4.00
5/10/2017	Wednesday	23.60	0.024	0.669	<10.000	3.858	0.372	0.002960	6.935	0.040	34.854	4.120	<4.00
5/16/2017	Tuesday	24.61	<0.020	0.544	<10.000	3.277	0.359	0.003530	5.512	0.034	31.385	8.020	<4.00
5/17/2017	Wednesday	24.41	0.024	0.565	<10.000	3.582	0.394	0.003730	11.343	0.032	32.251	5.070	<4.00
5/23/2017	Tuesday	20.97	0.036	0.520	<10.000	4.347	0.357	0.005150	10.862	0.031	39.817	6.460	<4.00
5/24/2017	Wednesday	20.28	0.039	0.489	<10.000	4.516	0.307	0.003760	10.487	0.036	40.654	8.200	<4.00
5/30/2017	Tuesday	20.20	0.046	0.505	<10.000	4.566	0.359	0.002830	6.389	0.033	38.284	5.710	<4.00

Table 11: Bucklin Point Effluent Metals (Cd-CN)

Bucklin Point Effluent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Effluent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
5/31/2017	Wednesday	20.15	0.041	0.616	<10.000	3.794	0.331	0.002830	7.022	0.031	41.017	6.030	<4.00
6/6/2017	Tuesday	36.47	0.038	0.796	<10.000	5.142	0.433	0.003120	5.091	0.052	32.545	5.120	<4.00
6/7/2017	Wednesday	22.74	0.028	0.637	<10.000	5.244	0.369	0.003560	5.351	0.041	35.511	6.020	<4.00
6/13/2017	Tuesday	17.46	0.036	0.512	<10.000	3.869	0.383	0.003450	9.541	0.034	36.611	6.310	<4.00
6/14/2017	Wednesday	17.38	0.032	0.531	<10.000	3.464	0.369	0.002550	10.621	0.035	36.613	4.440	<4.00
6/20/2017	Tuesday	26.44	<0.020	0.584	<10.000	3.748	0.395	0.002180	5.372	0.032	32.465	<10.000	<10.000
6/21/2017	Wednesday	19.59	0.027	0.560	<10.000	3.656	0.526	<0.0020	5.398	0.028	35.664	<10.000	<10.000
6/27/2017	Tuesday	18.37	0.039	0.674	<10.000	4.362	0.593	0.003880	5.556	0.036	41.740	11.70	<4.00
6/28/2017	Wednesday	17.42	0.040	0.748	<10.000	4.708	0.585	0.002460	6.041	0.044	42.281	7.480	<4.00
7/4/2017	Tuesday	14.63	0.047	0.650	<10.000	6.748	0.758	0.004560	5.323	0.076	41.837	6.020	<4.00
7/5/2017	Wednesday	15.36	0.054	0.817	<10.000	8.440	0.817	0.006800	6.356	0.093	40.735	7.080	<4.00
7/11/2017	Tuesday	22.71	0.068	2.268	<10.000	18.692	1.574	0.01300	7.811	0.276	49.874	6.520	<4.00
7/12/2017	Wednesday	27.18	0.074	2.752	<10.000	22.373	1.975	0.01470	8.940	0.323	51.716	7.050	<4.00
7/18/2017	Tuesday	21.10	0.096	3.316	<10.000	25.290	2.405	0.01100	7.430	0.457	55.002	7.500	<4.00
7/19/2017	Wednesday	17.87	0.088	2.889	<10.000	25.512	2.136	0.01780	9.051	0.395	55.184	8.240	<4.00
7/25/2017	Tuesday	17.67	0.045	1.370	<10.000	9.473	1.337	0.005990	5.193	0.130	37.136	7.490	<4.00
7/26/2017	Wednesday	15.94	0.042	1.275	<10.000	7.860	1.127	0.005190	5.282	0.108	40.719	6.270	<4.00
8/1/2017	Tuesday	14.99	0.032	0.798	<10.000	4.914	0.557	0.002680	4.139	0.044	39.476	9.340	<4.00
8/2/2017	Wednesday	15.93	0.034	0.834	<10.000	5.405	0.536	<0.0020	6.041	0.040	40.663	10.20	<4.00
8/8/2017	Tuesday	15.30	0.035	0.626	<10.000	4.195	0.444	0.002250	5.041	0.030	43.045	6.040	<4.00
8/9/2017	Wednesday	14.24	0.041	1.074	<10.000	5.100	0.437	0.002040	7.427	0.041	42.599	6.830	<4.00
8/15/2017	Tuesday	14.66	0.042	0.518	<10.000	4.269	0.368	<0.0020	3.733	0.028	39.175	8.290	<4.00
8/16/2017	Wednesday	13.56	0.039	0.601	<10.000	4.440	0.382	0.002850	4.757	0.026	41.498	9.480	<4.00
8/22/2017	Tuesday	13.98	0.049	0.694	<10.000	5.999	0.446	0.002370	6.167	0.048	44.088	6.07	<4.00
8/23/2017	Wednesday	13.43	0.043	0.778	<10.000	5.826	0.411	0.005840	5.934	0.044	41.114	7.27	<4.00
8/29/2017	Tuesday	13.71	0.054	0.806	<10.000	5.853	0.386	0.002660	7.225	0.054	44.186	8.72	<4.00
8/30/2017	Wednesday	16.50	0.052	0.999	<10.000	5.549	0.369	0.002720	8.385	0.052	40.538	7.71	<4.00
9/5/2017	Tuesday	13.16	0.051	0.450	<10.000	4.851	<0.300	<0.0020	4.325	0.023	39.474	4.85	<4.00
9/6/2017	Wednesday	16.11	0.047	0.896	<10.000	5.391	0.327	0.002330	5.088	0.037	42.693	5.29	<4.00
9/12/2017	Tuesday	12.48	0.044	0.686	<10.000	4.318	0.353	0.002700	5.278	0.025	41.958		
9/13/2017	Wednesday	12.45	0.037	0.771	<10.000	4.478	0.328	0.002640	7.439	0.026	39.341	5.370	<4.00
9/14/2017	Thursday	12.95										5.430	<4.00
9/19/2017	Tuesday	14.20	0.029	0.790	<10.000	4.161	0.313	<0.0020	5.583	0.031	36.570	6.160	<4.00
9/20/2017	Wednesday	22.69	0.023	0.724	<10.000	3.860	<0.300	0.002210	4.807	0.032	31.631	6.550	<4.00
9/26/2017	Tuesday	12.81	0.035	0.694	<10.000	3.724	<0.300	<0.0020	4.898	0.021	40.394	5.890	<4.00
9/27/2017	Wednesday	12.93	0.029	0.627	<10.000	3.739	<0.300	0.002370	6.303	0.026	38.018	6.390	<4.00
10/3/2017	Tuesday	13.18	0.029	0.660	<10.000	3.916	<0.300	0.002440	5.380	0.033	36.331	6.440	<4.00
10/4/2017	Wednesday	12.75	0.030	0.887	<10.000	4.294	<0.300	<0.0020	6.375	0.042	37.459	5.270	<4.00
10/10/2017	Tuesday	12.79	0.028	0.499	<10.000	3.672	<0.300	0.002090	4.172	0.041	36.641	4.670	<4.00
10/11/2017	Wednesday	13.16	0.024	0.629	<10.000	3.734	<0.300	<0.0020	5.896	0.043	36.679	6.130	<4.00
10/17/2017	Tuesday	12.09	0.024	0.660	<10.000	3.456	<0.300	0.002310	12.005	0.037	39.055	4.370	<4.00
10/18/2017	Wednesday	12.19	0.024	0.853	<10.000	3.257	<0.300	0.002150	12.639	0.032	36.038	4.630	<4.00
10/24/2017	Tuesday	19.10	0.024	0.553	<10.000	4.377	<0.300	<0.0020	9.474	0.060	35.399	7.730	<4.00
10/25/2017	Wednesday	28.33	0.023	1.126	<10.000	6.345	0.483	0.004030	9.055	0.170	34.472	6.470	<4.00
10/31/2017	Tuesday	16.29	0.024	0.658	<10.000	5.002	0.475	0.006470	5.373	0.127	35.533	7.920	<4.00

Table 11: Bucklin Point Effluent Metals (Cd-CN)

Bucklin Point Effluent Metals, Cd-CN, 2017

all analyses in ppb

Date	Day of the Week	Effluent Flow	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN	Available CN
11/1/2017	Wednesday	16.36	0.021	0.533	<10.000	3.718	0.312	<0.0020	7.403	0.053	34.698	6.090	<4.00
11/7/2017	Tuesday	15.17	0.031	0.605	<10.000	4.987	0.374	0.003740	6.243	0.068	43.372	6.730	<4.00
11/8/2017	Wednesday	15.20	0.029	0.610	<10.000	4.599	0.359	0.002310	6.932	0.061	37.402	8.440	<4.00
11/14/2017	Tuesday	14.29	0.024	0.564	<10.000	4.011	0.387	0.002220	8.393	0.053	36.669	7.860	<4.00
11/15/2017	Wednesday	13.58	0.022	0.635	<10.000	3.727	0.352	0.002730	7.773	0.041	36.785	6.630	<8.00
11/21/2017	Tuesday	14.00	0.020	0.670	<10.000	4.002	0.420	0.002800	5.174	0.045	39.164	5.090	<4.00
11/22/2017	Wednesday	29.03	<0.020	0.921	<10.000	5.305	0.488	0.004060	5.393	0.092	33.233	5.480	<4.00
11/28/2017	Tuesday	14.09	0.028	0.743	<10.000	4.388	0.538	0.003430	4.671	0.053	42.482	10.20	<8.00
11/29/2017	Wednesday	14.21	0.021	1.214	<10.000	3.937	0.417	0.003020	8.163	0.056	38.351	7.000	<8.00
12/5/2017	Tuesday	18.76	0.027	1.219	<10.000	5.186	0.514	0.002720	10.445	0.107	39.474	10.40	<8.00
12/6/2017	Wednesday	22.98	0.022	1.384		4.770	0.456		9.171	0.133	35.087	<8.00	<8.00
12/12/2017	Tuesday	19.03	0.043	0.888		5.164	0.429		6.578	0.136	45.136	5.940	<4.00
12/13/2017	Wednesday	14.27	0.029	1.732		5.222	0.464		6.465	0.123	47.809	9.500	<4.00
12/19/2017	Tuesday	14.67	0.031	1.099		3.467	0.563		3.660	0.055	41.856	5.470	<4.00
12/20/2017	Wednesday	14.19	0.029	0.698		4.097	0.525		5.445	0.053	41.781	5.820	<4.00
12/26/2017	Tuesday	14.58	0.028	0.468		4.011	0.375		2.984	0.046	37.500	7.030	<4.00
12/27/2017	Wednesday	14.23	0.030	0.505		3.550	0.543		4.401	0.063	44.087	7.610	<4.00

Table 11: Bucklin Point Effluent Metals (Cd-CN)

Bucklin Point Effluent Metals, Al-Sn, 2017

all analyses in ppb

Date	Day of the Week	Effluent Flow	Al	Fe	Se	As	Mo	Sn
1/3/2017	Tuesday	28.88	20.534	110.967				<5.00
1/4/2017	Wednesday	16.73	16.417	75.372				<5.00
1/10/2017	Tuesday	19.17	26.072	168.469	<1.000	0.902	1.999	<5.00
1/11/2017	Wednesday	27.36	24.481	111.571				<5.00
1/17/2017	Tuesday	20.01	17.169	118.858				<5.00
1/18/2017	Wednesday	19.03	19.417	91.332				<5.00
1/24/2017	Tuesday	34.38	25.187	113.421				<5.00
1/25/2017	Wednesday	24.37	16.774	78.852				<5.00
1/31/2017	Tuesday	17.56	14.415	80.758				<5.00
2/1/2017	Wednesday	18.44	18.311	93.928				<5.00
2/7/2017	Tuesday	17.68	18.872	111.791	<1.000	0.763	1.847	<5.00
2/8/2017	Wednesday	15.84	18.335	89.464				<5.00
2/14/2017	Tuesday	15.59	16.492	96.400				<5.00
2/15/2017	Wednesday	18.22	18.264	108.370				<5.00
2/21/2017	Tuesday	17.12	12.295	82.955				<5.00
2/22/2017	Wednesday	17.92	13.866	89.352				<5.00
2/28/2017	Tuesday	17.53	13.962	86.929				<5.00
3/1/2017	Wednesday	18.63	15.226	92.112				<5.00
3/7/2017	Tuesday	16.61	16.990	89.842	<1.000	0.884	1.184	<5.00
3/8/2017	Wednesday	16.48	13.147	88.498				<5.00
3/14/2017	Tuesday	25.30	25.891	161.684				<5.00
3/15/2017	Wednesday	18.94	17.629	89.882				<5.00
3/21/2017	Tuesday	16.02	19.248	117.230				<5.00
3/22/2017	Wednesday	15.80	21.590	104.889				<5.00
3/28/2017	Tuesday	22.23	23.935	126.605				<5.00
3/29/2017	Wednesday	21.79	16.392	81.721				<5.00
4/4/2017	Tuesday	34.34	109.672	458.659	<1.000	0.879	1.500	<5.00
4/5/2017	Wednesday	24.61	18.785	146.292				<5.00
4/11/2017	Tuesday	21.96	13.519	98.169				<5.00
4/12/2017	Wednesday	21.67	17.027	107.282				<5.00
4/18/2017	Tuesday	18.13	13.156	64.698				<5.00
4/19/2017	Wednesday	19.12	30.138	84.521				<5.00
4/25/2017	Tuesday	29.88	26.394	183.615				<5.00
4/26/2017	Wednesday	35.08	14.629	90.250				<5.00
5/2/2017	Tuesday	29.03	29.385	225.806				<5.00
5/3/2017	Wednesday	20.83	37.740	274.784				<5.00
5/9/2017	Tuesday	25.32	20.812	112.690	<1.000	0.694	1.466	<5.00
5/10/2017	Wednesday	23.60	18.328	122.489				<5.00
5/16/2017	Tuesday	24.61	16.384	182.546				<5.00
5/17/2017	Wednesday	24.41	15.576	145.017				<5.00
5/23/2017	Tuesday	20.97	15.242	61.998				<5.00
5/24/2017	Wednesday	20.28	14.492	57.767				<5.00
5/30/2017	Tuesday	20.20	13.558	54.687				<5.00
5/31/2017	Wednesday	20.15	13.626	58.749				<5.00
6/6/2017	Tuesday	36.47	25.340	119.170	<1.000	0.789	1.522	<5.00
6/7/2017	Wednesday	22.74	22.410	119.656				<5.00
6/13/2017	Tuesday	17.46	14.863	69.457				<5.00
6/14/2017	Wednesday	17.38	12.609	60.671				<5.00
6/20/2017	Tuesday	26.44	17.020	119.716				<5.00
6/21/2017	Wednesday	19.59	14.747	76.359				<5.00
6/27/2017	Tuesday	18.37	18.331	62.052				<5.00
6/28/2017	Wednesday	17.42	20.400	67.437				<5.00
7/4/2017	Tuesday	14.63	28.404	87.134				<5.00
7/5/2017	Wednesday	15.36	39.800	119.850				<5.00
7/11/2017	Tuesday	22.71	94.163	364.386	<1.000	1.096	2.084	<5.00
7/12/2017	Wednesday	27.18	121.527	472.129				<5.00
7/18/2017	Tuesday	21.10	145.935	592.510				<5.00
7/19/2017	Wednesday	17.87	140.105	543.118				<5.00
7/25/2017	Tuesday	17.67	56.810	381.237				<5.00
7/26/2017	Wednesday	15.94	46.671	323.656				<5.00
8/1/2017	Tuesday	14.99	19.883	103.541				<5.00
8/2/2017	Wednesday	15.93	19.463	101.508				<5.00
8/8/2017	Tuesday	15.30	14.530	60.879	<1.000	0.905	1.953	<5.00
8/9/2017	Wednesday	14.24	14.705	60.860				<5.00
8/15/2017	Tuesday	14.66	11.461	50.195				<5.00

Table 12: Bucklin Point Effluent Metals (Al-Sn)

Bucklin Point Effluent Metals, Al-Sn, 2017

all analyses in ppb

Date	Day of the Week	Effluent Flow	Al	Fe	Se	As	Mo	Sn
8/16/2017	Wednesday	13.56	12.972	56.601				<5.00
8/22/2017	Tuesday	13.98	15.140	73.056				<5.00
8/23/2017	Wednesday	13.43	13.465	61.490				<5.00
8/29/2017	Tuesday	13.71	15.718	71.623				<5.00
8/30/2017	Wednesday	16.50	22.404	67.002				<5.00
9/5/2017	Tuesday	13.16	9.938	46.578				<5.00
9/6/2017	Wednesday	16.11	13.384	64.143				<5.00
9/12/2017	Tuesday	12.48	11.229	57.827	<1.000	0.883	1.881	<5.00
9/13/2017	Wednesday	12.45	13.495	60.644				<5.00
9/19/2017	Tuesday	14.20	16.085	75.684				<5.00
9/20/2017	Wednesday	22.69	12.033	64.691				<5.00
9/26/2017	Tuesday	12.81	10.260	54.910				<5.00
9/27/2017	Wednesday	12.93	10.302	58.190				<5.00
10/3/2017	Tuesday	13.18	11.292	61.945	<1.000	0.918	3.325	<5.00
10/4/2017	Wednesday	12.75	12.726	71.757				<5.00
10/10/2017	Tuesday	12.79	10.434	66.256				<5.00
10/11/2017	Wednesday	13.16	10.714	68.443				<5.00
10/17/2017	Tuesday	12.09	9.686	62.140				<5.00
10/18/2017	Wednesday	12.19	11.319	64.518				<5.00
10/24/2017	Tuesday	19.10	13.003	85.720				<5.00
10/25/2017	Wednesday	28.33	29.831	195.198				<5.00
10/31/2017	Tuesday	16.29	23.655	142.382				<5.00
11/1/2017	Wednesday	16.36	12.296	76.217				<5.00
11/7/2017	Tuesday	15.17	16.961	88.119	<1.000	0.806	3.605	<5.00
11/8/2017	Wednesday	15.20	14.198	77.703				<5.00
11/14/2017	Tuesday	14.29	20.366	101.850				11.86
11/15/2017	Wednesday	13.58	14.711	76.055				22.19
11/21/2017	Tuesday	14.00	16.127	89.870				<5.00
11/22/2017	Wednesday	29.03	24.915	151.648				<5.00
11/28/2017	Tuesday	14.09	15.996	88.446				<5.00
11/29/2017	Wednesday	14.21	15.469	109.567				<5.00
12/5/2017	Tuesday	18.76	21.524	108.979	<1.000	0.721	2.377	<5.00
12/6/2017	Wednesday	22.98	23.793		<1.000	0.711	2.540	
12/12/2017	Tuesday	19.03	21.286		<1.000	0.759	3.478	
12/13/2017	Wednesday	14.27	21.808		<1.000	0.721	2.847	
12/19/2017	Tuesday	14.67	14.387		<1.000	0.598	1.454	
12/20/2017	Wednesday	14.19	18.012		<1.000	0.610	1.433	
12/26/2017	Tuesday	14.58	16.672		<1.000	0.665	0.645	
12/27/2017	Wednesday	14.23	16.495		<1.000	0.669	0.990	

Table 12: Bucklin Point Effluent Metals (Al-Sn)

Field's Point Influent and Effluent Nutrients 2017

Field's Point Influent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate+Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
01/02/17	0.0701	0.178	0.248	19.30	26.700	2.890	26.948
01/03/17	0.1450	0.5940	0.739	11.60	17.800	2.140	18.539
01/04/17	0.1630	0.5600	0.723	16.00	19.800	2.130	20.523
01/09/17	0.129	0.2730	0.402	21.70	27.100	3.350	27.502
01/10/17	0.075	0.383	0.458	16.90	22.700	2.840	23.158
01/11/17	0.074	0.625	0.699	12.20	16.700	2.020	17.399
01/16/17	0.138	0.3080	0.446	22.80	26.500	3.050	26.946
01/17/17	0.094	0.493	0.587	18.80	27.900	3.060	28.487
01/18/17	0.124	0.4890	0.613	17.30	23.200	5.250	23.813
01/23/17	0.084	0.345	0.429	16.90	32.300	3.560	32.729
01/24/17	0.062	0.948	1.010	6.820	10.800	1.510	11.810
01/25/17	0.087	1.313	1.400	9.230	14.000	1.740	15.400
01/30/17	0.177	0.6080	0.785	17.90	33.900	4.130	34.685
01/31/17	0.134	0.5390	0.673	16.20	26.900	3.330	27.573
02/01/17	0.117	0.442	0.559	16.50	24.800	3.450	25.359
02/06/17	0.115	0.269	0.384	20.90	34.900	3.980	35.284
02/07/17	0.106	0.653	0.759	15.50	30.000	5.560	30.759
02/08/17	0.146	0.402	0.548	17.40	29.500	3.400	30.048
02/13/17	0.102	0.438	0.540	17.40	27.200	5.720	27.740
02/14/17	0.341	0.410	0.751	18.00	29.000	4.180	29.751
02/15/17	0.113	0.481	0.594	17.20	28.300	3.690	28.894
02/20/17	0.519	0.711	1.230	17.50	28.300	2.720	29.530
02/21/17	0.388	0.752	1.140	13.80	26.000	3.050	27.140
02/22/17	0.440	0.551	0.991	15.30	26.100	3.630	27.091
02/27/17	0.952	0.478	1.430	15.60	25.000	3.000	26.430
02/28/17	0.507	0.583	1.090	18.00	28.700	3.540	29.790
03/01/17	0.466	0.422	0.888	15.80	25.300	4.060	26.188
03/06/17	0.392	0.215	0.607	22.60	34.800	4.080	35.407
03/07/17	0.277	0.362	0.639	21.80	38.200	7.120	38.839
03/08/17	0.389	0.322	0.711	17.00	33.300	4.260	34.011
03/13/17	0.115	0.353	0.468	20.30	32.900	4.400	33.368
03/14/17	0.126	0.583	0.709	10.80	26.000	3.070	26.709
03/15/17	0.247	0.833	1.080	12.00	19.600	3.630	20.680
03/20/17	0.098	0.637	0.735	17.60	26.300	3.630	27.035
03/21/17	0.121	0.621	0.742	19.60	28.800	3.710	29.542
03/22/17	0.120	0.642	0.762	18.70	27.800	3.400	28.562
03/27/17	0.086	0.603	0.689	15.50	24.700	3.320	25.389
03/28/17	0.094	0.690	0.784	15.90	25.800	2.920	26.584
03/29/17	0.129	0.771	0.900	16.30	27.600	2.820	28.500
04/03/17	0.121	1.529	1.650	11.50	18.800	1.830	20.450
04/04/17	0.079	1.251	1.330	7.880	12.800	1.320	14.130
04/05/17	0.113	1.347	1.460	10.20	17.700	1.570	19.160
04/10/17	0.137	1.083	1.220	11.10	19.900	2.090	21.120
04/11/17	0.135	0.975	1.110	12.20	22.400	3.660	23.510
04/12/17	0.152	0.948	1.100	13.40	23.200	4.370	24.300
04/17/17	0.210	0.393	0.603	18.20	27.100	2.710	27.703
04/18/17	0.256	0.465	0.721	14.30	23.800	3.160	24.521
04/19/17	0.185	0.455	0.640	14.20	25.000	3.230	25.640
04/24/17	0.197	0.198	0.395	20.40	32.400	3.270	32.795
04/25/17	0.133	0.459	0.592	9.150	18.700	2.180	19.292
04/26/17	0.174	0.976	1.150	6.220	11.700	1.310	12.850
05/01/17	0.305	0.631	0.936	17.10	26.600	2.770	27.536
05/02/17	0.220	0.666	0.886	9.690	17.600	2.190	18.486
05/03/17	0.251	0.567	0.818	10.60	19.100	2.360	19.918
05/08/17	0.167	1.083	1.250	10.90	19.600	2.090	20.850
05/09/17	0.126	0.924	1.050	9.950	24.100	2.420	25.150
05/10/17	0.119	0.661	0.780	9.720	17.800	3.050	18.580
05/15/17	0.100	0.898	0.998	8.680	15.800	1.640	16.798
05/16/17	0.140	0.720	0.860	9.530	15.500	1.810	16.360
05/17/17	0.130	0.575	0.705	9.170	15.400	1.940	16.105
05/22/17	0.110	0.387	0.497	12.00	20.900	2.880	21.397
05/23/17	0.137	0.388	0.525	14.30	22.900	3.460	23.425
05/24/17	0.155	0.249	0.404	15.10	25.200	2.970	25.604
05/29/17	0.149	0.257	0.406	13.90	23.500	2.390	23.906
05/30/17	0.125	0.232	0.357	15.10	26.100	3.080	26.457
05/31/17	<0.050	0.373	0.373	12.90	21.400	3.750	21.773
06/05/17	0.114	0.335	0.449	13.40	22.800	3.050	23.249
06/06/17	0.073	0.843	0.916	11.20	19.800	2.120	20.716
06/07/17	0.097	0.583	0.680	8.220	14.500	1.780	15.180
06/12/17	<0.050	0.209	0.209	14.70	22.900	3.900	23.109
06/13/17	<0.050	0.174	0.174	15.70	25.000	2.760	25.174
06/14/17	<0.050	0.204	0.204	13.70	22.400	3.040	22.604
06/19/17	0.160	0.228	0.388	10.70	17.700	2.440	18.088
06/20/17	0.195	0.115	0.310	9.790	17.000	2.580	17.310
06/21/17	0.191	0.108	0.299	13.10	25.600	4.380	25.899
06/26/17	0.288	0.113	0.401	16.40	25.100	3.290	25.501
06/27/17	0.291	0.124	0.415	15.80	23.300	2.870	23.715
06/28/17	0.259	0.122	0.381	17.50	26.700	4.100	27.081
07/03/17	0.392	0.093	0.485	16.90	26.400	2.760	26.885
07/04/17	0.434	0.174	0.608	14.30	23.100	2.500	23.708
07/05/17	0.331	0.101	0.432	14.30	27.300	3.550	27.732
07/10/17	0.0327	0.241	0.274	17.40	25.800	3.380	26.074
07/11/17	0.0350	0.132	0.167	7.800	11.500	1.790	11.667
07/12/17	0.0458	0.198	0.244	7.650	12.600	1.740	12.844

Field's Point Effluent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate+Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
01/02/17	0.0999	0.408	0.508	5.590	6.150	1.100	6.658
01/03/17	0.1810	2.5990	2.780	5.490	5.810	0.9240	8.590
01/04/17	0.1860	1.0540	1.240	7.660	7.770	0.7440	9.010
01/09/17	0.114	0.9560	1.070	7.100	7.470	1.960	8.540
01/10/17	0.125	2.4950	2.620	6.190	6.570	1.640	9.190
01/11/17	0.144	2.9560	3.100	4.610	4.880	1.020	7.980
01/16/17	0.067	0.2180	0.285	10.70	11.300	2.010	11.585
01/17/17	0.075	0.2070	0.282	12.40	12.600	1.340	12.882
01/18/17	0.055	<0.1	0.135	10.40	10.900	0.9590	11.035
01/23/17	0.097	1.343	1.440	8.220	9.230	2.110	10.670
01/24/17	0.155	4.3650	4.520	3.300	4.030	0.9860	8.550
01/25/17	0.207	3.7530	3.960	3.780	4.460	0.8490	8.420
01/30/17	0.092	0.269	0.361	7.170	7.880	1.130	8.241
01/31/17	0.098	0.314	0.412	7.280	7.950	1.210	8.362
02/01/17	0.120	0.430	0.550	6.660	7.660	1.380	8.210
02/06/17	0.096	0.463	0.559	8.720	10.000	2.750	10.559
02/07/17	0.162	1.258	1.420	6.450	7.860	1.960	9.280
02/08/17	0.122	0.656	0.778	5.280	6.630	2.240	7.408
02/13/17	0.189	2.071	2.260	5.690	7.190	3.010	9.450
02/14/17	0.239	2.101	2.340	3.590	4.220	2.630	6.560
02/15/17	0.310	2.000	2.310	4.490	4.560	2.020	6.870
02/20/17	0.461	1.499	1.960	5.380	6.730	1.640	8.690
02/21/17	0.245	0.385	0.630	5.520	6.210	1.700	6.840
02/22/17	0.278	0.369	0.647	8.020	9.110	1.550	9.757
02/27/17	0.164	1.196	1.360	5.960	6.310	1.540	7.670
02/28/17	0.176	0.844	1.020	7.490	7.810	2.100	8.830
03/01/17	0.201	1.089	1.290	4.580	5.150	1.550	6.440
03/06/17	0.216	1.044	1.260	8.730	9.270	2.080	10.530
03/07/17	0.247	1.063	1.310	7.710	8.610	1.880	9.920
03/08/17	0.245	1.135	1.380	6.010	7.180	1.770	8.560
03/13/17	0.171	1.519	1.690	5.190	6.930	2.730	8.620
03/14/17	0.127	3.573	3.700	3.290	4.170	1.350	7.870
03/15/17	0.261	3.609	3.870	5.590	6.330	1.110	10.200
03/20/17	0.147	1.133	1.280	5.160	5.850	1.530	7.130
03/21/17	0.153	1.917	2.070	4.970	5.810	1.260	7.880
03/22/17	0.124	3.236	3.360	4.490	5.550	1.210	8.910
03/27/17	0.172	3.418	3.590	5.310	6.120	1.160	9.710
03/28/17	0.161	4.479	4.640	5.210	6.350	1.150	10.990
03/29/17	0.178	4.972	5.150	3.460	4.640	0.6860	9.790
04/03/17	0.181	3.969	4.150	4.180	5.170	0.6160	9.320
04/04/17	0.072	4.979	5.050	1.670	2.520	0.3510	7.570
04/05/17	0.168	4.912	5.080	4.010	4.760	0.300	9.840
04/10/17	0.119	4.561	4.680	2.270	3.380	0.3360	8.060
04/11/17	0.122	3.438	3.560	2.410	3.400	0.420	6.960
04/12/17	0.089	1.911	2.000	1.680	2.780	0.3270	4.780
04/17/17	0.096	3.454	3.550	3.570	4.830	0.9630	8.380
04/18/17	<0.050	3.260	3.260	0.4440	1.600	1.000	4.860
04/19/17	<0.050	3.350	3.350	0.630	1.640	1.160	4.990
04/24/17	0.092	3.459	3.550	3.220	4.440	1.870	7.990
04/25/17	<0.050	4.160	4.160	0.2920	1.950	1.310	6.110
04/26/17	<0.050	5.590	5.590	0.8070	1.670	0.8490	7.260
05/01/17	0.144	3.516	3.660	1.870	3.280	2.040	6.940
05/02/17	<0.050	2.640	2.640	<0.1	1.110	1.000	3.750
05/03/17	<0.050	3.300	3.300	0.2850	1.380	0.5320	4.680
05/08/17	0.201	4.559	4.760	1.420	3.070	1.310	7.830
05/09/17	0.104	3.906	4.010	0.5150	1.540	0.9480	5.550
05/10/17	0.072	3.349	3.420	0.4410	1.410	0.6170	4.830
05/15/17	0.091	4.549	4.640	0.5540	1.360	0.7450	6.000
05/16/17	0.057	4.193	4.250	0.2010	1.250	1.030	5.500
05/17/17	0.076	3.844	3.920	0.6380	1.470	0.7940	5.390
05/22/17	0.087	2.503	2.590	0.6520	1.760	1.510	4.350
05/23/17	0.156	2.234	2.390	0.750	1.890	1.410	4.280
05/24/17	0.144	3.076	3.220	0.6850	1.850	1.420	5.070
05/29/17	0.183	2.057	2.240	0.6570	1.770	1.430	4.010
05/30/17	<0.050	1.690	1.690	0.1570	1.220	1.330	2.910
05/31/17	<0.050	1.530	1.530	<0.1	1.070	0.9320	2.600
06/05/17	0.114	3.376	3.490	0.3510	1.790	1.670	5.280
06/06/17	0.127	4.983	5.110	0.3720	1.450	0.9970	6.560
06/07/17	<0.050	3.060	3.060	<0.1	1.170	0.780	4.230
06/12/17	<0.050	1.780	1.780	<0.1	1.340	1.380	3.120
06/13/17	<0.050	2.460	2.460	<0.1	0.956	1.030	3.416
06/14/17	<0.050	1.490	1.490	0.1320	1.070	1.370	2.560
06/19/17	0.085	2.035	2.120	0.5140	1.780	1.330	3.900
06/20/17	<0.050	1.780	1.780	<0.1	1.160	0.6350	2.940
06/21/17	0.085	1.065	1.150	0.5090	1.530	0.7540	2.680
06/26/17	<0.050	2.440	2.440	0.8710	1.890	1.480	4.330
06/27/17	<0.050	1.790	1.790	0.3850	1.570	1.410	3.360
06/28/17	<0.050	2.790	2.790	0.4780	1.480	1.720	4.270
07/03/17	<0.050	2.510	2.510	0.3120	1.580	1.760	4.090
07/04/17	<0.01	2.810	2.810	<0.1	1.080	1.500	3.890
07/05/17	<0.01	1.260	1.260	<0.1	1.200	1.960	2.460
07/10/17	<0.01	2.320	2.320	<0.1	1.250	1.570	3.570
07/11/17	<0.01	3.120	3.120	<0.1	0.989	1.020	4.109
07/12/17	0.0200	2.400	2.420	0.2750	1.980	1.330	4.400

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2017

Field's Point Influent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate+Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
07/17/17	0.0103	0.0977	0.108	19.60	28.700	3.140	28.808
07/18/17	0.0274	0.109	0.137	16.80	25.800	3.060	25.937
07/19/17	0.0150	0.277	0.292	19.50	26.700	2.990	26.992
07/24/17	0.0897	0.102	0.192	11.80	19.000	2.710	19.192
07/25/17	0.0359	0.116	0.152	13.70	19.600	2.700	19.752
07/26/17	0.0219	0.090	0.112	20.60	30.600	3.400	30.712
07/27/17							
07/31/17	0.0225	0.156	0.178	18.00	27.000	3.960	27.178
08/01/17	0.142	0.077	0.219	17.60	26.100	3.610	26.319
08/02/17	0.132	0.038	0.170	15.90	25.300	3.460	25.470
08/07/17	0.092	0.171	0.263	18.00	28.900	4.060	29.163
08/08/17	<0.01	0.000	<0.100	19.70	29.300	3.540	29.300
08/09/17	0.0116	0.000	<0.100	18.20	30.200	3.730	30.200
08/10/17							
08/14/17	<0.01	0.112	0.112	18.60	30.100	3.650	30.212
08/15/17	0.0102	0.092	0.102	20.00	31.300	3.920	31.402
08/16/17	<0.01	<0.100	<0.100	19.60	27.300	3.880	27.300
08/21/17	<0.010	0.138	0.138	23.60	33.900	4.600	34.038
08/22/17	0.064	0.064	0.128	19.50	30.700	4.120	30.828
08/23/17	0.079	0.063	0.142	20.50	30.500	3.760	30.642
08/28/17	<0.010	<0.100	<0.100	25.30	36.900	4.390	36.900
08/29/17	0.133	0.132	0.265	18.20	30.500	4.340	30.765
08/30/17	0.135	0.119	0.254	17.80	26.700	3.710	26.954
09/04/17	0.243	0.081	0.324	18.60	37.200	3.830	37.524
09/05/17	0.184	0.200	0.384	21.60	30.500	4.370	30.884
09/06/17	0.230	0.082	0.312	16.40	32.000	4.820	32.312
09/11/17	0.251	0.139	0.390	25.60	35.000	4.140	35.390
09/12/17	0.218	0.063	0.281	22.10	32.800	4.410	33.081
09/13/17	0.245	<0.100	0.257	19.40	29.800	4.360	30.057
09/18/17	<0.010	0.134	0.134	19.90	29.400	4.440	29.534
09/19/17	<0.010	0.105	0.105	19.10	32.300	7.240	32.405
09/20/17	0.027	0.139	0.166	22.60	32.100	3.420	32.266
09/25/17	<0.010	0.118	0.118	22.20	31.700	4.490	31.818
09/26/17	<0.010	<0.100	<0.100	27.10	38.800	4.080	38.800
09/27/17	<0.010	0.121	0.121	22.80	35.900	4.450	36.021
10/02/17	<0.010	0.168	0.168	23.20	33.200	4.410	33.368
10/03/17	<0.010	0.105	0.105	22.90	32.400	4.190	32.505
10/04/17	<0.010	0.173	0.173	23.30	32.000	4.980	32.173
10/09/17	<0.010	0.154	0.154	18.30	25.300	3.760	25.454
10/10/17	<0.010	0.105	0.105	23.80	32.700	4.610	32.805
10/11/17	<0.010	0.102	0.102	21.90	31.700	4.240	31.802
10/16/17	<0.010	0.148	0.148	21.90	32.100	4.970	32.248
10/17/17	<0.010	<0.100	<0.100	25.90	36.000	4.650	36.000
10/18/17	0.024	0.090	0.114	24.50	35.500	5.210	35.614
10/23/17	0.015	0.127	0.142	25.00	34.900	4.820	35.042
10/24/17	0.056	0.157	0.213	16.00	25.800	3.900	26.013
10/25/17	0.105	0.285	0.390	10.40	15.800	2.140	16.190
10/30/17	0.253	0.651	0.904	9.480	15.200	1.780	16.104
10/31/17	0.187	0.208	0.395	9.240	14.900	2.020	15.295
11/01/17	0.163	0.109	0.272	11.40	16.800	2.490	17.072
11/06/17	<0.010	0.123	0.123	21.00	31.600	4.890	31.723
11/07/17	0.055	0.440	0.495	18.70	29.600	4.330	30.095
11/08/17	<0.010	0.153	0.153	19.90	26.000	4.160	26.153
11/13/17	<0.010	0.137	0.137	19.80	30.400	4.080	30.537
11/14/17	0.014	0.108	0.122	22.10	30.500	4.160	30.622
11/15/17	<0.010	<0.100	<0.100	20.40	31.000	4.300	31.000
11/20/17	<0.010	0.118	0.118	21.20	34.000	4.120	34.118
11/21/17	<0.010	<0.100	<0.100	20.60	36.500	4.310	36.500
11/22/17	0.055	0.306	0.361	8.010	16.600	2.080	16.961
11/27/17	<0.010	0.122	0.122	22.90	35.400	5.450	35.522
11/28/17	0.010	0.177	0.187	20.70	32.800	3.550	32.987
11/29/17	0.011	0.163	0.174	18.80	33.800	3.640	33.974
12/04/17	<0.010	0.158	0.158	24.30	40.200		40.358
12/05/17	0.034	0.179	0.213	17.00	34.800	4.080	35.013
12/06/17	0.104	0.385	0.489	13.60	21.600		22.089
12/11/17	0.028	0.137	0.165	19.50	31.500		31.665
12/12/17	0.067	0.280	0.347	15.50	27.300	3.570	27.647
12/13/17	0.045	0.160	0.205	20.50	32.800		33.005
12/16/17							
12/18/17	0.013	0.135	0.148	17.70	30.300		30.448
12/19/17	0.017	0.111	0.128	18.60	29.500	3.850	29.628
12/20/17	<0.010	0.104	0.104	18.80	31.100		31.204
12/25/17	0.147	0.276	0.423	13.50	22.300		22.723
12/26/17	0.122	0.183	0.305	17.70	29.500	3.310	29.805
12/27/17	0.066	0.161	0.227	17.60	31.100		31.327

Field's Point Effluent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate+Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
07/17/17	0.0417	1.638	1.680	0.7710	2.170	1.580	3.850
07/18/17	0.0232	1.207	1.230	0.5820	1.670	1.350	2.900
07/19/17	<0.01	2.120	2.120	0.1870	1.280	1.140	3.400
07/24/17							
07/25/17	<0.01	2.710	2.710	<0.1	1.110	1.640	3.820
07/26/17	<0.01	2.410	2.410	<0.1	1.030	1.600	3.440
07/27/17	<0.01	3.210	3.210	<0.1	1.110	1.730	4.320
07/31/17	<0.01	1.840	1.840	<0.1	0.868	2.020	2.708
08/01/17	<0.01	1.820	1.820	<0.1	0.933	2.130	2.753
08/02/17	<0.01	1.510	1.510	<0.1	0.915	1.910	2.425
08/07/17							
08/08/17	<0.01	1.580	1.580	<0.1	1.120	1.580	2.700
08/09/17	<0.01	1.460	1.460	<0.1	1.030	1.810	2.490
08/10/17	<0.01	0.823	0.823	<0.1	0.964	1.940	1.787
08/14/17	<0.01	1.220	1.220	<0.1	1.010	2.010	2.230
08/15/17	<0.01	1.530	1.530	<0.1	0.928	1.850	2.458
08/16/17	<0.01	1.730	1.730	<0.1	0.978	2.080	2.708
08/21/17	0.0298	2.760	2.790	0.6130	1.740	2.460	4.530
08/22/17	<0.010	1.410	1.410	<0.1	1.040	1.790	2.450
08/23/17	<0.010	2.020	2.020	<0.1	1.040	1.750	3.060
08/28/17	<0.01	2.970	2.970	<0.1	1.090	2.500	4.060
08/29/17	<0.01	1.140	1.140	<0.1	1.130	2.290	2.270
08/30/17	<0.01	0.958	0.958	<0.1	0.901	1.430	1.859
09/04/17	<0.01	1.040	1.040	<0.1	1.010	1.720	2.050
09/05/17	0.0309	1.069	1.100	0.460	1.700	1.900	2.800
09/06/17	0.0621	1.528	1.590	1.040	2.180	1.820	3.770
09/11/17	0.0334	2.117	2.150	0.4020	1.470	2.430	3.620
09/12/17	<0.01	1.540	1.540	<0.1	1.050	2.220	2.590
09/13/17	<0.01	0.825	0.825	<0.1	0.948	2.460	1.773
09/18/17	<0.010	0.582	0.582	<0.1	0.990	2.720	1.572
09/19/17	<0.010	0.727	0.727	0.1240	1.170	1.810	1.897
09/20/17	0.012	2.328	2.340	0.2340	1.290	1.960	3.630
09/25/17	<0.010	0.886	0.886	<0.1	1.190	2.490	2.076
09/26/17	0.076	3.274	3.350	1.700	3.000	1.850	6.350
09/27/17	0.021	1.499	1.520	0.4650	1.680	2.520	3.200
10/02/17	<0.010	1.290	1.290	0.1860	1.300	2.200	2.590
10/03/17	0.018	1.882	1.900	0.2690	1.460	2.550	3.360
10/04/17	<0.010	3.090	3.090	0.200	1.400	2.250	4.490
10/09/17	0.013	1.257	1.270	0.2040	1.340	2.000	2.610
10/10/17	<0.010	1.340	1.340	<0.1	0.981	1.940	2.321
10/11/17	<0.010	1.350	1.350	<0.1	1.070	2.420	2.420
10/16/17	<0.010	1.140	1.140	<0.1	1.100	2.510	2.240
10/17/17	0.051	2.689	2.740	0.8730	1.900	2.320	4.640
10/18/17	<0.010	4.020	4.020	<0.1	1.240	2.470	5.260
10/23/17	<0.010	3.020	3.020	0.1650	1.540	2.500	4.560
10/24/17	<0.010	3.330	3.330	0.1830	1.560	1.910	4.890
10/25/17	0.017	4.673	4.690	0.6170	1.480	1.020	6.170
10/30/17	0.041	4.149	4.190	0.5250	1.420	1.080	5.610
10/31/17	<0.010	3.300	3.300	0.1060	0.864	0.710	4.164
11/01/17	<0.010	1.700	1.700	0.2090	0.948	0.8110	2.648
11/06/17	0.099	1.331	1.430	1.440	2.660	2.560	4.090
11/07/17	0.085	1.055	1.140	1.070	2.040	2.230	3.180
11/08/17	0.057	1.503	1.560	0.8140	1.770	1.930	3.330
11/13/17	0.158	1.712	1.870	2.530	3.670	1.960	5.540
11/14/17	0.093	1.397	1.490	1.140	2.320	2.340	3.810
11/15/17	0.082	1.339	1.420	1.500	2.700	2.110	4.120
11/20/17	0.053	1.047	1.100	0.6920	2.000	2.130	3.100
11/21/17	0.065	1.815	1.880	1.180	2.590	2.010	4.470
11/22/17	0.026	2.274	2.300	1.380	2.390	1.240	4.690
11/27/17	0.103	0.957	1.060	1.930	3.210	2.210	4.270
11/28/17	0.111	1.249	1.360	1.480	2.770	1.620	4.130
11/29/17	0.039	0.923	0.962	0.6130	1.780	1.870	2.742
12/04/17	0.176	1.544	1.720	1.630	3.050	2.610	4.770
12/05/17	0.186	2.104	2.290	1.850	3.160		5.450
12/06/17	0.152	2.928	3.080	0.6160	1.660		4.740
12/11/17	0.161	2.029	2.190	1.330	2.650	2.390	4.840
12/12/17							
12/13/17	0.264	1.826	2.090	2.140	3.410		5.500
12/16/17	0.192	0.798	0.990	1.670	4.070		5.060
12/18/17	0.137	0.495	0.632	1.980	3.190	2.560	3.822
12/19/17	0.177	0.853	1.030	1.830	2.940		3.970
12/20/17	0.174	1.056	1.230	1.700	2.830		4.060
12/25/17	0.266	1.574	1.840	1.560	2.610	1.060	4.450
12/26/17	0.166	0.617	0.783	2.410	3.970		4.753
12/27/17	0.142	0.303	0.445	3.170	4.590		5.035

Table 13: Field's Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2017

Bucklin Point Influent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate + Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
01/03/17	0.2470	<0.1	0.303	22.30	32.400	3.850	32.703
01/04/17	0.1580	0.3940	0.552	14.70	18.700	2.450	19.252
01/09/17	0.130	0.3060	0.436	23.20	31.100	4.170	31.536
01/10/17	0.146	0.1740	0.320	24.00	32.500	4.140	32.82
01/11/17	0.152	0.4780	0.630	12.70	15.800	2.540	16.430
01/16/17	0.109	<0.1	0.156	21.60	25.000	3.370	25.156
01/17/17	<0.050	0.1420	0.142	21.50	25.500	3.740	25.642
01/18/17	0.166	0.2390	0.405	15.90	22.300	2.920	22.705
01/23/17	<0.050	<0.1	<0.100	21.40	29.100	5.190	29.100
01/24/17	<0.050	0.4750	0.475	9.520	14.800	2.330	15.275
01/25/17	0.084	0.795	0.879	10.30	14.100	1.730	14.979
01/30/17	0.149	0.3690	0.518	19.00	28.600	2.890	29.118
01/31/17	0.152	0.3110	0.463	18.90	32.200	3.880	32.663
02/01/17	0.167	<0.1	0.234	18.90	27.700	5.400	27.934
02/06/17	0.064	<0.1	0.113	20.10	30.600	3.340	30.713
02/07/17	0.052	<0.1	<0.100	19.40	32.700	4.330	32.700
02/08/17	0.187	0.480	0.667	16.50	26.600	3.600	27.267
02/13/17	0.116	0.048	0.164	20.70	31.300	5.950	31.464
02/14/17	0.274	0.125	0.399	19.70	30.400	3.790	30.799
02/15/17	0.219	0.105	0.324	19.80	30.200	3.720	30.524
02/20/17	0.178	0.614	0.792	16.40	23.200	2.530	23.992
02/21/17	0.208	0.310	0.518	20.50	30.200	3.300	30.718
02/22/17	0.308	0.034	0.342	16.60	27.800	3.600	28.142
02/27/17	0.307	0.101	0.408	18.50	28.400	3.190	28.808
02/28/17	0.252	0.216	0.468	21.60	32.600	3.220	33.068
03/01/17	0.194	0.004	0.198	20.50	33.400	3.880	33.598
03/06/17	0.054	0.058	0.112	20.00	32.800	3.950	32.912
03/07/17	<0.050	0.232	0.232	19.90	34.000	4.360	34.232
03/08/17	<0.050	0.199	0.199	20.50	33.600	4.560	33.799
03/13/17	0.184	0.025	0.209	21.40	33.200	3.740	33.409
03/14/17	0.059	0.162	0.221	23.20	37.100	4.300	37.321
03/15/17	0.163	0.867	1.030	14.00	21.600	2.850	22.630
03/20/17	0.307	0.128	0.435	20.30	31.100	4.090	31.535
03/21/17	0.251	0.204	0.455	19.30	29.400	4.050	29.855
03/22/17	0.194	0.008	0.202	19.70	31.100	4.100	31.302
03/27/17	0.144	0.085	0.229	18.60	30.700	4.100	30.929
03/28/17	<0.050	0.828	0.828	16.60	25.400	8.050	26.228
03/29/17	0.083	0.639	0.722	13.60	21.300	4.010	22.022
04/03/17	0.191	1.279	1.470	14.80	22.700	2.310	24.170
04/04/17	0.144	1.376	1.520	9.860	16.400	1.920	17.920
04/05/17	0.129	1.001	1.130	11.20	17.000	2.380	18.130
04/10/17	0.221	1.199	1.420	13.60	22.300	2.350	23.720
04/11/17	0.229	1.081	1.310	13.80	23.200	2.620	24.510
04/12/17	0.219	0.881	1.100	14.10	20.700	2.570	21.800
04/17/17	0.202	0.007	0.209	16.60	24.800	2.690	25.009
04/18/17	0.172	0.303	0.475	17.40	28.100	3.430	28.575
04/19/17	0.266	0.085	0.351	17.30	27.900	3.700	28.251
04/24/17	0.161	0.281	0.442	17.80	27.900	3.080	28.342
04/25/17	0.201	0.149	0.350	17.60	28.500	3.280	28.850
04/26/17	0.052	0.595	0.647	6.530	11.600	1.360	12.247
05/01/17	0.159	0.517	0.676	16.20	25.300	3.350	25.976
05/02/17	0.162	0.544	0.706	12.30	22.900	3.560	23.606
05/03/17	0.245	0.629	0.874	12.90	21.700	2.700	22.574
05/08/17	0.327	0.943	1.270	12.00	18.600	2.210	19.870
05/09/17	0.304	1.006	1.310	13.10	20.200	2.700	21.510
05/10/17	0.299	0.635	0.934	13.10	21.800	2.740	22.734
05/15/17	0.093	0.853	0.946	11.20	17.800	2.450	18.746
05/16/17	0.122	0.857	0.979	12.60	20.000	1.800	20.979
05/17/17	0.114	0.647	0.761	12.40	20.000	2.560	20.761
05/22/17	0.261	0.065	0.326	14.30	22.300	2.730	22.626
05/23/17	0.351	0.107	0.458	13.20	23.200	3.080	23.658
05/24/17	<0.050	0.140	0.140	14.40	24.600	3.240	24.740
05/29/17	0.117	0.526	0.643	16.20	25.900	2.790	26.543
05/30/17	0.114	0.413	0.527	16.90	27.500	3.150	28.027
05/31/17	0.182	0.071	0.253	16.70	31.000	3.930	31.253
06/05/17	0.139	0.355	0.494	14.90	22.100	2.260	22.594
06/06/17	0.090	0.407	0.496	15.60	27.300	3.210	27.796
06/07/17	0.123	0.634	0.757	13.60	19.500	1.850	20.257
06/12/17	0.425	0.111	0.536	17.20	27.000	3.090	27.536
06/13/17	0.223	0.308	0.531	35.90	44.200	2.580	44.731
06/14/17	0.236	<0.100	0.197	19.40	29.100	3.400	29.297
06/19/17	0.766	0.078	0.844	14.50	23.500	3.250	24.344
06/20/17	0.222	0.042	0.264	11.80	21.700	3.380	21.964
06/21/17	0.202	-0.021	0.181	14.10	27.200	3.290	27.381
06/26/17	<0.050	0.105	0.105	19.80	27.300	2.770	27.405
06/27/17	<0.050	0.102	0.102	22.50	29.500	3.830	29.602
06/28/17	<0.050	0.000	<0.100	18.20	31.500	3.710	31.500
07/03/17	<0.050	0.000	<0.100	16.20	26.000	3.030	26.000
07/04/17	<0.050	0.000	<0.100	15.90	24.800	3.180	24.800
07/05/17	0.0105	0.000	<0.100	16.50	20.000	3.530	20.000
07/10/17	0.212	<0.1	0.194	18.30	24.700	3.450	24.894
07/11/17	0.223	0.010	0.233	12.90	19.600	3.130	19.833
07/12/17	0.745	<0.100	0.623	17.20	25.500	3.190	26.123
07/17/17	0.652	<0.100	0.622	17.00	24.700	3.180	25.322
07/18/17	0.295	<0.100	0.274	16.90	26.200	3.940	26.474
07/19/17	0.498	<0.100	0.370	16.20	25.000	3.150	25.370
07/24/17	<0.010	0.000	<0.100	17.50	25.000	3.140	25.000
07/25/17	0.0306	0.000	<0.100	16.20	22.800	2.860	22.800
07/26/17	<0.01	0.000	<0.100	20.30	28.900	3.500	28.900
07/27/17							
07/28/17							
07/29/17							
07/30/17							
07/31/17	0.0108	<0.100	<0.100	21.10	29.400	3.570	29.400
08/01/17	<0.01	0.119	0.119	21.00	31.700	4.400	31.819
08/02/17	<0.01	0.000	<0.100	19.00	28.900	3.910	28.900
08/07/17	0.0384	0.000	<0.100	20.50	30.900	3.490	30.900

Bucklin Point Effluent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate + Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
01/03/17	0.0611	0.467	0.528	4.140	4.850	1.770	5.378
01/04/17	0.0664	0.440	0.506	5.150	5.850	1.840	6.356
01/09/17	0.078	0.992	1.070	1.700	2.520	1.730	3.590
01/10/17	0.069	1.091	1.160	4.120	4.950	2.470	6.110
01/11/17	0.087	0.9930	1.080	6.080	6.590	1.450	7.670
01/16/17	0.058	0.422	0.480	4.260	4.700	1.880	5.180
01/17/17	0.066	0.544	0.610	5.690	6.150	2.110	6.760
01/18/17	0.086	0.765	0.851	4.870	5.270	1.360	6.121
01/23/17	0.072	2.648	2.720	2.340	3.220	2.600	5.940
01/24/17	0.081	2.159	2.240	3.710	4.550	1.640	6.790
01/25/17	0.092	2.478	2.570	5.900	6.650	1.950	9.220
01/30/17	0.055	3.055	3.110	0.7920	2.030	2.580	5.140
01/31/17	<0.050	2.5200	2.520	0.5490	1.710	2.810	4.230
02/01/17	0.055	2.415	2.470	1.540	2.580	3.860	5.050
02/06/17	0.071	3.479	3.550	0.7710	2.230	2.780	5.780
02/07/17	0.079	1.701	1.780	2.550	3.950	2.780	5.730
02/08/17	0.088	2.382	2.470	2.000	3.370	2.530	5.840
02/13/17	0.079	1.951	2.030	5.050	6.250	2.950	8.280
02/14/17	0.074	1.886	1.960	3.400	5.610	2.580	7.570
02/15/17	0.066	2.104	2.170	2.990	3.980	2.400	6.150
02/20/17	0.079	1.991	2.070	2.360	3.480	1.690	5.550
02/21/17	0.080	1.410	1.490	1.360	2.670	1.660	4.160
02/22/17	0.076	2.114	2.190	1.680	2.450	2.260	4.640
02/27/17	0.141	1.649	1.790	1.570	2.310	1.470	4.100
02/28/17	0.123	1.227	1.350	2.100	2.640	1.630	3.990
03/01/17	0.129	1.551	1.680	2.630	3.750	2.350	5.430
03/06/17	0.112	1.268	1.380	1.380	2.53	1.950	3.91
03/07/17	0.120	2.000	2.120	2.050	3.020	2.230	5.140
03/08/17	0.099	0.870	0.969	3.210	4.440	3.010	5.409
03/13/17	0.122	1.928	2.050	2.230	3.720	2.390	5.770
03/14/17	0.096	0.994	1.090	3.250	4.990	2.570	6.080
03/15/17	0.138	1.442	1.580	3.170	4.190	1.380	5.770
03/20/17	0.074	0.510	0.584	1.750	2.660	1.190	3.244
03/21/17	0.074	0.648	0.722	2.650	3.520	1.810	4.242
03/22/17	0.105	1.325	1.430	1.780	3.000	1.400	4.430
03/27/17	<0.050	0.631	0.631	3.620	4.980	2.020	5.611
03/28/17	<0.050	0.375	0.375	7.600	8.680	3.730	9.055
03/29/17	0.077	0.973	1.050	3.790	4.840	1.710	5.890
04/03/17	0.079	0.417	0.496	2.840	3.650	0.6280	4.146
04/04/17	0.090	0.689	0.779	2.330	5.620	1.770	6.399
04/05/17	0.060	0.406	0.466	4.100	5.070	0.9960	5.536
04/10/17	0.062	0.494	0.556	1.020	2.140	0.800	2.696
04/11/17	0.051	0.766	0.817	0.4310	1.420	0.8430	2.237
04/12/17	<0.050	0.985	0.985	0.3280	1.760	1.020	2.745
04/17/17	<0.050	2.100	2.100	<0.1	1.300	1.410	3.400
04/18/17	<0.050	1.780	1.780	0.1130	1.280	1.440	3.060
04/19/17	<0.050	1.940	1.940	1.610	2.810	2.460	4.750
04/24/17	<0.050	0.220	0.220	3.670	4.870	1.730	5.090
04/25/17	<0.050	0.375	0.375	3.080	4.310	1.910	4.685
04/26/17	<0.050	0.473	0.473	1.250	2.090	1.070	2.563
05/01/17	<0.050	0.250	0.250	1.990	3.220	1.480	3.470
05/02/17	<0.050	0.627	0.627	0.6770	5.320	1.600	5.947
05/03/17	<0.050	0.650	0.650	0.5390	2.550	1.730	3.200
05/08/17	0.051	2.839	2.890	0.1790	1.510	1.660	4.400
05/09/17	<0.050	1.910	1.910	<0.1	1.100	1.490	3.010
05/10/17	<0.050	1.850	1.850	0.6230	2.080	1.870	3.930
05/15/17	<0.050	0.831	0.831	2.330	3.710	1.530	4.541
05/16/17	0.054	0.533	0.587	1.610	2.560	1.100	3.147
05/17/17	<0.050	1.110	1.110	0.3770	1.510	1.200	2.620
05/22/17	<0.050	3.620	3.620	<0.1	1.070	2.200	4.690
05/23/17	<0.050	2.580	2.580	<0.1	3.040	2.470	5.620
05/24/17	<0.050	2.530	2.530	<0.1	1.170	2.700	3.700
05/29/17	<0.050	1.260	1.260	<0.1	1.010	1.820	2.270
05/30/17	<0.050	1.360	1.360	<0.1	1.050	1.910	2.410
05/31/17	<0.050	0.871	0.871	<0.1	1.030	1.760	1.901
06/05/17	<0.050	2.200	2.200	0.1240	1.530	2.200	3.730
06/06/17	<0.050	2.010	2.010	<0.1	1.370	1.590	3.380
06/07/17	<0.050	2.910	2.910	<0.1	1.620	1.840	4.530
06/12/17	<0.050	1.330	1.330	<0.1	1.220	2.110	2.550
06/13/17	<0.050	1.420	1.420	<0.1	1.290	2.160	2.710
06/14/17	<0.050	0.880	0.880	<0.1	0.974	2.070	1.854
06/19/17	<0.050	0.647	0.647	0.5320	1.520	2.090	2.167
06/20/17	<0.050	1.130	1.130	0.1980	1.160	2.210	2.290
06/21/17	<0.050	0.804	0.804	<0.1	1.040	2.140	1.844
06/26/17	<0.050	1.630	1.630	0.3110	1.480	2.670	3.110
06/27/17	<0.050	1.250	1.250	0.410	1.610	3.030	2.860
06/28/17	<0.050	1.170	1.170	0.2950	1.570	3.050	2.740
07/03/17	<0.050	1.510	1.510	1.680	3.170	3.420	4.680
07/04/17	<0.050	1.370	1.370	2.510	4.160	3.530	5.530
07/05/17	0.051	2.619	2.670	3.190	5.180	3.730	7.850
07/10/17	0.0162	<0.100	<0.100	6.520	9.160	3.000	9.160
07/11/17	0.0165	<0.100	<0.100	7.390	10.100	2.740	10.100
07/12/17	0.0161	<0.100	<0.100	8.700	12.200	2.730	12.200
07/17/17	0.0216	<0.100	<0.100	16.90	20.200	2.490	20.200
07/18/17	0.0253	<0.100	<0.100	17.50	20.600	2.720	20.600
07/19/17	0.143	1.377	1.520	16.60	19.600	2.770	21.120
07/24/17	0.322	0.066	0.388	11.30	13.500	2.030	13.888
07/25/17	0.509	0.166	0.675	8.840	10.800	1.900	11.475
07/26/17	0.716	0.248	0.964	6.750	8.730	1.910	9.694
07/27/17			0.238	2.900	5.280		5.518
07/28/17			1.880	1.580	3.640		5.520
07/29/17			2.300	0.7290	2.680		4.980
07/30/17			2.150	0.1380	1.810		3.960
07/31/17	0.380	1.070	1.450	<0.1	1.360	1.680	2.810
08/01/17	0.274	1.746	2.020	<0.1	1.390	1.800	3.410
08/02/17	0.174	1.806	1.980	<0.1	1.450	2.090	3.430
08/07/17	0.0200	1.68	1.700	<0.1	0.937	1.630	2.637

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2017

Bucklin Point Influent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate + Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
08/08/17	<0.01	0.175	0.175	21.10	33.200	4.480	33.375
08/09/17	0.061	-0.061	<0.100	19.80	31.600	4.200	31.600
08/14/17	0.360	0.006	0.366	20.20	30.300	3.880	30.666
08/15/17	<0.01	0.000	<0.100	22.40	34.700	3.970	34.700
08/16/17	<0.01	<0.100	<0.100	22.70	32.200	4.640	32.200
08/21/17	<0.010	0.000	<0.100	25.00	35.000	10.60	35.000
08/22/17	0.0126	0.000	<0.100	24.90	36.000	6.150	36.000
08/23/17	0.0102	-0.010	<0.100	24.20	36.800	4.640	36.800
08/28/17	0.182	0.080	0.262	23.60	34.700	4.270	34.962
08/29/17	0.0980	<0.100	<0.100	24.60	37.100	4.960	37.100
08/30/17	0.0157	<0.100	<0.100	22.90	33.600	5.030	33.600
09/04/17	<0.01	<0.100	<0.100	27.70	36.600	3.810	36.600
09/05/17	0.0123	<0.100	<0.100	24.70	34.700	4.220	34.700
09/06/17	0.0131	<0.100	<0.100	24.50	37.600	4.880	37.600
09/11/17	0.0283	<0.100	<0.100	24.10	34.000	4.780	34.000
09/12/17	0.134	0.016	0.150	24.90	34.600	5.050	34.750
09/13/17	0.051	<0.100	<0.100	26.60	36.400	4.990	36.400
09/18/17	0.148	<0.100	0.151	25.40	37.300	4.620	37.451
09/19/17	0.038	0.169	0.207	23.50	35.800	4.910	36.007
09/20/17	0.730	<0.100	0.524	17.80	28.300	3.980	28.824
09/25/17	<0.010	<0.100	<0.100	26.70	39.100	6.340	39.100
09/26/17	<0.010	<0.100	<0.100	27.30	36.900	4.090	36.900
09/27/17	<0.010	<0.100	<0.100	24.10	37.600	4.890	37.600
10/02/17	<0.010	<0.100	<0.100	34.00	45.000	5.960	45.000
10/03/17	<0.010	<0.100	<0.100	33.10	44.700	5.050	44.700
10/04/17	<0.010	<0.100	<0.100	32.70	42.100	5.260	42.100
10/09/17	<0.010	<0.100	<0.100	25.00	32.200	4.280	32.200
10/10/17	0.308	<0.100	0.300	23.40	31.400	4.810	31.700
10/11/17	0.044	<0.100	<0.100	22.20	31.500	5.240	31.500
10/16/17	0.153	<0.100	0.155	24.90	36.100	4.630	36.255
10/17/17	0.124	<0.100	0.152	30.30	43.900	5.400	44.052
10/18/17	<0.010	<0.100	<0.100	31.60	38.000	5.160	38.000
10/23/17	0.021	<0.100	<0.100	30.00	39.300	5.850	39.300
10/24/17	0.107	<0.100	0.135	24.50	33.800	4.890	33.935
10/25/17	0.077	0.152	0.229	19.10	27.100	4.890	27.329
10/30/17	0.102	0.306	0.408	12.50	19.100	2.540	19.508
10/31/17	0.148	0.398	0.546	18.40	26.200	3.070	26.746
11/01/17	0.122	<0.100	0.125	21.00	30.300	3.950	30.425
11/06/17	0.103	<0.100	0.110	26.20	37.900	4.420	38.010
11/07/17	0.242	0.133	0.375	20.80	32.700	4.820	33.075
11/08/17	0.409	<0.100	0.290	18.60	25.900	4.390	26.190
11/13/17	0.251	<0.100	0.235	26.20	36.600	5.150	36.835
11/14/17	0.753	0.127	0.880	22.10	32.000	4.200	32.880
11/15/17	0.417	<0.100	0.281	23.90	35.400	4.970	35.681
11/20/17	0.634	<0.100	0.510	26.80	40.600	4.320	41.110
11/21/17	0.234	0.242	0.476	26.00	40.500	5.000	40.976
11/22/17	0.551	<0.100	0.521	16.60	30.700	5.100	31.221
11/27/17	<0.010	<0.100	<0.100	28.50	41.100	3.650	41.100
11/28/17	<0.010	<0.100	<0.100	30.30	43.200	3.890	43.200
11/29/17	<0.010	<0.100	<0.100	28.40	44.600	4.610	44.600
12/04/17	<0.010	<0.100	<0.100	30.30	45.600		45.600
12/05/17	<0.010	<0.100	<0.100	29.30	43.700	5.150	43.700
12/06/17	0.028	0.356	0.384	21.50	32.200		32.584
12/11/17	0.069	<0.100	<0.100	27.80	41.100		41.100
12/12/17	0.010	0.105	0.115	26.80	42.000	5.280	42.115
12/13/17	0.086	0.172	0.258	25.10	37.400		37.658
12/18/17	0.013	<0.100	<0.100	28.50	41.700		41.700
12/19/17	0.010	<0.100	<0.100	28.20	41.200	5.050	41.200
12/20/17	0.014	<0.100	<0.100	28.70	42.900		42.900
12/25/17	0.046	0.270	0.316	21.20	34.000		34.316
12/26/17	0.051	0.255	0.306	25.40	40.000	3.820	40.306
12/27/17	0.052	0.161	0.213	25.50	41.500		41.713

Bucklin Point Effluent Nutrients

Date	Nitrite $N\text{-}NO_2$ ppm	Nitrate $N\text{-}NO_3$ ppm	Nitrate + Nitrite $N\text{-}NO_3NO_2$ ppm	Ammonia $N\text{-}NH_3$ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
08/08/17	0.0185	2.092	2.110	<0.1	1.040	1.730	3.150
08/09/17	0.0182	1.972	1.990	<0.1	1.060	2.030	3.050
08/14/17	0.0141	1.386	1.400	<0.1	0.892	1.750	2.292
08/15/17	0.0171	1.673	1.690	<0.1	0.972	1.600	2.662
08/16/17	0.0198	2.020	2.040	<0.1	0.715	2.100	2.755
08/21/17	0.0255	2.365	2.390	<0.1	1.120	2.460	3.510
08/22/17	0.0247	2.305	2.330	<0.1	1.290	2.790	3.620
08/23/17	0.0261	2.524	2.550	<0.1	1.250	2.340	3.800
08/28/17	0.0134	1.837	1.850	<0.1	1.430	1.800	3.280
08/29/17	0.0172	2.583	2.600	<0.1	1.320	2.100	3.920
08/30/17	0.0261	2.084	2.110	<0.1	1.240	2.290	3.350
09/04/17	0.0183	1.902	1.920	<0.1	0.966	1.740	2.886
09/05/17	0.0288	2.811	2.840	<0.1	1.010	1.970	3.850
09/06/17	0.0350	1.825	1.860	<0.1	1.310	2.200	3.170
09/11/17	0.0171	1.193	1.210	<0.1	0.707	1.260	1.917
09/12/17	0.0251	1.655	1.680	<0.1	0.930	1.170	2.610
09/13/17	0.0228	1.807	1.830	<0.1	0.963	1.580	2.793
09/18/17	0.026	1.444	1.470	<0.1	1.020	1.360	2.490
09/19/17	0.034	1.956	1.990	<0.1	1.050	1.610	3.040
09/20/17	0.024	1.296	1.320	<0.1	0.943	1.160	2.263
09/25/17	0.029	1.691	1.720	<0.1	0.910	1.800	2.630
09/26/17	0.029	1.401	1.430	<0.1	0.769	1.970	2.199
09/27/17	0.034	1.596	1.630	<0.1	0.990	2.190	2.620
10/02/17	0.023	1.927	1.950	<0.1	0.953	1.210	2.903
10/03/17	0.029	3.571	3.600	<0.1	1.090	1.750	4.690
10/04/17	0.034	4.226	4.260	<0.1	1.090	2.710	5.350
10/09/17	0.046	2.444	2.490	<0.1	0.949	2.090	3.439
10/10/17	0.039	1.811	1.850	<0.1	1.020	2.250	2.870
10/11/17	0.030	2.100	2.130	<0.1	0.989	2.680	3.119
10/16/17	0.020	0.812	0.832	<0.1	0.863	2.530	1.695
10/17/17	0.018	1.582	1.600	<0.1	0.947	2.560	2.547
10/18/17	0.022	2.418	2.440	<0.1	0.890	2.870	3.330
10/23/17	0.019	1.471	1.490	<0.1	1.070	2.370	2.560
10/24/17	0.034	1.716	1.750	<0.1	1.100	2.510	2.850
10/25/17	0.022	2.028	2.050	0.1090	1.640	2.130	3.690
10/30/17	0.042	3.628	3.670	1.360	2.370	2.270	6.040
10/31/17	0.023	4.107	4.130	0.2850	1.710	2.440	5.840
11/01/17	0.017	3.893	3.910	<0.1	0.882	2.260	4.792
11/06/17	0.022	2.868	2.890	<0.1	1.210	2.920	4.100
11/07/17	0.024	3.896	3.920	<0.1	1.540	3.310	5.460
11/08/17	0.014	3.886	3.900	<0.1	1.140	2.940	5.040
11/13/17	0.018	1.132	1.150	1.670	3.190	2.760	4.340
11/14/17	0.048	2.412	2.460	0.3090	1.660	1.770	4.120
11/15/17	0.023	2.077	2.100	<0.1	1.270	1.820	3.370
11/20/17	0.063	2.017	2.080	0.2820	1.740	0.7670	3.820
11/21/17	0.042	1.748	1.790	<0.1	1.520	1.510	3.310
11/22/17	0.049	1.391	1.440	0.3640	2.170	1.630	3.610
11/27/17	0.038	1.812	1.850	0.5620	2.100	1.640	3.950
11/28/17	0.043	2.367	2.410	0.2870	1.790	2.050	4.200
11/29/17	0.059	1.221	1.280	0.420	1.850	1.380	3.130
12/04/17	0.027	2.853	2.880	<0.1	1.720		4.600
12/05/17	0.043	2.637	2.680	0.2260	2.240	2.650	4.920
12/06/17	0.049	2.301	2.350	0.5330	2.410		4.760
12/11/17	0.029	3.441	3.470	<0.1	1.640		5.110
12/12/17	0.058	2.502	2.560	1.280	3.090	4.910	5.650
12/13/17	0.038	3.392	3.430	<0.1	1.550		4.980
12/18/17	0.050	2.550	2.600	<0.1	1.390		3.990
12/19/17	0.064	1.396	1.460	0.6220	1.770	2.120	3.230
12/20/17	0.080	2.240	2.320	0.7050	1.960		4.280
12/25/17	0.019	1.481	1.500	<0.1	0.925		2.425
12/26/17	0.056	2.344	2.400	0.4440	1.620	2.130	4.020
12/27/17	0.028	1.022	1.050	<0.1	1.210		2.260

Table 14: Bucklin Point Influent and Effluent Nutrients

Oil and Grease Data 2017
Field's Point and Bucklin Point

Field's Point Oil & Grease 2017

Date	Influent Flow	Effluent Flow	Influent Average	Effluent Average
	MGD	MGD	ppm	ppm
1/11/2017	57.43	57.43	16.27	<4.0
2/7/2017	44.50	44.50	35.05	<4.0
3/7/2017	36.91	36.91	26.81	<4.0
4/4/2017	78.02	75.60	9.146	<4.0
5/9/2017	64.23	64.23	8.363	<4.0
6/6/2017	62.62	62.62	13.81	<4.0
7/11/2017	65.96	65.96	10.13	<4.0
8/8/2017	32.16	32.16	26.49	<4.0
9/12/2017	28.43	28.43	31.80	<4.0
10/3/2017	27.55	27.55	28.38	<4.0
11/7/2017	37.18	37.18	23.25	<4.0
12/5/2017	50.45	50.45	22.17	<4.0

Bucklin Point Oil & Grease 2017

Date	Influent Flow	Effluent Flow	Influent Average	Effluent Average
	MGD	MGD	ppm	ppm
1/11/2017	29.70	27.36	12.16	<4.0
2/7/2017	17.68	17.68	30.11	<4.0
3/7/2017	16.61	16.61	26.91	<4.0
4/4/2017	45.66	34.34	23.19	<4.0
5/9/2017	25.32	25.32	18.80	<4.0
6/6/2017	50.75	36.47	17.27	<4.0
7/11/2017	33.41	22.71	37.71	<4.0
8/8/2017	15.30	15.30	43.19	<4.0
9/12/2017	12.48	12.48	35.64	<4.0
10/3/2017	13.18	13.18	30.48	<4.0
11/7/2017	15.17	15.17	34.16	<4.0
12/5/2017	18.76	18.76	33.74	<4.0

Table 15: Bucklin Point and Field's Point Oil and Grease Data

Field's Point Dissolved Metals 2017

all analyses in ppb

MDL = method detection limit

Date	**Cd**	**Cd MDL**	Cr	Cr MDL	**Cu**	**Cu MDL**	Pb	Pb MDL	**Ni**	**Ni MDL**	Ag	Ag MDL	Zn	Zn MDL	**Al**	**Al MDL**	Fe	Fe MDL
01/10/2017	<0.02	0.02	1.13	0.30	2.33	0.30	<0.30	0.30	14.70	0.30	<0.02	0.02	30.18	5.00	<5.00	5.00	64.58	5.00
02/07/2017	0.02	0.02	1.00	0.30	2.41	0.30	<0.30	0.30	14.04	0.30	<0.02	0.02	31.02	5.00	<5.00	5.00	50.82	5.00
03/07/2017	0.03	0.02	1.47	0.30	2.29	0.30	<0.30	0.30	12.16	0.30	0.03	0.02	30.57	5.00	<5.00	5.00	53.81	5.00
04/04/2017	0.03	0.02	0.81	0.30	2.50	0.30	<0.30	0.30	12.16	0.30	<0.02	0.02	31.98	5.00	<5.00	5.00	38.20	5.00
05/09/2017	0.02	0.02	0.79	0.30	2.30	0.30	<0.30	0.30	9.81	0.30	<0.02	0.02	20.24	5.00	<5.00	5.00	35.67	5.00
06/06/2017	<0.02	0.02	1.10	0.30	2.31	0.30	<0.30	0.30	17.44	0.30	<0.02	0.02	25.10	5.00	<5.00	5.00	31.42	5.00
07/11/2017	<0.02	0.02	0.73	0.30	1.59	0.30	<0.30	0.30	8.22	0.30	<0.02	0.02	26.03	5.00	<5.00	5.00	35.42	5.00
08/08/2017	<0.02	0.02	2.28	0.30	1.60	0.30	<0.30	0.30	17.32	0.30	<0.02	0.02	28.89	5.00	<5.00	5.00	38.48	5.00
09/12/2017	<0.02	0.02	1.60	0.30	1.77	0.30	<0.30	0.30	14.79	0.30	<0.02	0.02	26.62	5.00	<5.00	5.00	48.32	5.00
10/03/2017	<0.02	0.02	1.47	0.30	2.51	0.30	<0.30	0.30	16.57	0.30	<0.02	0.02	29.41	5.00	<5.00	5.00	49.04	5.00
11/07/2017	<0.02	0.02	1.96	0.30	2.31	0.30	<0.30	0.30	17.70	0.30	<0.02	0.02	28.19	5.00	<5.00	5.00	54.16	5.00
12/05/2017	<0.02	0.02	2.52	0.30	2.37	0.30	<0.30	0.30	13.88	0.30	<0.02	0.02	27.15	5.00	<5.00	5.00	58.15	5.00

	Cd	**Cr**	**Cu**	**Pb**	**Ni**	**Ag**	**Zn**	**Al**	**Fe**
yearly average concentration	<0.02	1.41	2.19	<0.30	14.07	<0.02	27.95	<5.00	46.51
yearly median concentration	0.02	1.30	2.31	0.30	14.37	0.02	28.54	5.00	48.68
yearly minimum concentration	<0.02	0.73	1.59	<0.30	8.22	<0.02	20.24	<5.00	31.42
yearly maximum concentration	0.03	2.52	2.51	<0.30	17.70	0.03	31.98	<5.00	64.58

Table 16: Field's Point Effluent Dissolved Metals

Bucklin Point Dissolved Metals 2017

all analyses in ppb

MDL = method detection limit

Date	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL	Al	Al MDL	Fe	Fe MDL
01/10/2017	0.02	0.02	5.656	0.30	3.24	0.30	0.33	0.30	6.01	0.30	0.04	0.02	39.51	5.00	8.30	5.00	82.60	5.00
02/07/2017	<0.02	0.02	0.881	0.30	2.77	0.30	<0.30	0.30	4.16	0.30	0.03	0.02	33.57	5.00	8.10	5.00	70.06	5.00
03/07/2017	0.04	0.02	0.521	0.30	3.45	0.30	<0.30	0.30	6.36	0.30	0.03	0.02	37.49	5.00	7.43	5.00	54.72	5.00
04/04/2017	<0.02	0.02	0.454	0.30	1.88	0.30	<0.30	0.30	5.90	0.30	<0.02	0.02	28.43	5.00	5.12	5.00	42.99	5.00
05/09/2017	<0.02	0.02	0.553	0.30	2.37	0.30	<0.30	0.30	7.06	0.30	<0.02	0.02	34.82	5.00	5.63	5.00	56.26	5.00
06/06/2017	<0.02	0.02	0.548	0.30	2.25	0.30	<0.30	0.30	4.24	0.30	<0.02	0.02	30.56	5.00	5.92	5.00	34.72	5.00
07/11/2017	0.03	0.02	0.776	0.30	6.23	0.30	0.45	0.30	6.31	0.30	0.05	0.02	35.52	5.00	14.96	5.00	25.74	5.00
08/08/2017	0.03	0.02	0.609	0.30	3.63	0.30	0.37	0.30	5.11	0.30	<0.02	0.02	44.73	5.00	9.09	5.00	28.53	5.00
09/12/2017	0.05	0.02	0.746	0.30	3.96	0.30	0.31	0.30	5.27	0.30	<0.02	0.02	43.99	5.00	7.09	5.00	35.94	5.00
10/03/2017	0.03	0.02	0.729	0.30	3.46	0.30	<0.30	0.30	5.34	0.30	<0.02	0.02	39.80	5.00	10.16	5.00	46.51	5.00
11/07/2017	0.03	0.02	0.595	0.30	3.54	0.30	<0.30	0.30	5.94	0.30	0.03	0.02	38.56	5.00	6.51	5.00	47.99	5.00
12/05/2017	0.02	0.02	1.220	0.30	3.35	0.30	0.36	0.30	10.38	0.30	0.02	0.02	39.11	5.00	8.83	5.00	53.39	5.00

	Cd	Cr	Cu	Pb	Ni	Ag	Zn	Al	Fe
yearly average concentration	<0.03	1.11	3.34	<0.33	6.01	<0.03	37.17	8.09	48.29
yearly median concentration	0.03	0.67	3.40	0.30	5.92	0.02	38.03	7.76	47.25
yearly minimum concentration	<0.02	0.45	1.88	<0.30	4.16	<0.02	28.43	5.12	25.74
yearly maximum concentration	0.05	5.66	6.23	0.45	10.38	0.05	44.73	14.96	82.60

Table 17: Bucklin Point Effluent Dissolved Metals

Field's Point Bioassay Data 2017

Field's Point WWTF Bioassay Results - 2017 *Americamysis bahia*						
Acute	**1st Quarter, 2017**			**2nd Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
LC_{50}	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A
	3rd Quarter, 2017			**4th Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
LC_{50}	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A

* NOTE - % indicates Percent Effluent

** No permit limit exists for A-NOEC

LC_{50}	LC_{50} is the effluent concentration that causes 50% mortality during the acute toxicity test duration.
A-NOEC	No observable effect concentration: Highest concentration of the effluent in which 90% or more of the test animals survive
Acute Test	continuous exposure to effluent for 48 hours
NC	Not calculated

Field's Point WWTF Bioassay Results - 2017 *Arbacia punctulata*						
Chronic	**1st Quarter, 2017**			**2nd Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
C-NOEC	100%	Required monitoring: No Limit	Y	100%	Required monitoring: No Limit	Y
	3rd Quarter, 2017			**4th Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
C-NOEC	100%	Required monitoring: No Limit	Y	100%	Required monitoring: No Limit	Y

* NOTE - % indicates Percent Effluent

C-NOEC	Highest concentration of effluent with no observed effect on fertilization rates
Chronic test	Tests for sublethal effects of effluent on specifically on fertilization rates of *A. punculata* eggs. Exposure rate is 60 minutes

Table 18: Field's Point Bioassay Data

Bucklin Point WWTF Bioassay Results - 2017 ***Americamysis bahia***						
Acute	**1st Quarter, 2017**			**2nd Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
LC_{50}	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A
	3rd Quarter, 2017			**4th Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
LC_{50}	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A

* NOTE - % indicates Percent Effluent

** No permit limit exists for A-NOEC

LC_{50}	LC_{50} is the effluent concentration that causes 50% mortality during the acute toxicity
A-NOEC	No observable effect concentration: Highest concentration of the effluent in which 90% or more of the test animals survive
Acute Test	continuous exposure to effluent for 48 hours
NC	Not calculated

Bucklin Point WWTF Bioassay Results - 2017 ***Arbacia punctulata***						
Chronic	**1st Quarter, 2017**			**2nd Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
C-NOEC	100%	50%	Y	100%	50%	Y
	3rd Quarter, 2017			**4th Quarter, 2017**		
Test	**Result**	**Permit Limit**	**Pass Y/N**	**Result**	**Permit Limit**	**Pass Y/N**
C-NOEC	100%	50%	Y	100%	50%	Y

* NOTE - % indicates Percent Effluent

C-NOEC	Highest concentration of effluent with no observed effect on fertilization rates
Chronic test	Tests for sublethal effects of effluent on specifically on fertilization rates of *A. punculata* eggs. Exposure rate is 60 minutes

Field's Point Metals Loading From Final Sludge (lbs/yr)

	Sludge	Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead		Mercury		Molybdenum		Nickel		Selenium		Silver		Zinc		Cyanide	
Date	**Dry Tons**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**
1/3/2017	19.75	4.64		0.16		1.09		46.81		165.28		50.99		0.39		4.86		31.21		7.03		2.51		415.39		1.10	
1/17/2017	27.86	6.17		0.26		1.31		55.02		205.38		65.49		0.35		4.99		41.88		8.67		3.23		483.38		0.85	
Monthly Avg:	**23.81**	**5.40**		**0.21**		**1.20**		**50.92**		**185.33**		**58.24**		**0.37**		**4.92**		**36.54**		**7.85**		**2.87**		**449.38**		**0.98**	
Monthly Total in lbs.	**1,305,673**		**7.06**		**0.27**		**1.57**		**66.48**		**241.98**		**76.04**		**0.48**		**6.43**		**47.71**		**10.25**		**3.74**		**586.75**		**1.27**
2/7/2017	26.66	5.29		0.20		1.30		53.10		171.31		46.32		0.31		5.22		37.80		6.07		3.15		408.61		1.60	
2/14/2017	29.78	3.67		0.20		1.33		64.56		174.90		45.57		0.32		4.41		35.23		5.72		3.42		434.60		5.70	
Monthly Avg:	**28.22**	**4.48**		**0.20**		**1.32**		**58.83**		**173.10**		**45.95**		**0.32**		**4.82**		**36.52**		**5.90**		**3.28**		**421.61**		**3.65**	
Monthly Total in lbs.	**1,299,120**		**5.82**		**0.26**		**1.71**		**76.42**		**224.88**		**59.69**		**0.41**		**6.26**		**47.44**		**7.66**		**4.26**		**547.72**		**4.74**
3/7/2017	28.59	4.76		0.18		1.24		54.65		172.73		46.72		0.16		4.74		33.86		7.50		3.84		443.61		2.70	
3/21/2017	28.77	3.80		0.13		1.03		48.13		165.36		47.92		0.16		4.13		36.82		6.85		4.13		374.32		2.00	
Monthly Avg:	**28.68**	**4.28**		**0.15**		**1.13**		**51.39**		**169.05**		**47.32**		**0.16**		**4.44**		**35.34**		**7.17**		**3.99**		**408.97**		**2.35**	
Monthly Total in lbs.	**1,442,360**		**6.18**		**0.22**		**1.63**		**74.12**		**243.82**		**68.25**		**0.23**		**6.40**		**50.97**		**10.35**		**5.75**		**589.88**		**3.39**
4/4/2017	27.34	4.65		0.26		2.10		55.93		228.10		80.05		0.23		4.72		61.41		7.02		3.49		405.75		2.80	
4/18/2017	29.66	4.54		0.23		1.97		39.04		189.01		68.17		0.14		4.30		32.22		6.65		3.82		382.15		2.40	
Monthly Avg:	**28.50**	**4.60**		**0.24**		**2.04**		**47.48**		**208.56**		**74.11**		**0.19**		**4.51**		**46.82**		**6.83**		**3.65**		**393.95**		**2.60**	
Monthly Total in lbs.	**1,391,380**		**6.40**		**0.34**		**2.83**		**66.07**		**290.18**		**103.12**		**0.26**		**6.27**		**65.14**		**9.51**		**5.08**		**548.14**		**3.62**
5/2/2017	27.90	4.74		0.14		1.62		41.04		228.00		79.11		0.60		7.95		38.07		8.17		4.76		416.35		5.20	
5/16/2017	29.45	4.24		0.06		1.50		62.94		242.69		76.75		1.33		6.49		37.88		7.75		4.26		455.78		2.55	
Monthly Avg:	**28.68**	**4.49**		**0.10**		**1.56**		**51.99**		**235.35**		**77.93**		**0.96**		**7.22**		**37.97**		**7.96**		**4.51**		**436.07**		**3.88**	
Monthly Total in lbs.	**1,433,240**		**6.44**		**0.14**		**2.23**		**74.52**		**337.31**		**111.69**		**1.38**		**10.35**		**54.43**		**11.41**		**6.46**		**624.99**		**5.55**
6/6/2017	23.54	3.98		0.27		2.02		87.92		266.55		80.15		0.75		6.96		52.75		9.46		3.44		515.52		5.94	
6/12/2017	28.96	3.91		0.24		1.78		74.78		258.39		56.18				5.81		46.98		9.71		4.23		448.26			
6/20/2017	23.96	4.18		0.21		2.20		83.79		264.92		117.15		0.57		7.08		44.74		8.03		6.04		543.57		5.77	
Monthly Avg:	**25.49**	**4.02**		**0.24**		**2.00**		**82.16**		**263.29**		**84.49**		**0.66**		**6.62**		**48.16**		**9.06**		**4.57**		**502.45**		**5.86**	
Monthly Total in lbs.	**1,413,160**		**5.69**		**0.34**		**2.82**		**116.11**		**372.06**		**119.40**		**0.93**		**9.35**		**68.06**		**12.81**		**6.46**		**710.04**		**8.27**
7/4/2017	14.96	4.62		0.23		2.46		64.69		302.02		141.07		1.09		7.44		51.83		7.31		6.74		617.68		6.22	
7/18/2017	30.02	5.44		0.27		2.53		81.95		331.07		148.98		1.05		8.15		46.19		7.68		6.21		760.24		6.31	
Monthly Avg:	**22.49**	**5.03**		**0.25**		**2.49**		**73.32**		**316.55**		**145.03**		**1.07**		**7.80**		**49.01**		**7.50**		**6.48**		**688.96**		**6.27**	
Monthly Total in lbs.	**1,224,880**		**6.16**		**0.30**		**3.06**		**89.81**		**387.73**		**177.64**		**1.31**		**9.55**		**60.03**		**9.18**		**7.93**		**843.89**		**7.67**
8/1/2017	28.49	4.58		0.25		2.03		60.33		284.72		89.80		0.52		6.59		45.99		8.38		7.80		635.14		0.76	
8/15/2017	26.59	4.43		0.22		1.74		58.33		282.11		78.69		0.14		7.78		47.73		8.48		6.79		674.51		0.78	
Monthly Avg:	**27.54**	**4.51**		**0.23**		**1.89**		**59.33**		**283.41**		**84.24**		**0.33**		**7.19**		**46.86**		**8.43**		**7.30**		**654.83**		**0.77**	
Monthly Total in lbs.	**1,242,460**		**5.60**		**0.29**		**2.34**		**73.71**		**352.13**		**104.67**		**0.41**		**8.93**		**58.22**		**10.48**		**9.07**		**813.60**		**0.96**
9/5/2017	21.04	4.47		0.11		2.44		60.22		254.01		73.54		0.15		9.01		48.75		7.70		4.06		620.69		0.70	
9/19/2017	28.17	4.29		0.21		1.29		75.75		235.41		55.79		0.15		6.22		39.70		7.08		6.22		540.34		0.61	
9/26/2017	24.01	4.48		0.22		1.79		92.98		396.78		74.61				7.62		51.75		7.84		6.95		705.97			
Monthly Avg:	**24.41**	**4.41**		**0.18**		**1.84**		**76.32**		**295.40**		**67.98**		**0.15**		**7.62**		**46.74**		**7.54**		**5.74**		**622.33**		**0.65**	
Monthly Total in lbs.	**1,231,180**		**5.43**		**0.22**		**2.26**		**93.96**		**363.69**		**83.70**		**0.18**		**9.38**		**57.54**		**9.29**		**7.07**		**766.20**		**0.81**
10/3/2017	27.03	4.19		0.04		1.32		80.01		342.10		75.56		0.29		6.29		48.24		8.60		6.82		633.99		0.36	
10/17/2017	20.35	3.32		0.13		0.98		46.72		241.40		43.97		0.30		3.83		27.68		6.55		4.70		500.62		0.31	
Monthly Avg:	**23.69**	**3.76**		**0.08**		**1.15**		**63.36**		**291.75**		**59.77**		**0.29**		**5.06**		**37.96**		**7.58**		**5.76**		**567.31**		**0.34**	
Monthly Total in lbs.	**1,295,980**		**4.87**		**0.11**		**1.49**		**82.12**		**378.10**		**77.46**		**0.38**		**6.56**		**49.19**		**9.82**		**7.46**		**735.22**		**0.43**
11/7/2017	27.99	4.03		0.18		2.66		66.83		276.44		66.70		0.30		4.71		42.61		6.32		5.55		563.19		0.54	
11/21/2017	28.25	4.27		0.18		2.60		72.21		275.10		70.44		0.26		4.92		48.75		7.94		5.40		556.27		0.59	
Monthly Avg:	**28.12**	**4.15**		**0.18**		**2.63**		**69.52**		**275.77**		**68.57**		**0.28**		**4.82**		**45.68**		**7.13**		**5.47**		**559.73**		**0.57**	
Monthly Total in lbs.	**1,243,540**		**5.16**		**0.22**		**3.27**		**86.45**		**342.93**		**85.27**		**0.35**		**5.99**		**56.81**		**8.87**		**6.80**		**696.05**		**0.70**
12/5/2017	28.04	3.89		0.20		2.22		52.38		250.43		46.14		0.15		4.43		35.26		7.11		6.04		488.57		0.53	
12/19/2017	35.50	4.14		0.20		2.36		47.48		209.45		43.74		0.03		6.11		35.07		6.01		4.53		435.25		0.93	
Monthly Avg:	**31.77**	**4.01**		**0.20**		**2.29**		**49.93**		**229.94**		**44.94**		**0.09**		**5.27**		**35.16**		**6.56**		**5.29**		**461.91**		**0.73**	
Monthly Total in lbs.	**1,321,740**		**5.30**		**0.26**		**3.03**		**66.00**		**303.92**		**59.40**		**0.11**		**6.97**		**46.48**		**8.67**		**6.99**		**610.52**		**0.96**
YEARLY TOTAL LBS	**15,844,713**		**70.10**		**2.98**		**28.25**		**965.77**		**3838.73**		**1126.33**		**6.43**		**92.43**		**662.02**		**118.29**		**77.09**		**8072.99**		**38.38**

Table 20: Field's Point Sludge Analysis

Field's Point Metals Loadings from Final Sludge (lbs/yr)

Year	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdeum	Nickel	Selenium	Silver	Zinc	Cyanide
1994			202.7	2628.1	13386.0	4297.2	74.0		4626.2		1113.9	15683.7	281.0
1995			203.5	2824.5	14962.8	3700.2	55.0		4202.3		818.1	13071.5	189.3
1996	132.3	4.9	186.4	3473.3	12461.8	3389.6	47.8	205.1	3860.3		757.7	11615.1	239.8
1997			189.7	3654.7	13674.5	4122.1	53.9		3400.3		867.9	12323.5	189.6
1998	44.6		208.7	2655.5	11207.8	2879.9	36.9		2188.6		698.3	10101.5	127.1
1999	35.4		233.3	2315.0	13490.2	2516.8	28.8	164.7	1887.7	74.9	677.4	11549.1	90.1
2000	42.4	32.3	352.8	1747.7	15019.4	2544.9	12.0	84.1	1191.9	23.5	384.0	6482.0	49.6
2001	88.1	16.9	205.7	2379.0	15120.0	2611.1	26.3	204.6	2008.3	282.0	634.9	13297.6	111.0
2002	84.9	7.6	154.5	1757.0	15758.0	3156.0	27.9	190.1	1555.0	190.4	651.5	15148.0	79.6
2003	53.6	9.7	183.8	1976.2	12993.4	3008.8	28.4	98.1	1485.4	118.2	466.3	12773.9	60.8
2004	43.4	12.1	221.0	3774.2	20910.1	2608.5	23.8	103.2	2472.9	163.4	501.2	14645.1	95.9
2005	79.5	13.9	250.7	4970.6	30477.9	2867.9	29.6	190.3	3092.9	167.2	478.5	20592.3	78.6
2006	85.2	11.7	131.8	1448.6	5889.2	2616.6	16.7	193.4	1181.6	136.4	452.8	12290.6	56.9
2007	18.5	12.2	64.5	612.1	3862.6	1033.7	6.8	157.1	526.2	41.8	173.4	6833.0	67.5
2008	32.9	48.3	66.7	856.5	5426.0	1793.2	74.0	294.3	841.1	39.2	195.7	9914.5	113.8
2009	38.0	33.0	82.5	919.6	4792.0	1771.9	8.4	300.2	769.1	26.5	132.2	10442.8	121.1
2010	44.8	27.6	73.5	928.9	6111.0	1770.2	60.6	276.2	874.0	33.0	151.0	9897.7	94.6
2011	40.8	26.1	123.7	1156.0	3795.4	1613.2	7.5	261.0	790.7	43.0	115.9	9026.6	71.5
2012	33.8	28.5	78.3	995.0	3892.6	1269.2	8.1	285.5	818.7	114.5	185.3	8760.1	199.1
2013	75.1	3.6	48.0	1006.5	4202.2	1454.2	8.0	99.9	757.9	168.3	189.9	8772.9	83.2
2014	82.1	3.9	41.3	846.3	3873.3	1153.0	6.7	100.6	709.6	181.4	131.9	7457.4	59.7
2015	88.0	2.4	42.3	798.3	3683.9	991.0	6.5	98.3	652.2	154.2	105.6	8168.1	71.3
2016	67.2	2.1	22.2	713.9	3385.5	1048.0	6.8	96.7	604.5	113.7	75.6	7542.5	51.3
2017	70.1	3.0	28.3	965.8	3838.7	1126.3	6.4	92.4	662.0	118.3	77.1	8073.0	38.4

Table 21: Field's Point Sludge Summary

Bucklin Point Metals Loadings from Final Sludge (lbs/yr)

	Sludge	Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead		Mercury		Molybdenum		Nickel		Selenium		Silver		Zinc		Cyanide	
Date	**Dry Tons**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**	**ppm**	**lbs**
1/3/2017	6.8	4.36		0.40		0.98		66.34		602.74		63.74		0.75		12.71		56.59		7.22		22.55		717.65		2.30	
1/17/2017	6.6	4.57		0.37		1.02		125.76		593.49		68.06		0.74		11.73		78.43		7.04		20.75		720.67		2.10	
Monthly Ave:	**6.67**	**4.46**		**0.39**		**1.00**		**96.05**		**598.11**		**65.90**		**0.75**		**12.22**		**67.51**		**7.13**		**21.65**		**719.16**		**2.20**	
Monthly Total in lbs.	**332.380**		**1.48**		**0.13**		**0.33**		**31.93**		**198.80**		**21.90**		**0.25**		**4.06**		**22.44**		**2.37**		**7.20**		**239.03**		**0.73**
2/7/2017	5.1	3.92		0.40		1.21		116.78		603.50		72.79		0.69		13.75		78.32		6.01		21.54		739.41		2.00	
2/14/2017	6.4	3.38		0.37		1.03		97.75		566.49		65.53		0.75		11.33		66.42		5.82		18.35		662.01		2.90	
Monthly Avg:	**5.78**	**3.65**		**0.38**		**1.12**		**107.27**		**584.99**		**69.16**		**0.72**		**12.54**		**72.37**		**5.92**		**19.94**		**700.71**		**2.45**	
Monthly Total in lbs.	**395.180**		**1.44**		**0.15**		**0.44**		**42.39**		**231.18**		**27.33**		**0.28**		**4.96**		**28.60**		**2.34**		**7.88**		**276.91**		**0.97**
3/7/2017	6.2	4.34		0.36		0.87		168.88		549.80		64.95		0.45		10.62		135.25		7.28		16.10		707.54		3.90	
3/21/2017	6.2	4.94		0.46		1.00		190.52		581.17		67.08		0.30		11.27		148.13		7.84		15.58		766.89		3.30	
Monthly Avg:	**6.21**	**4.64**		**0.41**		**0.93**		**179.70**		**565.49**		**66.02**		**0.38**		**10.95**		**141.69**		**7.56**		**15.84**		**737.22**		**3.60**	
Monthly Total in lbs.	**359.147**		**1.67**		**0.15**		**0.34**		**64.54**		**203.09**		**23.71**		**0.13**		**3.93**		**50.89**		**2.72**		**5.69**		**264.77**		**1.29**
4/4/2017	6.2	4.78		0.53		1.86		220.82		597.02		71.36		0.42		11.31		179.72		7.93		14.60		744.23		2.70	
4/18/2017	5.7	4.60		0.56		1.86		221.63		585.58		79.91		0.46		9.94		192.55		7.06		12.44		685.21		3.30	
Monthly Avg:	**5.99**	**4.69**		**0.54**		**1.86**		**221.22**		**591.30**		**75.63**		**0.44**		**10.62**		**186.13**		**7.49**		**13.52**		**714.72**		**3.00**	
Monthly Total in lbs.	**282.460**		**1.32**		**0.15**		**0.52**		**62.49**		**167.02**		**21.36**		**0.12**		**3.00**		**52.58**		**2.12**		**3.82**		**201.88**		**0.85**
5/2/2017	7.6	4.62		0.47		1.20		227.16		620.04		88.44		0.92		9.79		240.19		7.04		11.75		761.55		3.99	
5/16/2017	7.3	4.67		0.53		1.19		187.28		615.88		91.99		0.95		9.64		190.19		7.34		10.40		770.82		2.45	
Monthly Avg:	**7.46**	**4.64**		**0.50**		**1.19**		**207.22**		**617.96**		**90.22**		**0.94**		**9.72**		**215.19**		**7.19**		**11.07**		**766.18**		**3.22**	
Monthly Total in lbs.	**371.260**		**1.72**		**0.19**		**0.44**		**76.93**		**229.42**		**33.49**		**0.35**		**3.61**		**79.89**		**2.67**		**4.11**		**284.45**		**1.20**
6/6/2017	7.4	4.26		0.71		1.98		179.53		639.47		82.96		0.73		10.54		201.78		8.04		9.98		734.52		7.60	
6/13/2017	6.0	4.69		0.72		2.19		195.17		717.73		98.17				11.36		201.43		8.41		10.33		837.02			
6/20/2017	6.6	4.05		0.63		2.07		153.43		619.40		79.67		0.84		9.76		152.99		6.57		9.13		724.45		6.60	
Monthly Avg:	**6.66**	**4.33**		**0.69**		**2.08**		**176.04**		**658.86**		**86.93**		**0.78**		**10.56**		**185.40**		**7.67**		**9.81**		**765.33**		**7.10**	
Monthly Total in lbs.	**370.960**		**1.61**		**0.26**		**0.77**		**65.30**		**244.41**		**32.25**		**0.29**		**3.92**		**68.78**		**2.85**		**3.64**		**283.91**		**2.63**
7/4/2017	6.8	4.34		0.68		2.02		136.44		631.69		85.49		0.93		10.40		129.07		6.32		9.48		766.45		4.83	
7/18/2017	6.8	4.68		0.07		2.15		190.81		655.80		100.74		1.21		10.92		137.28		6.56		10.43		863.21		6.34	
Monthly Ave:	**6.78**	**4.51**		**0.37**		**2.09**		**163.63**		**643.74**		**93.11**		**1.07**		**10.66**		**133.18**		**6.44**		**9.95**		**814.83**		**5.59**	
Monthly Total in lbs.	**310.520**		**1.40**		**0.12**		**0.65**		**50.81**		**199.89**		**28.91**		**0.33**		**3.31**		**41.35**		**2.00**		**3.09**		**253.02**		**1.73**
8/1/2017	7.6	4.54		0.71		2.01		168.02		625.72		103.13		0.15		10.25		107.57		6.10		10.72		884.50		0.71	
8/15/2017	5.6	4.60		0.75		2.00		250.37		628.84		96.65		0.45		10.38		143.62		5.88		12.15		910.26		0.71	
Monthly Avg:	**6.57**	**4.57**		**0.73**		**2.00**		**209.19**		**627.28**		**99.89**		**0.30**		**10.32**		**125.60**		**5.99**		**11.43**		**897.38**		**0.71**	
Monthly Total in lbs.	**346.620**		**1.58**		**0.25**		**0.69**		**72.51**		**217.43**		**34.62**		**0.10**		**3.58**		**43.53**		**2.08**		**3.96**		**311.05**		**0.25**
9/5/2017	6.8	4.77		0.58		2.99		211.47		617.84		77.54		0.27		11.73		126.47		6.20		12.73		891.51		0.56	
9/19/2017	7.1	4.82		0.66		1.32		211.52		580.87		77.81		0.38		11.40		121.00		5.70		13.81		821.54		0.53	
9/26/2017	7.1	5.91		0.63		1.06		210.31		601.14		78.13				11.40		116.34		5.91		14.78		813.77			
Monthly Avg:	**6.97**	**5.17**		**0.62**		**1.79**		**211.10**		**599.95**		**77.83**		**0.33**		**11.51**		**121.27**		**5.94**		**13.77**		**842.28**		**0.54**	
Monthly Total in lbs.	**341.060**		**1.76**		**0.21**		**0.61**		**72.00**		**204.62**		**26.54**		**0.11**		**3.93**		**41.36**		**2.02**		**4.70**		**287.27**		**0.19**
10/3/2017	6.7	5.25		0.39		1.23		179.12		579.73		69.59		0.59		10.37		101.43		6.22		14.03		775.06		0.65	
10/17/2017	6.8	5.78		0.29		1.25		149.07		594.01		68.10		0.60		10.93		96.38		5.69		15.56		809.86		0.39	
Monthly Avg:	**6.77**	**5.51**		**0.34**		**1.24**		**164.10**		**586.87**		**68.85**		**0.59**		**10.65**		**98.90**		**5.96**		**14.80**		**792.46**		**0.52**	
Monthly Total in lbs.	**381.020**		**2.10**		**0.13**		**0.47**		**62.52**		**223.61**		**26.23**		**0.23**		**4.06**		**37.68**		**2.27**		**5.64**		**301.94**		**0.20**
11/7/2017	6.7	4.42		0.69		2.77		136.99		537.10		78.76		0.29		10.07		93.60		4.31		17.83		744.97		0.65	
11/22/2017	12.9	4.96		0.77		2.85		118.77		588.44		68.81		0.26		10.87		83.71		5.73		17.92		744.83		0.54	
Monthly Avg:	**9.81**	**4.69**		**0.73**		**2.81**		**127.88**		**562.77**		**73.79**		**0.28**		**10.47**		**88.65**		**5.02**		**17.87**		**744.90**		**0.60**	
Monthly Total in lbs.	**370.460**		**1.74**		**0.27**		**1.04**		**47.37**		**208.49**		**27.33**		**0.10**		**3.88**		**32.84**		**1.86**		**6.62**		**275.96**		**0.22**
12/5/2017	6.8	6.02		0.69		3.00		101.42		631.12		75.61		0.19		11.76		73.30		6.11		18.44		791.32		0.36	
12/19/2017	7.5	4.69		0.59		2.55		101.86		546.99		69.09		0.03		9.62		72.62		5.36		15.70		683.40		1.00	
Monthly Avg:	**7.11**	**5.35**		**0.64**		**2.77**		**101.64**		**589.06**		**72.35**		**0.11**		**10.69**		**72.96**		**5.73**		**17.07**		**737.36**		**0.68**	
Monthly Total in lbs.	**286.960**		**1.54**		**0.18**		**0.80**		**29.17**		**169.04**		**20.76**		**0.03**		**3.07**		**20.94**		**1.65**		**4.90**		**211.59**		**0.20**
YEARLY TOTAL LBS	**4,148.027**		**19.37**		**2.19**		**7.11**		**677.96**		**2496.99**		**324.46**		**2.33**		**45.29**		**520.88**		**26.93**		**61.24**		**3191.78**		**10.45**

Table 22: Bucklin Point Sludge Analysis

Bucklin Point Metals Loading from Final Sludge (lbs/yr)

Year	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdeum	Nickel	Selenium	Silver	Zinc	Cyanide
1994	16.2		35.4	655.5	3839.7	723.4	84.2		627.6		171.3	4234.5	64.3
1995			35.8	681.0	4306.7	551.8	55.9		539.8		126.2	3495.8	57.6
1996													
1997	16.0		52.9	1177.6	4589.3	1183.6	16.0		1074.4		339.8	4349.4	58.9
1998	12.2		44.8	1263.0	4743.4	1128.3	12.2		977.8		463.4	5838.9	27.7
1999	11.1		44.4	993.6	3906.8	930.3	11.1		716.9		473.0	5945.8	24.3
2000	38.3		60.8	1304.1	5164.7	1073.2	16.8	171.8	1345.4		467.7	7104.0	24.8
2001	57.8	13.6	38.6	1003.3	4132.9	900.1	12.0	167.4	985.3	44.4	371.2	6336.5	33.6
2002	43.7	6.1	27.1	755.0	4565.0	1034.3	18.0	148.9	840.7	37.6	385.8	7226.0	13.3
2003	30.2	6.6	29.2	2669.3	3439.4	772.3	10.0	69.3	868.1	32.1	273.0	5973.1	8.9
2004	27.6	7.3	45.5	851.5	3733.7	739.0	11.6	62.0	794.7	36.1	225.0	6759.2	7.6
2005	18.8	5.9	30.9	969.5	4468.6	682.1	8.9	77.4	781.5	32.5	153.0	5469.7	10.3
2006	25.5	2.0	24.4	2398.8	3657.0	713.0	6.8	37.1	1089.2	33.9	165.4	4953.9	12.0
2007	11.2	5.2	25.7	4143.3	4676.1	633.5	9.3	70.7	1389.7	14.4	177.5	5635.0	22.8
2008	8.9	14.1	23.3	5594.6	4209.5	585.4	36.0	84.7	1568.6	17.4	116.8	5519.0	27.4
2009	18.1	8.2	20.6	1054.3	3132.4	516.6	4.6	79.6	438.2	14.6	62.5	4895.0	19.3
2010	20.7	7.0	17.5	619.0	3075.2	445.7	14.4	74.3	318.1	14.6	58.1	3949.5	17.1
2011	19.3	9.0	13.9	499.9	2159.5	474.2	4.9	90.0	294.1	15.1	66.4	3583.1	14.5
2012	18.2	8.4	13.5	370.6	2502.2	370.7	4.3	84.3	269.2	16.0	56.8	3388.8	24.9
2013	21.1	1.9	11.7	349.5	2493.6	381.4	4.0	45.4	271.9	21.2	54.1	3264.5	19.6
2014	26.6	2.5	11.1	432.7	3268.3	373.4	2.9	51.5	335.1	30.3	57.8	3499.3	19.1
2015	25.4	2.3	7.4	422.7	3125.3	367.9	3.3	49.2	346.2	31.9	54.6	3619.9	21.8
2016	24.1	2.2	5.8	397.4	2872.2	365.9	3.9	54.1	347.5	28.4	80.7	3620.5	17.9
2017	19.4	2.2	7.1	678.0	2497.0	324.5	2.3	45.3	520.9	26.9	61.2	3191.8	10.5

Table 23: Bucklin Point Sludge Summary

EPA VOC Data
Field's Point 2017

Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
1/10/2017	1,1,1-Trichloroethane	<1	ppb
1/10/2017	1,1,2,2-Tetrachlorethane	<1	ppb
1/10/2017	1,1,2-Trichloroethane	<1	ppb
1/10/2017	1,1-Dichloroethane	<1	ppb
1/10/2017	1,1-Dichloroethene	<1	ppb
1/10/2017	1,2-dichlorobenzene	<1	ppb
1/10/2017	1,2-Dichloroethane	<1	ppb
1/10/2017	1,2-Dichloropropane	<1	ppb
1/10/2017	1,3-dichlorobenzene	<1	ppb
1/10/2017	1,4-dichlorobenzene	<1	ppb
1/10/2017	2-Chloroethylvinylether	<2	ppb
1/10/2017	Benzene	<1	ppb
1/10/2017	Bromodichloromethane	<1	ppb
1/10/2017	Bromoform	<1	ppb
1/10/2017	Bromomethane	<10	ppb
1/10/2017	Carbon Tetrachloride	<1	ppb
1/10/2017	Chlorobenzene	<1	ppb
1/10/2017	Chloroethane	<10	ppb
1/10/2017	Chloroform	4.3	ppb
1/10/2017	Chloromethane	<10	ppb
1/10/2017	cis-1,3-Dichloropropene	<1	ppb
1/10/2017	Dibromochloromethane	<1	ppb
1/10/2017	Ethylbenzene	<1	ppb
1/10/2017	Methylene Chloride	5.1	ppb
1/10/2017	o- xylene	<1	ppb
1/10/2017	p&m xylene	<1	ppb
1/10/2017	Tetrachlorethene	1.5	ppb
1/10/2017	Toluene	1.3	ppb
1/10/2017	Trans-1,2-Dichloroethene	<1	ppb
1/10/2017	Trans-1,3-Dichloropropene	<1	ppb
1/10/2017	Trichlorethene	1.0	ppb
1/10/2017	Trichlorofluoromethane	<1	ppb
1/10/2017	Vinyl Chloride	<1	ppb
2/7/2017	1,1,1-Trichloroethane	<1	ppb
2/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
2/7/2017	1,1,2-Trichloroethane	<1	ppb
2/7/2017	1,1-Dichloroethane	<1	ppb
2/7/2017	1,1-Dichloroethene	<1	ppb
2/7/2017	1,2-dichlorobenzene	<1	ppb
2/7/2017	1,2-Dichloroethane	<1	ppb
2/7/2017	1,2-Dichloropropane	<1	ppb
2/7/2017	1,3-dichlorobenzene	<1	ppb
2/7/2017	1,4-dichlorobenzene	<1	ppb
2/7/2017	2-Chloroethylvinylether	<2	ppb
2/7/2017	Benzene	<1	ppb
2/7/2017	Bromodichloromethane	<1	ppb
2/7/2017	Bromoform	<1	ppb
2/7/2017	Bromomethane	<10	ppb
2/7/2017	Carbon Tetrachloride	<1	ppb
2/7/2017	Chlorobenzene	<1	ppb
2/7/2017	Chloroethane	<10	ppb
2/7/2017	Chloroform	3.3	ppb
2/7/2017	Chloromethane	<10	ppb
2/7/2017	cis-1,3-Dichloropropene	<1	ppb
2/7/2017	Dibromochloromethane	<1	ppb
2/7/2017	Ethylbenzene	<1	ppb
2/7/2017	Methylene Chloride	5.9	ppb
2/7/2017	o- xylene	<1	ppb
2/7/2017	p&m xylene	<1	ppb
2/7/2017	Tetrachlorethene	1.3	ppb
2/7/2017	Toluene	1.8	ppb
2/7/2017	Trans-1,2-Dichloroethene	<1	ppb
2/7/2017	Trans-1,3-Dichloropropene	<1	ppb
2/7/2017	Trichlorethene	1.2	ppb
2/7/2017	Trichlorofluoromethane	<1	ppb
2/7/2017	Vinyl Chloride	<1	ppb
3/7/2017	1,1,1-Trichloroethane	<1	ppb
3/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
3/7/2017	1,1,2-Trichloroethane	<1	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
1/11/2017	1,1,1-Trichloroethane	<1	ppb
1/11/2017	1,1,2,2-Tetrachlorethane	<1	ppb
1/11/2017	1,1,2-Trichloroethane	<1	ppb
1/11/2017	1,1-Dichloroethane	<1	ppb
1/11/2017	1,1-Dichloroethene	<1	ppb
1/11/2017	1,2-dichlorobenzene	<1	ppb
1/11/2017	1,2-Dichloroethane	<1	ppb
1/11/2017	1,2-Dichloropropane	<1	ppb
1/11/2017	1,3-dichlorobenzene	<1	ppb
1/11/2017	1,4-dichlorobenzene	<1	ppb
1/11/2017	2-Chloroethylvinylether	<2	ppb
1/11/2017	Benzene	<1	ppb
1/11/2017	Bromodichloromethane	<1	ppb
1/11/2017	Bromoform	<1	ppb
1/11/2017	Bromomethane	<10	ppb
1/11/2017	Carbon Tetrachloride	<1	ppb
1/11/2017	Chlorobenzene	<1	ppb
1/11/2017	Chloroethane	<10	ppb
1/11/2017	Chloroform	1.1	ppb
1/11/2017	Chloromethane	<10	ppb
1/11/2017	cis-1,3-Dichloropropene	<1	ppb
1/11/2017	Dibromochloromethane	<1	ppb
1/11/2017	Ethylbenzene	<1	ppb
1/11/2017	Methylene Chloride	<5	ppb
1/11/2017	o- xylene	<1	ppb
1/11/2017	p&m xylene	<1	ppb
1/11/2017	Tetrachlorethene	15	ppb
1/11/2017	Toluene	<1	ppb
1/11/2017	Trans-1,2-Dichloroethene	<1	ppb
1/11/2017	Trans-1,3-Dichloropropene	<1	ppb
1/11/2017	Trichlorethene	<1	ppb
1/11/2017	Trichlorofluoromethane	<1	ppb
1/11/2017	Vinyl Chloride	<1	ppb
2/8/2017	1,1,1-Trichloroethane	<1	ppb
2/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
2/8/2017	1,1,2-Trichloroethane	<1	ppb
2/8/2017	1,1-Dichloroethane	<1	ppb
2/8/2017	1,1-Dichloroethene	<1	ppb
2/8/2017	1,2-dichlorobenzene	<1	ppb
2/8/2017	1,2-Dichloroethane	<1	ppb
2/8/2017	1,2-Dichloropropane	<1	ppb
2/8/2017	1,3-dichlorobenzene	<1	ppb
2/8/2017	1,4-dichlorobenzene	<1	ppb
2/8/2017	2-Chloroethylvinylether	<2	ppb
2/8/2017	Benzene	<1	ppb
2/8/2017	Bromodichloromethane	<1	ppb
2/8/2017	Bromoform	<1	ppb
2/8/2017	Bromomethane	<10	ppb
2/8/2017	Carbon Tetrachloride	<1	ppb
2/8/2017	Chlorobenzene	<1	ppb
2/8/2017	Chloroethane	<10	ppb
2/8/2017	Chloroform	1.3	ppb
2/8/2017	Chloromethane	<10	ppb
2/8/2017	cis-1,3-Dichloropropene	<1	ppb
2/8/2017	Dibromochloromethane	<1	ppb
2/8/2017	Ethylbenzene	<1	ppb
2/8/2017	Methylene Chloride	<5	ppb
2/8/2017	o- xylene	<1	ppb
2/8/2017	p&m xylene	<1	ppb
2/8/2017	Tetrachlorethene	<1	ppb
2/8/2017	Toluene	<1	ppb
2/8/2017	Trans-1,2-Dichloroethene	<1	ppb
2/8/2017	Trans-1,3-Dichloropropene	<1	ppb
2/8/2017	Trichlorethene	<1	ppb
2/8/2017	Trichlorofluoromethane	<1	ppb
2/8/2017	Vinyl Chloride	<1	ppb
3/8/2017	1,1,1-Trichloroethane	<1	ppb
3/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
3/8/2017	1,1,2-Trichloroethane	<1	ppb

Table 24: EPA VOC Data
Field's Point

EPA VOC Data
Field's Point 2017

Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
3/7/2017	1,1-Dichloroethane	<1	ppb
3/7/2017	1,1-Dichloroethene	<1	ppb
3/7/2017	1,2-dichlorobenzene	<1	ppb
3/7/2017	1,2-Dichloroethane	<1	ppb
3/7/2017	1,2-Dichloropropane	<1	ppb
3/7/2017	1,3-dichlorobenzene	<1	ppb
3/7/2017	1,4-dichlorobenzene	<1	ppb
3/7/2017	2-Chloroethylvinylether	<2	ppb
3/7/2017	Benzene	<1	ppb
3/7/2017	Bromodichloromethane	<1	ppb
3/7/2017	Bromoform	<1	ppb
3/7/2017	Bromomethane	<10	ppb
3/7/2017	Carbon Tetrachloride	<1	ppb
3/7/2017	Chlorobenzene	<1	ppb
3/7/2017	Chloroethane	<10	ppb
3/7/2017	Chloroform	4.1	ppb
3/7/2017	Chloromethane	<10	ppb
3/7/2017	cis-1,3-Dichloropropene	<1	ppb
3/7/2017	Dibromochloromethane	<1	ppb
3/7/2017	Ethylbenzene	<1	ppb
3/7/2017	Methylene Chloride	<5	ppb
3/7/2017	o- xylene	<1	ppb
3/7/2017	p&m xylene	<1	ppb
3/7/2017	Tetrachlorethene	1.4	ppb
3/7/2017	Toluene	1.5	ppb
3/7/2017	Trans-1,2-Dichloroethene	<1	ppb
3/7/2017	Trans-1,3-Dichloropropene	<1	ppb
3/7/2017	Trichlorethene	<1	ppb
3/7/2017	Trichlorofluoromethane	<1	ppb
3/7/2017	Vinyl Chloride	<1	ppb
4/4/2017	1,1,1-Trichloroethane	<1	ppb
4/4/2017	1,1,2,2-Tetrachlorethane	<1	ppb
4/4/2017	1,1,2-Trichloroethane	<1	ppb
4/4/2017	1,1-Dichloroethane	<1	ppb
4/4/2017	1,1-Dichloroethene	<1	ppb
4/4/2017	1,2-dichlorobenzene	<1	ppb
4/4/2017	1,2-Dichloroethane	<1	ppb
4/4/2017	1,2-Dichloropropane	<1	ppb
4/4/2017	1,3-dichlorobenzene	<1	ppb
4/4/2017	1,4-dichlorobenzene	<1	ppb
4/4/2017	2-Chloroethylvinylether	<2	ppb
4/4/2017	Benzene	<1	ppb
4/4/2017	Bromodichloromethane	<1	ppb
4/4/2017	Bromoform	<1	ppb
4/4/2017	Bromomethane	<10	ppb
4/4/2017	Carbon Tetrachloride	<1	ppb
4/4/2017	Chlorobenzene	<1	ppb
4/4/2017	Chloroethane	<10	ppb
4/4/2017	Chloroform	2.6	ppb
4/4/2017	Chloromethane	<10	ppb
4/4/2017	cis-1,3-Dichloropropene	<1	ppb
4/4/2017	Dibromochloromethane	<1	ppb
4/4/2017	Ethylbenzene	<1	ppb
4/4/2017	Methylene Chloride	<5	ppb
4/4/2017	o- xylene	<1	ppb
4/4/2017	p&m xylene	<1	ppb
4/4/2017	Tetrachlorethene	1.4	ppb
4/4/2017	Toluene	1.1	ppb
4/4/2017	Trans-1,2-Dichloroethene	<1	ppb
4/4/2017	Trans-1,3-Dichloropropene	<1	ppb
4/4/2017	Trichlorethene	<1	ppb
4/4/2017	Trichlorofluoromethane	<1	ppb
4/4/2017	Vinyl Chloride	<1	ppb
5/9/2017	1,1,1-Trichloroethane	<1	ppb
5/9/2017	1,1,2,2-Tetrachlorethane	<1	ppb
5/9/2017	1,1,2-Trichloroethane	<1	ppb
5/9/2017	1,1-Dichloroethane	<1	ppb
5/9/2017	1,1-Dichloroethene	<1	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
3/8/2017	1,1-Dichloroethane	<1	ppb
3/8/2017	1,1-Dichloroethene	<1	ppb
3/8/2017	1,2-dichlorobenzene	<1	ppb
3/8/2017	1,2-Dichloroethane	<1	ppb
3/8/2017	1,2-Dichloropropane	<1	ppb
3/8/2017	1,3-dichlorobenzene	<1	ppb
3/8/2017	1,4-dichlorobenzene	<1	ppb
3/8/2017	2-Chloroethylvinylether	<2	ppb
3/8/2017	Benzene	<1	ppb
3/8/2017	Bromodichloromethane	<1	ppb
3/8/2017	Bromoform	<1	ppb
3/8/2017	Bromomethane	<10	ppb
3/8/2017	Carbon Tetrachloride	<1	ppb
3/8/2017	Chlorobenzene	<1	ppb
3/8/2017	Chloroethane	<10	ppb
3/8/2017	Chloroform	1.3	ppb
3/8/2017	Chloromethane	<10	ppb
3/8/2017	cis-1,3-Dichloropropene	<1	ppb
3/8/2017	Dibromochloromethane	<1	ppb
3/8/2017	Ethylbenzene	<1	ppb
3/8/2017	Methylene Chloride	<5	ppb
3/8/2017	o- xylene	<1	ppb
3/8/2017	p&m xylene	<1	ppb
3/8/2017	Tetrachlorethene	<1	ppb
3/8/2017	Toluene	<1	ppb
3/8/2017	Trans-1,2-Dichloroethene	<1	ppb
3/8/2017	Trans-1,3-Dichloropropene	<1	ppb
3/8/2017	Trichlorethene	<1	ppb
3/8/2017	Trichlorofluoromethane	<1	ppb
3/8/2017	Vinyl Chloride	<1	ppb
4/5/2017	1,1,1-Trichloroethane	<1	ppb
4/5/2017	1,1,2,2-Tetrachlorethane	<1	ppb
4/5/2017	1,1,2-Trichloroethane	<1	ppb
4/5/2017	1,1-Dichloroethane	<1	ppb
4/5/2017	1,1-Dichloroethene	<1	ppb
4/5/2017	1,2-dichlorobenzene	<1	ppb
4/5/2017	1,2-Dichloroethane	<1	ppb
4/5/2017	1,2-Dichloropropane	<1	ppb
4/5/2017	1,3-dichlorobenzene	<1	ppb
4/5/2017	1,4-dichlorobenzene	<1	ppb
4/5/2017	2-Chloroethylvinylether	<2	ppb
4/5/2017	Benzene	<1	ppb
4/5/2017	Bromodichloromethane	<1	ppb
4/5/2017	Bromoform	<1	ppb
4/5/2017	Bromomethane	<10	ppb
4/5/2017	Carbon Tetrachloride	<1	ppb
4/5/2017	Chlorobenzene	<1	ppb
4/5/2017	Chloroethane	<10	ppb
4/5/2017	Chloroform	1.6	ppb
4/5/2017	Chloromethane	<10	ppb
4/5/2017	cis-1,3-Dichloropropene	<1	ppb
4/5/2017	Dibromochloromethane	<1	ppb
4/5/2017	Ethylbenzene	<1	ppb
4/5/2017	Methylene Chloride	<5	ppb
4/5/2017	o- xylene	<1	ppb
4/5/2017	p&m xylene	<1	ppb
4/5/2017	Tetrachlorethene	<1	ppb
4/5/2017	Toluene	<1	ppb
4/5/2017	Trans-1,2-Dichloroethene	<1	ppb
4/5/2017	Trans-1,3-Dichloropropene	<1	ppb
4/5/2017	Trichlorethene	<1	ppb
4/5/2017	Trichlorofluoromethane	<1	ppb
4/5/2017	Vinyl Chloride	<1	ppb
5/10/2017	1,1,1-Trichloroethane	<1	ppb
5/10/2017	1,1,2,2-Tetrachlorethane	<1	ppb
5/10/2017	1,1,2-Trichloroethane	<1	ppb
5/10/2017	1,1-Dichloroethane	<1	ppb
5/10/2017	1,1-Dichloroethene	<1	ppb

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Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
5/9/2017	1,2-dichlorobenzene	<1	ppb
5/9/2017	1,2-Dichloroethane	<1	ppb
5/9/2017	1,2-Dichloropropane	<1	ppb
5/9/2017	1,3-dichlorobenzene	<1	ppb
5/9/2017	1,4-dichlorobenzene	<1	ppb
5/9/2017	2-Chloroethylvinylether	<2	ppb
5/9/2017	Benzene	<1	ppb
5/9/2017	Bromodichloromethane	<1	ppb
5/9/2017	Bromoform	<1	ppb
5/9/2017	Bromomethane	<10	ppb
5/9/2017	Carbon Tetrachloride	<1	ppb
5/9/2017	Chlorobenzene	<1	ppb
5/9/2017	Chloroethane	<10	ppb
5/9/2017	Chloroform	3.7	ppb
5/9/2017	Chloromethane	<10	ppb
5/9/2017	cis-1,3-Dichloropropene	<1	ppb
5/9/2017	Dibromochloromethane	<1	ppb
5/9/2017	Ethylbenzene	<1	ppb
5/9/2017	Methylene Chloride	<5	ppb
5/9/2017	o- xylene	<1	ppb
5/9/2017	p&m xylene	<1	ppb
5/9/2017	Tetrachlorethene	1.5	ppb
5/9/2017	Toluene	7.7	ppb
5/9/2017	Trans-1,2-Dichloroethene	<1	ppb
5/9/2017	Trans-1,3-Dichloropropene	<1	ppb
5/9/2017	Trichlorethene	<1	ppb
5/9/2017	Trichlorofluoromethane	<1	ppb
5/9/2017	Vinyl Chloride	<1	ppb
6/6/2017	1,1,1-Trichloroethane	<1	ppb
6/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
6/6/2017	1,1,2-Trichloroethane	<1	ppb
6/6/2017	1,1-Dichloroethane	<1	ppb
6/6/2017	1,1-Dichloroethene	<1	ppb
6/6/2017	1,2-dichlorobenzene	<1	ppb
6/6/2017	1,2-Dichloroethane	<1	ppb
6/6/2017	1,2-Dichloropropane	<1	ppb
6/6/2017	1,3-dichlorobenzene	<1	ppb
6/6/2017	1,4-dichlorobenzene	<1	ppb
6/6/2017	2-Chloroethylvinylether	<2	ppb
6/6/2017	Benzene	<1	ppb
6/6/2017	Bromodichloromethane	<1	ppb
6/6/2017	Bromoform	<1	ppb
6/6/2017	Bromomethane	<10	ppb
6/6/2017	Carbon Tetrachloride	<1	ppb
6/6/2017	Chlorobenzene	<1	ppb
6/6/2017	Chloroethane	<10	ppb
6/6/2017	Chloroform	4.4	ppb
6/6/2017	Chloromethane	<10	ppb
6/6/2017	cis-1,3-Dichloropropene	<1	ppb
6/6/2017	Dibromochloromethane	<1	ppb
6/6/2017	Ethylbenzene	<1	ppb
6/6/2017	Methylene Chloride	15	ppb
6/6/2017	o- xylene	<1	ppb
6/6/2017	p&m xylene	<1	ppb
6/6/2017	Tetrachlorethene	4.0	ppb
6/6/2017	Toluene	2.1	ppb
6/6/2017	Trans-1,2-Dichloroethene	<1	ppb
6/6/2017	Trans-1,3-Dichloropropene	<1	ppb
6/6/2017	Trichlorethene	1.1	ppb
6/6/2017	Trichlorofluoromethane	<1	ppb
6/6/2017	Vinyl Chloride	<1	ppb
7/11/2017	1,1,1-Trichloroethane	<1	ppb
7/11/2017	1,1,2,2-Tetrachlorethane	<1	ppb
7/11/2017	1,1,2-Trichloroethane	<1	ppb
7/11/2017	1,1-Dichloroethane	<1	ppb
7/11/2017	1,1-Dichloroethene	<1	ppb
7/11/2017	1,2-dichlorobenzene	<1	ppb
7/11/2017	1,2-Dichloroethane	<1	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
5/10/2017	1,2-dichlorobenzene	<1	ppb
5/10/2017	1,2-Dichloroethane	<1	ppb
5/10/2017	1,2-Dichloropropane	<1	ppb
5/10/2017	1,3-dichlorobenzene	<1	ppb
5/10/2017	1,4-dichlorobenzene	<1	ppb
5/10/2017	2-Chloroethylvinylether	<2	ppb
5/10/2017	Benzene	<1	ppb
5/10/2017	Bromodichloromethane	5.7	ppb
5/10/2017	Bromoform	1.1	ppb
5/10/2017	Bromomethane	<10	ppb
5/10/2017	Carbon Tetrachloride	<1	ppb
5/10/2017	Chlorobenzene	<1	ppb
5/10/2017	Chloroethane	<10	ppb
5/10/2017	Chloroform	3.5	ppb
5/10/2017	Chloromethane	<10	ppb
5/10/2017	cis-1,3-Dichloropropene	<1	ppb
5/10/2017	Dibromochloromethane	4.6	ppb
5/10/2017	Ethylbenzene	<1	ppb
5/10/2017	Methylene Chloride	<5	ppb
5/10/2017	o- xylene	<1	ppb
5/10/2017	p&m xylene	<1	ppb
5/10/2017	Tetrachlorethene	<1	ppb
5/10/2017	Toluene	<1	ppb
5/10/2017	Trans-1,2-Dichloroethene	<1	ppb
5/10/2017	Trans-1,3-Dichloropropene	<1	ppb
5/10/2017	Trichlorethene	<1	ppb
5/10/2017	Trichlorofluoromethane	<1	ppb
5/10/2017	Vinyl Chloride	<1	ppb
6/7/2017	1,1,1-Trichloroethane	<1	ppb
6/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
6/7/2017	1,1,2-Trichloroethane	<1	ppb
6/7/2017	1,1-Dichloroethane	<1	ppb
6/7/2017	1,1-Dichloroethene	<1	ppb
6/7/2017	1,2-dichlorobenzene	<1	ppb
6/7/2017	1,2-Dichloroethane	<1	ppb
6/7/2017	1,2-Dichloropropane	<1	ppb
6/7/2017	1,3-dichlorobenzene	<1	ppb
6/7/2017	1,4-dichlorobenzene	<1	ppb
6/7/2017	2-Chloroethylvinylether	<2	ppb
6/7/2017	Benzene	<1	ppb
6/7/2017	Bromodichloromethane	5.2	ppb
6/7/2017	Bromoform	<1	ppb
6/7/2017	Bromomethane	<10	ppb
6/7/2017	Carbon Tetrachloride	<1	ppb
6/7/2017	Chlorobenzene	<1	ppb
6/7/2017	Chloroethane	<10	ppb
6/7/2017	Chloroform	3.3	ppb
6/7/2017	Chloromethane	<10	ppb
6/7/2017	cis-1,3-Dichloropropene	<1	ppb
6/7/2017	Dibromochloromethane	4.4	ppb
6/7/2017	Ethylbenzene	<1	ppb
6/7/2017	Methylene Chloride	<5	ppb
6/7/2017	o- xylene	<1	ppb
6/7/2017	p&m xylene	<1	ppb
6/7/2017	Tetrachlorethene	<1	ppb
6/7/2017	Toluene	<1	ppb
6/7/2017	Trans-1,2-Dichloroethene	<1	ppb
6/7/2017	Trans-1,3-Dichloropropene	<1	ppb
6/7/2017	Trichlorethene	<1	ppb
6/7/2017	Trichlorofluoromethane	<1	ppb
6/7/2017	Vinyl Chloride	<1	ppb
7/12/2017	1,1,1-Trichloroethane	<1	ppb
7/12/2017	1,1,2,2-Tetrachlorethane	<1	ppb
7/12/2017	1,1,2-Trichloroethane	<1	ppb
7/12/2017	1,1-Dichloroethane	<1	ppb
7/12/2017	1,1-Dichloroethene	<1	ppb
7/12/2017	1,2-dichlorobenzene	<1	ppb
7/12/2017	1,2-Dichloroethane	<1	ppb

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Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
7/11/2017	1,2-Dichloropropane	<1	ppb
7/11/2017	1,3-dichlorobenzene	<1	ppb
7/11/2017	1,4-dichlorobenzene	<1	ppb
7/11/2017	2-Chloroethylvinylether	<2	ppb
7/11/2017	Benzene	<1	ppb
7/11/2017	Bromodichloromethane	<1	ppb
7/11/2017	Bromoform	<1	ppb
7/11/2017	Bromomethane	<10	ppb
7/11/2017	Carbon Tetrachloride	<1	ppb
7/11/2017	Chlorobenzene	<1	ppb
7/11/2017	Chloroethane	<10	ppb
7/11/2017	Chloroform	3.2	ppb
7/11/2017	Chloromethane	<10	ppb
7/11/2017	cis-1,3-Dichloropropene	<1	ppb
7/11/2017	Dibromochloromethane	<1	ppb
7/11/2017	Ethylbenzene	<1	ppb
7/11/2017	Methylene Chloride	11	ppb
7/11/2017	o- xylene	<1	ppb
7/11/2017	p&m xylene	<1	ppb
7/11/2017	Tetrachlorethene	1.1	ppb
7/11/2017	Toluene	4.1	ppb
7/11/2017	Trans-1,2-Dichloroethene	<1	ppb
7/11/2017	Trans-1,3-Dichloropropene	<1	ppb
7/11/2017	Trichlorethene	<1	ppb
7/11/2017	Trichlorofluoromethane	<1	ppb
7/11/2017	Vinyl Chloride	<1	ppb
8/8/2017	1,1,1-Trichloroethane	<1	ppb
8/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
8/8/2017	1,1,2-Trichloroethane	<1	ppb
8/8/2017	1,1-Dichloroethane	<1	ppb
8/8/2017	1,1-Dichloroethene	<1	ppb
8/8/2017	1,2-dichlorobenzene	<1	ppb
8/8/2017	1,2-Dichloroethane	<1	ppb
8/8/2017	1,2-Dichloropropane	<1	ppb
8/8/2017	1,3-dichlorobenzene	<1	ppb
8/8/2017	1,4-dichlorobenzene	<1	ppb
8/8/2017	2-Chloroethylvinylether	<2	ppb
8/8/2017	Benzene	<1	ppb
8/8/2017	Bromodichloromethane	<1	ppb
8/8/2017	Bromoform	<1	ppb
8/8/2017	Bromomethane	<10	ppb
8/8/2017	Carbon Tetrachloride	<1	ppb
8/8/2017	Chlorobenzene	<1	ppb
8/8/2017	Chloroethane	<10	ppb
8/8/2017	Chloroform	4.4	ppb
8/8/2017	Chloromethane	<10	ppb
8/8/2017	cis-1,3-Dichloropropene	<1	ppb
8/8/2017	Dibromochloromethane	<1	ppb
8/8/2017	Ethylbenzene	<1	ppb
8/8/2017	Methylene Chloride	<5	ppb
8/8/2017	o- xylene	<1	ppb
8/8/2017	p&m xylene	1.4	ppb
8/8/2017	Tetrachlorethene	1.7	ppb
8/8/2017	Toluene	1.6	ppb
8/8/2017	Trans-1,2-Dichloroethene	<1	ppb
8/8/2017	Trans-1,3-Dichloropropene	<1	ppb
8/8/2017	Trichlorethene	<1	ppb
8/8/2017	Trichlorofluoromethane	<1	ppb
8/8/2017	Vinyl Chloride	<1	ppb
9/12/2017	1,1,1-Trichloroethane	<1	ppb
9/12/2017	1,1,2,2-Tetrachlorethane	<1	ppb
9/12/2017	1,1,2-Trichloroethane	<1	ppb
9/12/2017	1,1-Dichloroethane	<1	ppb
9/12/2017	1,1-Dichloroethene	<1	ppb
9/12/2017	1,2-dichlorobenzene	<1	ppb
9/12/2017	1,2-Dichloroethane	<1	ppb
9/12/2017	1,2-Dichloropropane	<1	ppb
9/12/2017	1,3-dichlorobenzene	<1	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
7/12/2017	1,2-Dichloropropane	<1	ppb
7/12/2017	1,3-dichlorobenzene	<1	ppb
7/12/2017	1,4-dichlorobenzene	<1	ppb
7/12/2017	2-Chloroethylvinylether	<2	ppb
7/12/2017	Benzene	<1	ppb
7/12/2017	Bromodichloromethane	8.0	ppb
7/12/2017	Bromoform	3.1	ppb
7/12/2017	Bromomethane	<10	ppb
7/12/2017	Carbon Tetrachloride	<1	ppb
7/12/2017	Chlorobenzene	<1	ppb
7/12/2017	Chloroethane	<10	ppb
7/12/2017	Chloroform	3.8	ppb
7/12/2017	Chloromethane	<10	ppb
7/12/2017	cis-1,3-Dichloropropene	<1	ppb
7/12/2017	Dibromochloromethane	9.9	ppb
7/12/2017	Ethylbenzene	<1	ppb
7/12/2017	Methylene Chloride	<5	ppb
7/12/2017	o- xylene	<1	ppb
7/12/2017	p&m xylene	<1	ppb
7/12/2017	Tetrachlorethene	<1	ppb
7/12/2017	Toluene	<1	ppb
7/12/2017	Trans-1,2-Dichloroethene	<1	ppb
7/12/2017	Trans-1,3-Dichloropropene	<1	ppb
7/12/2017	Trichlorethene	<1	ppb
7/12/2017	Trichlorofluoromethane	<1	ppb
7/12/2017	Vinyl Chloride	<1	ppb
8/9/2017	1,1,1-Trichloroethane	<1	ppb
8/9/2017	1,1,2,2-Tetrachlorethane	<1	ppb
8/9/2017	1,1,2-Trichloroethane	<1	ppb
8/9/2017	1,1-Dichloroethane	<1	ppb
8/9/2017	1,1-Dichloroethene	<1	ppb
8/9/2017	1,2-dichlorobenzene	<1	ppb
8/9/2017	1,2-Dichloroethane	<1	ppb
8/9/2017	1,2-Dichloropropane	<1	ppb
8/9/2017	1,3-dichlorobenzene	<1	ppb
8/9/2017	1,4-dichlorobenzene	<1	ppb
8/9/2017	2-Chloroethylvinylether	<2	ppb
8/9/2017	Benzene	<1	ppb
8/9/2017	Bromodichloromethane	11	ppb
8/9/2017	Bromoform	5.8	ppb
8/9/2017	Bromomethane	<10	ppb
8/9/2017	Carbon Tetrachloride	<1	ppb
8/9/2017	Chlorobenzene	<1	ppb
8/9/2017	Chloroethane	<10	ppb
8/9/2017	Chloroform	4.7	ppb
8/9/2017	Chloromethane	<10	ppb
8/9/2017	cis-1,3-Dichloropropene	<1	ppb
8/9/2017	Dibromochloromethane	14	ppb
8/9/2017	Ethylbenzene	<1	ppb
8/9/2017	Methylene Chloride	<5	ppb
8/9/2017	o- xylene	<1	ppb
8/9/2017	p&m xylene	<1	ppb
8/9/2017	Tetrachlorethene	<1	ppb
8/9/2017	Toluene	<1	ppb
8/9/2017	Trans-1,2-Dichloroethene	<1	ppb
8/9/2017	Trans-1,3-Dichloropropene	<1	ppb
8/9/2017	Trichlorethene	<1	ppb
8/9/2017	Trichlorofluoromethane	<1	ppb
8/9/2017	Vinyl Chloride	<1	ppb
9/13/2017	1,1,1-Trichloroethane	<1	ppb
9/13/2017	1,1,2,2-Tetrachlorethane	<1	ppb
9/13/2017	1,1,2-Trichloroethane	<1	ppb
9/13/2017	1,1-Dichloroethane	<1	ppb
9/13/2017	1,1-Dichloroethene	<1	ppb
9/13/2017	1,2-dichlorobenzene	<1	ppb
9/13/2017	1,2-Dichloroethane	<1	ppb
9/13/2017	1,2-Dichloropropane	<1	ppb
9/13/2017	1,3-dichlorobenzene	<1	ppb

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Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
9/12/2017	1,4-dichlorobenzene	<1	ppb
9/12/2017	2-Chloroethylvinylether	<2	ppb
9/12/2017	Benzene	<1	ppb
9/12/2017	Bromodichloromethane	<1	ppb
9/12/2017	Bromoform	<1	ppb
9/12/2017	Bromomethane	<10	ppb
9/12/2017	Carbon Tetrachloride	<1	ppb
9/12/2017	Chlorobenzene	<1	ppb
9/12/2017	Chloroethane	<10	ppb
9/12/2017	Chloroform	4.4	ppb
9/12/2017	Chloromethane	<10	ppb
9/12/2017	cis-1,3-Dichloropropene	<1	ppb
9/12/2017	Dibromochloromethane	<1	ppb
9/12/2017	Ethylbenzene	<1	ppb
9/12/2017	Methylene Chloride	<5	ppb
9/12/2017	o- xylene	<1	ppb
9/12/2017	p&m xylene	<1	ppb
9/12/2017	Tetrachlorethene	1.2	ppb
9/12/2017	Toluene	2.1	ppb
9/12/2017	Trans-1,2-Dichloroethene	<1	ppb
9/12/2017	Trans-1,3-Dichloropropene	<1	ppb
9/12/2017	Trichlorethene	<1	ppb
9/12/2017	Trichlorofluoromethane	<1	ppb
9/12/2017	Vinyl Chloride	<1	ppb
10/3/2017	1,1,1-Trichloroethane	<1	ppb
10/3/2017	1,1,2,2-Tetrachlorethane	<1	ppb
10/3/2017	1,1,2-Trichloroethane	<1	ppb
10/3/2017	1,1-Dichloroethane	<1	ppb
10/3/2017	1,1-Dichloroethene	<1	ppb
10/3/2017	1,2-dichlorobenzene	<1	ppb
10/3/2017	1,2-Dichloroethane	<1	ppb
10/3/2017	1,2-Dichloropropane	<1	ppb
10/3/2017	1,3-dichlorobenzene	<1	ppb
10/3/2017	1,4-dichlorobenzene	<1	ppb
10/3/2017	2-Chloroethylvinylether	<2	ppb
10/3/2017	Benzene	<1	ppb
10/3/2017	Bromodichloromethane	<1	ppb
10/3/2017	Bromoform	<1	ppb
10/3/2017	Bromomethane	<10	ppb
10/3/2017	Carbon Tetrachloride	<1	ppb
10/3/2017	Chlorobenzene	<1	ppb
10/3/2017	Chloroethane	<10	ppb
10/3/2017	Chloroform	3.6	ppb
10/3/2017	Chloromethane	<10	ppb
10/3/2017	cis-1,3-Dichloropropene	<1	ppb
10/3/2017	Dibromochloromethane	<1	ppb
10/3/2017	Ethylbenzene	<1	ppb
10/3/2017	Methylene Chloride	<5	ppb
10/3/2017	o- xylene	<1	ppb
10/3/2017	p&m xylene	<1	ppb
10/3/2017	Tetrachlorethene	1.3	ppb
10/3/2017	Toluene	1.9	ppb
10/3/2017	Trans-1,2-Dichloroethene	<1	ppb
10/3/2017	Trans-1,3-Dichloropropene	<1	ppb
10/3/2017	Trichlorethene	<1	ppb
10/3/2017	Trichlorofluoromethane	<1	ppb
10/3/2017	Vinyl Chloride	<1	ppb
11/7/2017	1,1,1-Trichloroethane	<1	ppb
11/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
11/7/2017	1,1,2-Trichloroethane	<1	ppb
11/7/2017	1,1-Dichloroethane	<1	ppb
11/7/2017	1,1-Dichloroethene	<1	ppb
11/7/2017	1,2-dichlorobenzene	<1	ppb
11/7/2017	1,2-Dichloroethane	<1	ppb
11/7/2017	1,2-Dichloropropane	<1	ppb
11/7/2017	1,3-dichlorobenzene	<1	ppb
11/7/2017	1,4-dichlorobenzene	<1	ppb
11/7/2017	2-Chloroethylvinylether	<2	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
9/13/2017	1,4-dichlorobenzene	<1	ppb
9/13/2017	2-Chloroethylvinylether	<2	ppb
9/13/2017	Benzene	<1	ppb
9/13/2017	Bromodichloromethane	8.5	ppb
9/13/2017	Bromoform	8.6	ppb
9/13/2017	Bromomethane	<10	ppb
9/13/2017	Carbon Tetrachloride	<1	ppb
9/13/2017	Chlorobenzene	<1	ppb
9/13/2017	Chloroethane	<10	ppb
9/13/2017	Chloroform	2.9	ppb
9/13/2017	Chloromethane	<10	ppb
9/13/2017	cis-1,3-Dichloropropene	<1	ppb
9/13/2017	Dibromochloromethane	14	ppb
9/13/2017	Ethylbenzene	<1	ppb
9/13/2017	Methylene Chloride	<5	ppb
9/13/2017	o- xylene	<1	ppb
9/13/2017	p&m xylene	<1	ppb
9/13/2017	Tetrachlorethene	<1	ppb
9/13/2017	Toluene	<1	ppb
9/13/2017	Trans-1,2-Dichloroethene	<1	ppb
9/13/2017	Trans-1,3-Dichloropropene	<1	ppb
9/13/2017	Trichlorethene	<1	ppb
9/13/2017	Trichlorofluoromethane	<1	ppb
9/13/2017	Vinyl Chloride	<1	ppb
10/4/2017	1,1,1-Trichloroethane	<1	ppb
10/4/2017	1,1,2,2-Tetrachlorethane	<1	ppb
10/4/2017	1,1,2-Trichloroethane	<1	ppb
10/4/2017	1,1-Dichloroethane	<1	ppb
10/4/2017	1,1-Dichloroethene	<1	ppb
10/4/2017	1,2-dichlorobenzene	<1	ppb
10/4/2017	1,2-Dichloroethane	<1	ppb
10/4/2017	1,2-Dichloropropane	<1	ppb
10/4/2017	1,3-dichlorobenzene	<1	ppb
10/4/2017	1,4-dichlorobenzene	<1	ppb
10/4/2017	2-Chloroethylvinylether	<2	ppb
10/4/2017	Benzene	<1	ppb
10/4/2017	Bromodichloromethane	14	ppb
10/4/2017	Bromoform	8.5	ppb
10/4/2017	Bromomethane	<10	ppb
10/4/2017	Carbon Tetrachloride	<1	ppb
10/4/2017	Chlorobenzene	<1	ppb
10/4/2017	Chloroethane	<10	ppb
10/4/2017	Chloroform	5.3	ppb
10/4/2017	Chloromethane	<10	ppb
10/4/2017	cis-1,3-Dichloropropene	<1	ppb
10/4/2017	Dibromochloromethane	20	ppb
10/4/2017	Ethylbenzene	<1	ppb
10/4/2017	Methylene Chloride	<5	ppb
10/4/2017	o- xylene	<1	ppb
10/4/2017	p&m xylene	<1	ppb
10/4/2017	Tetrachlorethene	<1	ppb
10/4/2017	Toluene	<1	ppb
10/4/2017	Trans-1,2-Dichloroethene	<1	ppb
10/4/2017	Trans-1,3-Dichloropropene	<1	ppb
10/4/2017	Trichlorethene	<1	ppb
10/4/2017	Trichlorofluoromethane	<1	ppb
10/4/2017	Vinyl Chloride	<1	ppb
11/8/2017	1,1,1-Trichloroethane	<1	ppb
11/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
11/8/2017	1,1,2-Trichloroethane	<1	ppb
11/8/2017	1,1-Dichloroethane	<1	ppb
11/8/2017	1,1-Dichloroethene	<1	ppb
11/8/2017	1,2-dichlorobenzene	<1	ppb
11/8/2017	1,2-Dichloroethane	<1	ppb
11/8/2017	1,2-Dichloropropane	<1	ppb
11/8/2017	1,3-dichlorobenzene	<1	ppb
11/8/2017	1,4-dichlorobenzene	<1	ppb
11/8/2017	2-Chloroethylvinylether	<2	ppb

EPA VOC Data
Field's Point 2017

Field's Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
11/7/2017	Benzene	<1	ppb
11/7/2017	Bromodichloromethane	<1	ppb
11/7/2017	Bromoform	<1	ppb
11/7/2017	Bromomethane	<10	ppb
11/7/2017	Carbon Tetrachloride	<1	ppb
11/7/2017	Chlorobenzene	<1	ppb
11/7/2017	Chloroethane	<10	ppb
11/7/2017	Chloroform	3.2	ppb
11/7/2017	Chloromethane	<10	ppb
11/7/2017	cis-1,3-Dichloropropene	<1	ppb
11/7/2017	Dibromochloromethane	<1	ppb
11/7/2017	Ethylbenzene	<1	ppb
11/7/2017	Methylene Chloride	<5	ppb
11/7/2017	o- xylene	<1	ppb
11/7/2017	p&m xylene	<1	ppb
11/7/2017	Tetrachlorethene	<1	ppb
11/7/2017	Toluene	1.1	ppb
11/7/2017	Trans-1,2-Dichloroethene	<1	ppb
11/7/2017	Trans-1,3-Dichloropropene	<1	ppb
11/7/2017	Trichlorethene	<1	ppb
11/7/2017	Trichlorofluoromethane	<1	ppb
11/7/2017	Vinyl Chloride	<1	ppb
12/5/2017	1,1,1-Trichloroethane	<1	ppb
12/5/2017	1,1,2,2-Tetrachlorethane	<1	ppb
12/5/2017	1,1,2-Trichloroethane	<1	ppb
12/5/2017	1,1-Dichloroethane	<1	ppb
12/5/2017	1,1-Dichloroethene	<1	ppb
12/5/2017	1,2-dichlorobenzene	<1	ppb
12/5/2017	1,2-Dichloroethane	<1	ppb
12/5/2017	1,2-Dichloropropane	<1	ppb
12/5/2017	1,3-dichlorobenzene	<1	ppb
12/5/2017	1,4-dichlorobenzene	<1	ppb
12/5/2017	2-Chloroethylvinylether	<2	ppb
12/5/2017	Benzene	<1	ppb
12/5/2017	Bromodichloromethane	<1	ppb
12/5/2017	Bromoform	<1	ppb
12/5/2017	Bromomethane	<10	ppb
12/5/2017	Carbon Tetrachloride	<1	ppb
12/5/2017	Chlorobenzene	<1	ppb
12/5/2017	Chloroethane	<10	ppb
12/5/2017	Chloroform	3.9	ppb
12/5/2017	Chloromethane	<10	ppb
12/5/2017	cis-1,3-Dichloropropene	<1	ppb
12/5/2017	Dibromochloromethane	<1	ppb
12/5/2017	Ethylbenzene	<1	ppb
12/5/2017	Methylene Chloride	8.5	ppb
12/5/2017	o- xylene	<1	ppb
12/5/2017	p&m xylene	<1	ppb
12/5/2017	Tetrachlorethene	<1	ppb
12/5/2017	Toluene	2.2	ppb
12/5/2017	Trans-1,2-Dichloroethene	<1	ppb
12/5/2017	Trans-1,3-Dichloropropene	<1	ppb
12/5/2017	Trichlorethene	1.2	ppb
12/5/2017	Trichlorofluoromethane	<1	ppb
12/5/2017	Vinyl Chloride	<1	ppb

Field's Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
11/8/2017	Benzene	<1	ppb
11/8/2017	Bromodichloromethane	<1	ppb
11/8/2017	Bromoform	<1	ppb
11/8/2017	Bromomethane	<10	ppb
11/8/2017	Carbon Tetrachloride	<1	ppb
11/8/2017	Chlorobenzene	<1	ppb
11/8/2017	Chloroethane	<10	ppb
11/8/2017	Chloroform	1.3	ppb
11/8/2017	Chloromethane	<10	ppb
11/8/2017	cis-1,3-Dichloropropene	<1	ppb
11/8/2017	Dibromochloromethane	<1	ppb
11/8/2017	Ethylbenzene	<1	ppb
11/8/2017	Methylene Chloride	<5	ppb
11/8/2017	o- xylene	<1	ppb
11/8/2017	p&m xylene	<1	ppb
11/8/2017	Tetrachlorethene	<1	ppb
11/8/2017	Toluene	<1	ppb
11/8/2017	Trans-1,2-Dichloroethene	<1	ppb
11/8/2017	Trans-1,3-Dichloropropene	<1	ppb
11/8/2017	Trichlorethene	<1	ppb
11/8/2017	Trichlorofluoromethane	<1	ppb
11/8/2017	Vinyl Chloride	<1	ppb
12/6/2017	1,1,1-Trichloroethane	<1	ppb
12/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
12/6/2017	1,1,2-Trichloroethane	<1	ppb
12/6/2017	1,1-Dichloroethane	<1	ppb
12/6/2017	1,1-Dichloroethene	<1	ppb
12/6/2017	1,2-dichlorobenzene	<1	ppb
12/6/2017	1,2-Dichloroethane	<1	ppb
12/6/2017	1,2-Dichloropropane	<1	ppb
12/6/2017	1,3-dichlorobenzene	<1	ppb
12/6/2017	1,4-dichlorobenzene	<1	ppb
12/6/2017	2-Chloroethylvinylether	<2	ppb
12/6/2017	Benzene	<1	ppb
12/6/2017	Bromodichloromethane	<1	ppb
12/6/2017	Bromoform	<1	ppb
12/6/2017	Bromomethane	<10	ppb
12/6/2017	Carbon Tetrachloride	<1	ppb
12/6/2017	Chlorobenzene	<1	ppb
12/6/2017	Chloroethane	<10	ppb
12/6/2017	Chloroform	<1	ppb
12/6/2017	Chloromethane	<10	ppb
12/6/2017	cis-1,3-Dichloropropene	<1	ppb
12/6/2017	Dibromochloromethane	<1	ppb
12/6/2017	Ethylbenzene	<1	ppb
12/6/2017	Methylene Chloride	<5	ppb
12/6/2017	o- xylene	<1	ppb
12/6/2017	p&m xylene	<1	ppb
12/6/2017	Tetrachlorethene	<1	ppb
12/6/2017	Toluene	<1	ppb
12/6/2017	Trans-1,2-Dichloroethene	<1	ppb
12/6/2017	Trans-1,3-Dichloropropene	<1	ppb
12/6/2017	Trichlorethene	<1	ppb
12/6/2017	Trichlorofluoromethane	<1	ppb
12/6/2017	Vinyl Chloride	<1	ppb

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
1/9/2017	1,1,1-Trichloroethane	<1	ppb
1/9/2017	1,1,2,2-Tetrachlorethane	<1	ppb
1/9/2017	1,1,2-Trichloroethane	<1	ppb
1/9/2017	1,1-Dichloroethane	<1	ppb
1/9/2017	1,1-Dichloroethene	<1	ppb
1/9/2017	1,2-dichlorobenzene	<1	ppb
1/9/2017	1,2-Dichloroethane	<1	ppb
1/9/2017	1,2-Dichloropropane	<1	ppb
1/9/2017	1,3-dichlorobenzene	<1	ppb
1/9/2017	1,4-dichlorobenzene	<1	ppb
1/9/2017	2-Chloroethylvinylether	<2	ppb
1/9/2017	Benzene	<1	ppb
1/9/2017	Bromodichloromethane	<1	ppb
1/9/2017	Bromoform	<1	ppb
1/9/2017	Bromomethane	<10	ppb
1/9/2017	Carbon Tetrachloride	<1	ppb
1/9/2017	Chlorobenzene	<1	ppb
1/9/2017	Chloroethane	<10	ppb
1/9/2017	Chloroform	3.2	ppb
1/9/2017	Chloromethane	<10	ppb
1/9/2017	cis-1,3-Dichloropropene	<1	ppb
1/9/2017	Dibromochloromethane	<1	ppb
1/9/2017	Ethylbenzene	1	ppb
1/9/2017	Methylene Chloride	<5	ppb
1/9/2017	o- xylene	<1	ppb
1/9/2017	p&m xylene	<1	ppb
1/9/2017	Tetrachlorethene	1.8	ppb
1/9/2017	Toluene	1.5	ppb
1/9/2017	Trans-1,2-Dichloroethene	<1	ppb
1/9/2017	Trans-1,3-Dichloropropene	<1	ppb
1/9/2017	Trichlorethene	<1	ppb
1/9/2017	Trichlorofluoromethane	<1	ppb
1/9/2017	Vinyl Chloride	<1	ppb
2/6/2017	1,1,1-Trichloroethane	<1	ppb
2/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
2/6/2017	1,1,2-Trichloroethane	<1	ppb
2/6/2017	1,1-Dichloroethane	<1	ppb
2/6/2017	1,1-Dichloroethene	<1	ppb
2/6/2017	1,2-dichlorobenzene	<1	ppb
2/6/2017	1,2-Dichloroethane	<1	ppb
2/6/2017	1,2-Dichloropropane	<1	ppb
2/6/2017	1,3-dichlorobenzene	<1	ppb
2/6/2017	1,4-dichlorobenzene	<1	ppb
2/6/2017	2-Chloroethylvinylether	<2	ppb
2/6/2017	Benzene	<1	ppb
2/6/2017	Bromodichloromethane	<1	ppb
2/6/2017	Bromoform	<1	ppb
2/6/2017	Bromomethane	<10	ppb
2/6/2017	Carbon Tetrachloride	<1	ppb
2/6/2017	Chlorobenzene	<1	ppb
2/6/2017	Chloroethane	<10	ppb
2/6/2017	Chloroform	4.1	ppb
2/6/2017	Chloromethane	<10	ppb
2/6/2017	cis-1,3-Dichloropropene	<1	ppb
2/6/2017	Dibromochloromethane	<1	ppb
2/6/2017	Ethylbenzene	<1	ppb
2/6/2017	Methylene Chloride	<5	ppb
2/6/2017	o- xylene	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
1/10/2017	1,1,1-Trichloroethane	<1	ppb
1/10/2017	1,1,2,2-Tetrachlorethane	<1	ppb
1/10/2017	1,1,2-Trichloroethane	<1	ppb
1/10/2017	1,1-Dichloroethane	<1	ppb
1/10/2017	1,1-Dichloroethene	<1	ppb
1/10/2017	1,2-dichlorobenzene	<1	ppb
1/10/2017	1,2-Dichloroethane	<1	ppb
1/10/2017	1,2-Dichloropropane	<1	ppb
1/10/2017	1,3-dichlorobenzene	<1	ppb
1/10/2017	1,4-dichlorobenzene	<1	ppb
1/10/2017	2-Chloroethylvinylether	<2	ppb
1/10/2017	Benzene	<1	ppb
1/10/2017	Bromodichloromethane	<1	ppb
1/10/2017	Bromoform	<1	ppb
1/10/2017	Bromomethane	<10	ppb
1/10/2017	Carbon Tetrachloride	<1	ppb
1/10/2017	Chlorobenzene	<1	ppb
1/10/2017	Chloroethane	<10	ppb
1/10/2017	Chloroform	<1	ppb
1/10/2017	Chloromethane	<10	ppb
1/10/2017	cis-1,3-Dichloropropene	<1	ppb
1/10/2017	Dibromochloromethane	<1	ppb
1/10/2017	Ethylbenzene	<1	ppb
1/10/2017	Methylene Chloride	<5	ppb
1/10/2017	o- xylene	<1	ppb
1/10/2017	p&m xylene	<1	ppb
1/10/2017	Tetrachlorethene	<1	ppb
1/10/2017	Toluene	<1	ppb
1/10/2017	Trans-1,2-Dichloroethene	<1	ppb
1/10/2017	Trans-1,3-Dichloropropene	<1	ppb
1/10/2017	Trichlorethene	<1	ppb
1/10/2017	Trichlorofluoromethane	<1	ppb
1/10/2017	Vinyl Chloride	<1	ppb
2/7/2017	1,1,1-Trichloroethane	<1	ppb
2/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
2/7/2017	1,1,2-Trichloroethane	<1	ppb
2/7/2017	1,1-Dichloroethane	<1	ppb
2/7/2017	1,1-Dichloroethene	<1	ppb
2/7/2017	1,2-dichlorobenzene	<1	ppb
2/7/2017	1,2-Dichloroethane	<1	ppb
2/7/2017	1,2-Dichloropropane	<1	ppb
2/7/2017	1,3-dichlorobenzene	<1	ppb
2/7/2017	1,4-dichlorobenzene	<1	ppb
2/7/2017	2-Chloroethylvinylether	<2	ppb
2/7/2017	Benzene	<1	ppb
2/7/2017	Bromodichloromethane	<1	ppb
2/7/2017	Bromoform	<1	ppb
2/7/2017	Bromomethane	<10	ppb
2/7/2017	Carbon Tetrachloride	<1	ppb
2/7/2017	Chlorobenzene	<1	ppb
2/7/2017	Chloroethane	<10	ppb
2/7/2017	Chloroform	<1	ppb
2/7/2017	Chloromethane	<10	ppb
2/7/2017	cis-1,3-Dichloropropene	<1	ppb
2/7/2017	Dibromochloromethane	<1	ppb
2/7/2017	Ethylbenzene	<1	ppb
2/7/2017	Methylene Chloride	<5	ppb
2/7/2017	o- xylene	<1	ppb

Table 25: EPA VOC Data
Bucklin Point

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
2/6/2017	p&m xylene	<1	ppb
2/6/2017	Tetrachlorethene	1.3	ppb
2/6/2017	Toluene	1.3	ppb
2/6/2017	Trans-1,2-Dichloroethene	<1	ppb
2/6/2017	Trans-1,3-Dichloropropene	<1	ppb
2/6/2017	Trichlorethene	<1	ppb
2/6/2017	Trichlorofluoromethane	<1	ppb
2/6/2017	Vinyl Chloride	<1	ppb
3/6/2017	1,1,1-Trichloroethane	<1	ppb
3/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
3/6/2017	1,1,2-Trichloroethane	<1	ppb
3/6/2017	1,1-Dichloroethane	<1	ppb
3/6/2017	1,1-Dichloroethene	<1	ppb
3/6/2017	1,2-dichlorobenzene	<1	ppb
3/6/2017	1,2-Dichloroethane	<1	ppb
3/6/2017	1,2-Dichloropropane	<1	ppb
3/6/2017	1,3-dichlorobenzene	<1	ppb
3/6/2017	1,4-dichlorobenzene	<1	ppb
3/6/2017	2-Chloroethylvinylether	<2	ppb
3/6/2017	Benzene	<1	ppb
3/6/2017	Bromodichloromethane	<1	ppb
3/6/2017	Bromoform	<1	ppb
3/6/2017	Bromomethane	<10	ppb
3/6/2017	Carbon Tetrachloride	<1	ppb
3/6/2017	Chlorobenzene	<1	ppb
3/6/2017	Chloroethane	<10	ppb
3/6/2017	Chloroform	2.9	ppb
3/6/2017	Chloromethane	<10	ppb
3/6/2017	cis-1,3-Dichloropropene	<1	ppb
3/6/2017	Dibromochloromethane	<1	ppb
3/6/2017	Ethylbenzene	<1	ppb
3/6/2017	Methylene Chloride	<5	ppb
3/6/2017	o- xylene	<1	ppb
3/6/2017	p&m xylene	<1	ppb
3/6/2017	Tetrachlorethene	6.5	ppb
3/6/2017	Toluene	1.8	ppb
3/6/2017	Trans-1,2-Dichloroethene	<1	ppb
3/6/2017	Trans-1,3-Dichloropropene	<1	ppb
3/6/2017	Trichlorethene	<1	ppb
3/6/2017	Trichlorofluoromethane	<1	ppb
3/6/2017	Vinyl Chloride	<1	ppb
4/3/2017	1,1,1-Trichloroethane	<1	ppb
4/3/2017	1,1,2,2-Tetrachlorethane	<1	ppb
4/3/2017	1,1,2-Trichloroethane	<1	ppb
4/3/2017	1,1-Dichloroethane	<1	ppb
4/3/2017	1,1-Dichloroethene	<1	ppb
4/3/2017	1,2-dichlorobenzene	<1	ppb
4/3/2017	1,2-Dichloroethane	<1	ppb
4/3/2017	1,2-Dichloropropane	<1	ppb
4/3/2017	1,3-dichlorobenzene	<1	ppb
4/3/2017	1,4-dichlorobenzene	<1	ppb
4/3/2017	2-Chloroethylvinylether	<2	ppb
4/3/2017	Benzene	<1	ppb
4/3/2017	Bromodichloromethane	<1	ppb
4/3/2017	Bromoform	<1	ppb
4/3/2017	Bromomethane	<10	ppb
4/3/2017	Carbon Tetrachloride	<1	ppb
4/3/2017	Chlorobenzene	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
2/7/2017	p&m xylene	<1	ppb
2/7/2017	Tetrachlorethene	<1	ppb
2/7/2017	Toluene	<1	ppb
2/7/2017	Trans-1,2-Dichloroethene	<1	ppb
2/7/2017	Trans-1,3-Dichloropropene	<1	ppb
2/7/2017	Trichlorethene	<1	ppb
2/7/2017	Trichlorofluoromethane	<1	ppb
2/7/2017	Vinyl Chloride	<1	ppb
3/7/2017	1,1,1-Trichloroethane	<1	ppb
3/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
3/7/2017	1,1,2-Trichloroethane	<1	ppb
3/7/2017	1,1-Dichloroethane	<1	ppb
3/7/2017	1,1-Dichloroethene	<1	ppb
3/7/2017	1,2-dichlorobenzene	<1	ppb
3/7/2017	1,2-Dichloroethane	<1	ppb
3/7/2017	1,2-Dichloropropane	<1	ppb
3/7/2017	1,3-dichlorobenzene	<1	ppb
3/7/2017	1,4-dichlorobenzene	<1	ppb
3/7/2017	2-Chloroethylvinylether	<2	ppb
3/7/2017	Benzene	<1	ppb
3/7/2017	Bromodichloromethane	<1	ppb
3/7/2017	Bromoform	<1	ppb
3/7/2017	Bromomethane	<10	ppb
3/7/2017	Carbon Tetrachloride	<1	ppb
3/7/2017	Chlorobenzene	<1	ppb
3/7/2017	Chloroethane	<10	ppb
3/7/2017	Chloroform	<1	ppb
3/7/2017	Chloromethane	<10	ppb
3/7/2017	cis-1,3-Dichloropropene	<1	ppb
3/7/2017	Dibromochloromethane	<1	ppb
3/7/2017	Ethylbenzene	<1	ppb
3/7/2017	Methylene Chloride	<5	ppb
3/7/2017	o- xylene	<1	ppb
3/7/2017	p&m xylene	<1	ppb
3/7/2017	Tetrachlorethene	<1	ppb
3/7/2017	Toluene	<1	ppb
3/7/2017	Trans-1,2-Dichloroethene	<1	ppb
3/7/2017	Trans-1,3-Dichloropropene	<1	ppb
3/7/2017	Trichlorethene	<1	ppb
3/7/2017	Trichlorofluoromethane	<1	ppb
3/7/2017	Vinyl Chloride	<1	ppb
4/4/2017	1,1,1-Trichloroethane	<1	ppb
4/4/2017	1,1,2,2-Tetrachlorethane	<1	ppb
4/4/2017	1,1,2-Trichloroethane	<1	ppb
4/4/2017	1,1-Dichloroethane	<1	ppb
4/4/2017	1,1-Dichloroethene	<1	ppb
4/4/2017	1,2-dichlorobenzene	<1	ppb
4/4/2017	1,2-Dichloroethane	<1	ppb
4/4/2017	1,2-Dichloropropane	<1	ppb
4/4/2017	1,3-dichlorobenzene	<1	ppb
4/4/2017	1,4-dichlorobenzene	<1	ppb
4/4/2017	2-Chloroethylvinylether	<2	ppb
4/4/2017	Benzene	<1	ppb
4/4/2017	Bromodichloromethane	<1	ppb
4/4/2017	Bromoform	<1	ppb
4/4/2017	Bromomethane	<10	ppb
4/4/2017	Carbon Tetrachloride	<1	ppb
4/4/2017	Chlorobenzene	<1	ppb

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
4/3/2017	Chloroethane	<10	ppb
4/3/2017	Chloroform	2.9	ppb
4/3/2017	Chloromethane	<10	ppb
4/3/2017	cis-1,3-Dichloropropene	<1	ppb
4/3/2017	Dibromochloromethane	<1	ppb
4/3/2017	Ethylbenzene	1.1	ppb
4/3/2017	Methylene Chloride	<5	ppb
4/3/2017	o- xylene	<1	ppb
4/3/2017	p&m xylene	1.3	ppb
4/3/2017	Tetrachlorethene	1.9	ppb
4/3/2017	Toluene	2.9	ppb
4/3/2017	Trans-1,2-Dichloroethene	<1	ppb
4/3/2017	Trans-1,3-Dichloropropene	<1	ppb
4/3/2017	Trichlorethene	<1	ppb
4/3/2017	Trichlorofluoromethane	<1	ppb
4/3/2017	Vinyl Chloride	<1	ppb
5/8/2017	1,1,1-Trichloroethane	<1	ppb
5/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
5/8/2017	1,1,2-Trichloroethane	<1	ppb
5/8/2017	1,1-Dichloroethane	<1	ppb
5/8/2017	1,1-Dichloroethene	<1	ppb
5/8/2017	1,2-dichlorobenzene	<1	ppb
5/8/2017	1,2-Dichloroethane	<1	ppb
5/8/2017	1,2-Dichloropropane	<1	ppb
5/8/2017	1,3-dichlorobenzene	<1	ppb
5/8/2017	1,4-dichlorobenzene	<1	ppb
5/8/2017	2-Chloroethylvinylether	<2	ppb
5/8/2017	Benzene	<1	ppb
5/8/2017	Bromodichloromethane	<1	ppb
5/8/2017	Bromoform	<1	ppb
5/8/2017	Bromomethane	<10	ppb
5/8/2017	Carbon Tetrachloride	<1	ppb
5/8/2017	Chlorobenzene	<1	ppb
5/8/2017	Chloroethane	<10	ppb
5/8/2017	Chloroform	2.9	ppb
5/8/2017	Chloromethane	<10	ppb
5/8/2017	cis-1,3-Dichloropropene	<1	ppb
5/8/2017	Dibromochloromethane	<1	ppb
5/8/2017	Ethylbenzene	<1	ppb
5/8/2017	Methylene Chloride	<5	ppb
5/8/2017	o- xylene	<1	ppb
5/8/2017	p&m xylene	<1	ppb
5/8/2017	Tetrachlorethene	<1	ppb
5/8/2017	Toluene	2.6	ppb
5/8/2017	Trans-1,2-Dichloroethene	<1	ppb
5/8/2017	Trans-1,3-Dichloropropene	<1	ppb
5/8/2017	Trichlorethene	<1	ppb
5/8/2017	Trichlorofluoromethane	<1	ppb
5/8/2017	Vinyl Chloride	<1	ppb
6/5/2017	1,1,1-Trichloroethane	<1	ppb
6/5/2017	1,1,2,2-Tetrachlorethane	<1	ppb
6/5/2017	1,1,2-Trichloroethane	<1	ppb
6/5/2017	1,1-Dichloroethane	<1	ppb
6/5/2017	1,1-Dichloroethene	<1	ppb
6/5/2017	1,2-dichlorobenzene	<1	ppb
6/5/2017	1,2-Dichloroethane	<1	ppb
6/5/2017	1,2-Dichloropropane	<1	ppb
6/5/2017	1,3-dichlorobenzene	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
4/4/2017	Chloroethane	<10	ppb
4/4/2017	Chloroform	<1	ppb
4/4/2017	Chloromethane	<10	ppb
4/4/2017	cis-1,3-Dichloropropene	<1	ppb
4/4/2017	Dibromochloromethane	<1	ppb
4/4/2017	Ethylbenzene	<1	ppb
4/4/2017	Methylene Chloride	<5	ppb
4/4/2017	o- xylene	<1	ppb
4/4/2017	p&m xylene	<1	ppb
4/4/2017	Tetrachlorethene	<1	ppb
4/4/2017	Toluene	<1	ppb
4/4/2017	Trans-1,2-Dichloroethene	<1	ppb
4/4/2017	Trans-1,3-Dichloropropene	<1	ppb
4/4/2017	Trichlorethene	<1	ppb
4/4/2017	Trichlorofluoromethane	<1	ppb
4/4/2017	Vinyl Chloride	<1	ppb
5/9/2017	1,1,1-Trichloroethane	<1	ppb
5/9/2017	1,1,2,2-Tetrachlorethane	<1	ppb
5/9/2017	1,1,2-Trichloroethane	<1	ppb
5/9/2017	1,1-Dichloroethane	<1	ppb
5/9/2017	1,1-Dichloroethene	<1	ppb
5/9/2017	1,2-dichlorobenzene	<1	ppb
5/9/2017	1,2-Dichloroethane	<1	ppb
5/9/2017	1,2-Dichloropropane	<1	ppb
5/9/2017	1,3-dichlorobenzene	<1	ppb
5/9/2017	1,4-dichlorobenzene	<1	ppb
5/9/2017	2-Chloroethylvinylether	<2	ppb
5/9/2017	Benzene	<1	ppb
5/9/2017	Bromodichloromethane	<1	ppb
5/9/2017	Bromoform	<1	ppb
5/9/2017	Bromomethane	<10	ppb
5/9/2017	Carbon Tetrachloride	<1	ppb
5/9/2017	Chlorobenzene	<1	ppb
5/9/2017	Chloroethane	<10	ppb
5/9/2017	Chloroform	<1	ppb
5/9/2017	Chloromethane	<10	ppb
5/9/2017	cis-1,3-Dichloropropene	<1	ppb
5/9/2017	Dibromochloromethane	<1	ppb
5/9/2017	Ethylbenzene	<1	ppb
5/9/2017	Methylene Chloride	<5	ppb
5/9/2017	o- xylene	<1	ppb
5/9/2017	p&m xylene	<1	ppb
5/9/2017	Tetrachlorethene	<1	ppb
5/9/2017	Toluene	<1	ppb
5/9/2017	Trans-1,2-Dichloroethene	<1	ppb
5/9/2017	Trans-1,3-Dichloropropene	<1	ppb
5/9/2017	Trichlorethene	<1	ppb
5/9/2017	Trichlorofluoromethane	<1	ppb
5/9/2017	Vinyl Chloride	<1	ppb
6/6/2017	1,1,1-Trichloroethane	<1	ppb
6/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
6/6/2017	1,1,2-Trichloroethane	<1	ppb
6/6/2017	1,1-Dichloroethane	<1	ppb
6/6/2017	1,1-Dichloroethene	<1	ppb
6/6/2017	1,2-dichlorobenzene	<1	ppb
6/6/2017	1,2-Dichloroethane	<1	ppb
6/6/2017	1,2-Dichloropropane	<1	ppb
6/6/2017	1,3-dichlorobenzene	<1	ppb

Table 25: EPA VOC Data
Bucklin Point

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
6/5/2017	1,4-dichlorobenzene	<1	ppb
6/5/2017	2-Chloroethylvinylether	<2	ppb
6/5/2017	Benzene	<1	ppb
6/5/2017	Bromodichloromethane	<1	ppb
6/5/2017	Bromoform	<1	ppb
6/5/2017	Bromomethane	<10	ppb
6/5/2017	Carbon Tetrachloride	<1	ppb
6/5/2017	Chlorobenzene	<1	ppb
6/5/2017	Chloroethane	<10	ppb
6/5/2017	Chloroform	4.0	ppb
6/5/2017	Chloromethane	<10	ppb
6/5/2017	cis-1,3-Dichloropropene	<1	ppb
6/5/2017	Dibromochloromethane	<1	ppb
6/5/2017	Ethylbenzene	<1	ppb
6/5/2017	Methylene Chloride	<5	ppb
6/5/2017	o- xylene	<1	ppb
6/5/2017	p&m xylene	<1	ppb
6/5/2017	Tetrachlorethene	<1	ppb
6/5/2017	Toluene	2.2	ppb
6/5/2017	Trans-1,2-Dichloroethene	<1	ppb
6/5/2017	Trans-1,3-Dichloropropene	<1	ppb
6/5/2017	Trichlorethene	<1	ppb
6/5/2017	Trichlorofluoromethane	<1	ppb
6/5/2017	Vinyl Chloride	<1	ppb
7/10/2017	1,1,1-Trichloroethane	<1	ppb
7/10/2017	1,1,2,2-Tetrachlorethane	<1	ppb
7/10/2017	1,1,2-Trichloroethane	<1	ppb
7/10/2017	1,1-Dichloroethane	<1	ppb
7/10/2017	1,1-Dichloroethene	<1	ppb
7/10/2017	1,2-dichlorobenzene	<1	ppb
7/10/2017	1,2-Dichloroethane	<1	ppb
7/10/2017	1,2-Dichloropropane	<1	ppb
7/10/2017	1,3-dichlorobenzene	<1	ppb
7/10/2017	1,4-dichlorobenzene	<1	ppb
7/10/2017	2-Chloroethylvinylether	<2	ppb
7/10/2017	Benzene	<1	ppb
7/10/2017	Bromodichloromethane	<1	ppb
7/10/2017	Bromoform	<1	ppb
7/10/2017	Bromomethane	<10	ppb
7/10/2017	Carbon Tetrachloride	<1	ppb
7/10/2017	Chlorobenzene	<1	ppb
7/10/2017	Chloroethane	<10	ppb
7/10/2017	Chloroform	4.3	ppb
7/10/2017	Chloromethane	<10	ppb
7/10/2017	cis-1,3-Dichloropropene	<1	ppb
7/10/2017	Dibromochloromethane	<1	ppb
7/10/2017	Ethylbenzene	<1	ppb
7/10/2017	Methylene Chloride	<5	ppb
7/10/2017	o- xylene	<1	ppb
7/10/2017	p&m xylene	<1	ppb
7/10/2017	Tetrachlorethene	1.5	ppb
7/10/2017	Toluene	4.4	ppb
7/10/2017	Trans-1,2-Dichloroethene	<1	ppb
7/10/2017	Trans-1,3-Dichloropropene	<1	ppb
7/10/2017	Trichlorethene	<1	ppb
7/10/2017	Trichlorofluoromethane	<1	ppb
7/10/2017	Vinyl Chloride	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
6/6/2017	1,4-dichlorobenzene	<1	ppb
6/6/2017	2-Chloroethylvinylether	<2	ppb
6/6/2017	Benzene	<1	ppb
6/6/2017	Bromodichloromethane	<1	ppb
6/6/2017	Bromoform	<1	ppb
6/6/2017	Bromomethane	<10	ppb
6/6/2017	Carbon Tetrachloride	<1	ppb
6/6/2017	Chlorobenzene	<1	ppb
6/6/2017	Chloroethane	<10	ppb
6/6/2017	Chloroform	<1	ppb
6/6/2017	Chloromethane	<10	ppb
6/6/2017	cis-1,3-Dichloropropene	<1	ppb
6/6/2017	Dibromochloromethane	<1	ppb
6/6/2017	Ethylbenzene	<1	ppb
6/6/2017	Methylene Chloride	<5	ppb
6/6/2017	o- xylene	<1	ppb
6/6/2017	p&m xylene	<1	ppb
6/6/2017	Tetrachlorethene	<1	ppb
6/6/2017	Toluene	<1	ppb
6/6/2017	Trans-1,2-Dichloroethene	<1	ppb
6/6/2017	Trans-1,3-Dichloropropene	<1	ppb
6/6/2017	Trichlorethene	<1	ppb
6/6/2017	Trichlorofluoromethane	<1	ppb
6/6/2017	Vinyl Chloride	<1	ppb
7/11/2017	1,1,1-Trichloroethane	<1	ppb
7/11/2017	1,1,2,2-Tetrachlorethane	<1	ppb
7/11/2017	1,1,2-Trichloroethane	<1	ppb
7/11/2017	1,1-Dichloroethane	<1	ppb
7/11/2017	1,1-Dichloroethene	<1	ppb
7/11/2017	1,2-dichlorobenzene	<1	ppb
7/11/2017	1,2-Dichloroethane	<1	ppb
7/11/2017	1,2-Dichloropropane	<1	ppb
7/11/2017	1,3-dichlorobenzene	<1	ppb
7/11/2017	1,4-dichlorobenzene	<1	ppb
7/11/2017	2-Chloroethylvinylether	<2	ppb
7/11/2017	Benzene	<1	ppb
7/11/2017	Bromodichloromethane	<1	ppb
7/11/2017	Bromoform	<1	ppb
7/11/2017	Bromomethane	<10	ppb
7/11/2017	Carbon Tetrachloride	<1	ppb
7/11/2017	Chlorobenzene	<1	ppb
7/11/2017	Chloroethane	<10	ppb
7/11/2017	Chloroform	<1	ppb
7/11/2017	Chloromethane	<10	ppb
7/11/2017	cis-1,3-Dichloropropene	<1	ppb
7/11/2017	Dibromochloromethane	<1	ppb
7/11/2017	Ethylbenzene	<1	ppb
7/11/2017	Methylene Chloride	<5	ppb
7/11/2017	o- xylene	<1	ppb
7/11/2017	p&m xylene	<1	ppb
7/11/2017	Tetrachlorethene	<1	ppb
7/11/2017	Toluene	1.2	ppb
7/11/2017	Trans-1,2-Dichloroethene	<1	ppb
7/11/2017	Trans-1,3-Dichloropropene	<1	ppb
7/11/2017	Trichlorethene	<1	ppb
7/11/2017	Trichlorofluoromethane	<1	ppb
7/11/2017	Vinyl Chloride	<1	ppb

Table 25: EPA VOC Data
Bucklin Point

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
8/7/2017	1,1,1-Trichloroethane	<1	ppb
8/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
8/7/2017	1,1,2-Trichloroethane	<1	ppb
8/7/2017	1,1-Dichloroethane	<1	ppb
8/7/2017	1,1-Dichloroethene	<1	ppb
8/7/2017	1,2-dichlorobenzene	<1	ppb
8/7/2017	1,2-Dichloroethane	<1	ppb
8/7/2017	1,2-Dichloropropane	<1	ppb
8/7/2017	1,3-dichlorobenzene	<1	ppb
8/7/2017	1,4-dichlorobenzene	<1	ppb
8/7/2017	2-Chloroethylvinylether	<2	ppb
8/7/2017	Benzene	<1	ppb
8/7/2017	Bromodichloromethane	<1	ppb
8/7/2017	Bromoform	<1	ppb
8/7/2017	Bromomethane	<10	ppb
8/7/2017	Carbon Tetrachloride	<1	ppb
8/7/2017	Chlorobenzene	<1	ppb
8/7/2017	Chloroethane	<10	ppb
8/7/2017	Chloroform	3.0	ppb
8/7/2017	Chloromethane	<10	ppb
8/7/2017	cis-1,3-Dichloropropene	<1	ppb
8/7/2017	Dibromochloromethane	<1	ppb
8/7/2017	Ethylbenzene	<1	ppb
8/7/2017	Methylene Chloride	<5	ppb
8/7/2017	o- xylene	<1	ppb
8/7/2017	p&m xylene	<1	ppb
8/7/2017	Tetrachlorethene	1.1	ppb
8/7/2017	Toluene	3.4	ppb
8/7/2017	Trans-1,2-Dichloroethene	<1	ppb
8/7/2017	Trans-1,3-Dichloropropene	<1	ppb
8/7/2017	Trichlorethene	<1	ppb
8/7/2017	Trichlorofluoromethane	<1	ppb
8/7/2017	Vinyl Chloride	<1	ppb
9/11/2017	1,1,1-Trichloroethane	<1	ppb
9/11/2017	1,1,2,2-Tetrachlorethane	<1	ppb
9/11/2017	1,1,2-Trichloroethane	<1	ppb
9/11/2017	1,1-Dichloroethane	<1	ppb
9/11/2017	1,1-Dichloroethene	<1	ppb
9/11/2017	1,2-dichlorobenzene	<1	ppb
9/11/2017	1,2-Dichloroethane	<1	ppb
9/11/2017	1,2-Dichloropropane	<1	ppb
9/11/2017	1,3-dichlorobenzene	<1	ppb
9/11/2017	1,4-dichlorobenzene	<1	ppb
9/11/2017	2-Chloroethylvinylether	<2	ppb
9/11/2017	Benzene	<1	ppb
9/11/2017	Bromodichloromethane	<1	ppb
9/11/2017	Bromoform	<1	ppb
9/11/2017	Bromomethane	<10	ppb
9/11/2017	Carbon Tetrachloride	<1	ppb
9/11/2017	Chlorobenzene	<1	ppb
9/11/2017	Chloroethane	<10	ppb
9/11/2017	Chloroform	3.1	ppb
9/11/2017	Chloromethane	<10	ppb
9/11/2017	cis-1,3-Dichloropropene	<1	ppb
9/11/2017	Dibromochloromethane	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
8/8/2017	1,1,1-Trichloroethane	<1	ppb
8/8/2017	1,1,2,2-Tetrachlorethane	<1	ppb
8/8/2017	1,1,2-Trichloroethane	<1	ppb
8/8/2017	1,1-Dichloroethane	<1	ppb
8/8/2017	1,1-Dichloroethene	<1	ppb
8/8/2017	1,2-dichlorobenzene	<1	ppb
8/8/2017	1,2-Dichloroethane	<1	ppb
8/8/2017	1,2-Dichloropropane	<1	ppb
8/8/2017	1,3-dichlorobenzene	<1	ppb
8/8/2017	1,4-dichlorobenzene	<1	ppb
8/8/2017	2-Chloroethylvinylether	<2	ppb
8/8/2017	Benzene	<1	ppb
8/8/2017	Bromodichloromethane	<1	ppb
8/8/2017	Bromoform	<1	ppb
8/8/2017	Bromomethane	<10	ppb
8/8/2017	Carbon Tetrachloride	<1	ppb
8/8/2017	Chlorobenzene	<1	ppb
8/8/2017	Chloroethane	<10	ppb
8/8/2017	Chloroform	<1	ppb
8/8/2017	Chloromethane	<10	ppb
8/8/2017	cis-1,3-Dichloropropene	<1	ppb
8/8/2017	Dibromochloromethane	<1	ppb
8/8/2017	Ethylbenzene	<1	ppb
8/8/2017	Methylene Chloride	<5	ppb
8/8/2017	o- xylene	<1	ppb
8/8/2017	p&m xylene	<1	ppb
8/8/2017	Tetrachlorethene	<1	ppb
8/8/2017	Toluene	<1	ppb
8/8/2017	Trans-1,2-Dichloroethene	<1	ppb
8/8/2017	Trans-1,3-Dichloropropene	<1	ppb
8/8/2017	Trichlorethene	<1	ppb
8/8/2017	Trichlorofluoromethane	<1	ppb
8/8/2017	Vinyl Chloride	<1	ppb
9/12/2017	1,1,1-Trichloroethane	<1	ppb
9/12/2017	1,1,2,2-Tetrachlorethane	<1	ppb
9/12/2017	1,1,2-Trichloroethane	<1	ppb
9/12/2017	1,1-Dichloroethane	<1	ppb
9/12/2017	1,1-Dichloroethene	<1	ppb
9/12/2017	1,2-dichlorobenzene	<1	ppb
9/12/2017	1,2-Dichloroethane	<1	ppb
9/12/2017	1,2-Dichloropropane	<1	ppb
9/12/2017	1,3-dichlorobenzene	<1	ppb
9/12/2017	1,4-dichlorobenzene	<1	ppb
9/12/2017	2-Chloroethylvinylether	<2	ppb
9/12/2017	Benzene	<1	ppb
9/12/2017	Bromodichloromethane	<1	ppb
9/12/2017	Bromoform	<1	ppb
9/12/2017	Bromomethane	<10	ppb
9/12/2017	Carbon Tetrachloride	<1	ppb
9/12/2017	Chlorobenzene	<1	ppb
9/12/2017	Chloroethane	<10	ppb
9/12/2017	Chloroform	<1	ppb
9/12/2017	Chloromethane	<10	ppb
9/12/2017	cis-1,3-Dichloropropene	<1	ppb
9/12/2017	Dibromochloromethane	<1	ppb

Table 25: EPA VOC Data
Bucklin Point

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
9/11/2017	Ethylbenzene	<1	ppb
9/11/2017	Methylene Chloride	<5	ppb
9/11/2017	o- xylene	<1	ppb
9/11/2017	p&m xylene	<1	ppb
9/11/2017	Tetrachlorethene	1.6	ppb
9/11/2017	Toluene	3.4	ppb
9/11/2017	Trans-1,2-Dichloroethene	<1	ppb
9/11/2017	Trans-1,3-Dichloropropene	<1	ppb
9/11/2017	Trichlorethene	<1	ppb
9/11/2017	Trichlorofluoromethane	<1	ppb
9/11/2017	Vinyl Chloride	<1	ppb
10/2/2017	1,1,1-Trichloroethane	<1	ppb
10/2/2017	1,1,2,2-Tetrachlorethane	<1	ppb
10/2/2017	1,1,2-Trichloroethane	<1	ppb
10/2/2017	1,1-Dichloroethane	<1	ppb
10/2/2017	1,1-Dichloroethene	<1	ppb
10/2/2017	1,2-dichlorobenzene	<1	ppb
10/2/2017	1,2-Dichloroethane	<1	ppb
10/2/2017	1,2-Dichloropropane	<1	ppb
10/2/2017	1,3-dichlorobenzene	<1	ppb
10/2/2017	1,4-dichlorobenzene	<1	ppb
10/2/2017	2-Chloroethylvinylether	<2	ppb
10/2/2017	Benzene	<1	ppb
10/2/2017	Bromodichloromethane	<1	ppb
10/2/2017	Bromoform	<1	ppb
10/2/2017	Bromomethane	<10	ppb
10/2/2017	Carbon Tetrachloride	<1	ppb
10/2/2017	Chlorobenzene	<1	ppb
10/2/2017	Chloroethane	<10	ppb
10/2/2017	Chloroform	2.4	ppb
10/2/2017	Chloromethane	<10	ppb
10/2/2017	cis-1,3-Dichloropropene	<1	ppb
10/2/2017	Dibromochloromethane	<1	ppb
10/2/2017	Ethylbenzene	<1	ppb
10/2/2017	Methylene Chloride	<5	ppb
10/2/2017	o- xylene	<1	ppb
10/2/2017	p&m xylene	<1	ppb
10/2/2017	Tetrachlorethene	4.7	ppb
10/2/2017	Toluene	4.3	ppb
10/2/2017	Trans-1,2-Dichloroethene	<1	ppb
10/2/2017	Trans-1,3-Dichloropropene	<1	ppb
10/2/2017	Trichlorethene	<1	ppb
10/2/2017	Trichlorofluoromethane	<1	ppb
10/2/2017	Vinyl Chloride	<1	ppb
11/6/2017	1,1,1-Trichloroethane	<1	ppb
11/6/2017	1,1,2,2-Tetrachlorethane	<1	ppb
11/6/2017	1,1,2-Trichloroethane	<1	ppb
11/6/2017	1,1-Dichloroethane	<1	ppb
11/6/2017	1,1-Dichloroethene	<1	ppb
11/6/2017	1,2-dichlorobenzene	<1	ppb
11/6/2017	1,2-Dichloroethane	<1	ppb
11/6/2017	1,2-Dichloropropane	<1	ppb
11/6/2017	1,3-dichlorobenzene	<1	ppb
11/6/2017	1,4-dichlorobenzene	<1	ppb
11/6/2017	2-Chloroethylvinylether	<2	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
9/12/2017	Ethylbenzene	<1	ppb
9/12/2017	Methylene Chloride	<5	ppb
9/12/2017	o- xylene	<1	ppb
9/12/2017	p&m xylene	<1	ppb
9/12/2017	Tetrachlorethene	<1	ppb
9/12/2017	Toluene	<1	ppb
9/12/2017	Trans-1,2-Dichloroethene	<1	ppb
9/12/2017	Trans-1,3-Dichloropropene	<1	ppb
9/12/2017	Trichlorethene	<1	ppb
9/12/2017	Trichlorofluoromethane	<1	ppb
9/12/2017	Vinyl Chloride	<1	ppb
10/3/2017	1,1,1-Trichloroethane	<1	ppb
10/3/2017	1,1,2,2-Tetrachlorethane	<1	ppb
10/3/2017	1,1,2-Trichloroethane	<1	ppb
10/3/2017	1,1-Dichloroethane	<1	ppb
10/3/2017	1,1-Dichloroethene	<1	ppb
10/3/2017	1,2-dichlorobenzene	<1	ppb
10/3/2017	1,2-Dichloroethane	<1	ppb
10/3/2017	1,2-Dichloropropane	<1	ppb
10/3/2017	1,3-dichlorobenzene	<1	ppb
10/3/2017	1,4-dichlorobenzene	<1	ppb
10/3/2017	2-Chloroethylvinylether	<2	ppb
10/3/2017	Benzene	<1	ppb
10/3/2017	Bromodichloromethane	<1	ppb
10/3/2017	Bromoform	<1	ppb
10/3/2017	Bromomethane	<10	ppb
10/3/2017	Carbon Tetrachloride	<1	ppb
10/3/2017	Chlorobenzene	<1	ppb
10/3/2017	Chloroethane	<10	ppb
10/3/2017	Chloroform	<1	ppb
10/3/2017	Chloromethane	<10	ppb
10/3/2017	cis-1,3-Dichloropropene	<1	ppb
10/3/2017	Dibromochloromethane	<1	ppb
10/3/2017	Ethylbenzene	<1	ppb
10/3/2017	Methylene Chloride	<5	ppb
10/3/2017	o- xylene	<1	ppb
10/3/2017	p&m xylene	<1	ppb
10/3/2017	Tetrachlorethene	<1	ppb
10/3/2017	Toluene	<1	ppb
10/3/2017	Trans-1,2-Dichloroethene	<1	ppb
10/3/2017	Trans-1,3-Dichloropropene	<1	ppb
10/3/2017	Trichlorethene	<1	ppb
10/3/2017	Trichlorofluoromethane	<1	ppb
10/3/2017	Vinyl Chloride	<1	ppb
11/7/2017	1,1,1-Trichloroethane	<1	ppb
11/7/2017	1,1,2,2-Tetrachlorethane	<1	ppb
11/7/2017	1,1,2-Trichloroethane	<1	ppb
11/7/2017	1,1-Dichloroethane	<1	ppb
11/7/2017	1,1-Dichloroethene	<1	ppb
11/7/2017	1,2-dichlorobenzene	<1	ppb
11/7/2017	1,2-Dichloroethane	<1	ppb
11/7/2017	1,2-Dichloropropane	<1	ppb
11/7/2017	1,3-dichlorobenzene	<1	ppb
11/7/2017	1,4-dichlorobenzene	<1	ppb
11/7/2017	2-Chloroethylvinylether	<2	ppb

Table 25: EPA VOC Data
Bucklin Point

EPA VOC Data
Bucklin Point 2017

Bucklin Point Influent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
11/6/2017	Benzene	<1	ppb
11/6/2017	Bromodichloromethane	<1	ppb
11/6/2017	Bromoform	<1	ppb
11/6/2017	Bromomethane	<10	ppb
11/6/2017	Carbon Tetrachloride	<1	ppb
11/6/2017	Chlorobenzene	<1	ppb
11/6/2017	Chloroethane	<10	ppb
11/6/2017	Chloroform	4.5	ppb
11/6/2017	Chloromethane	<10	ppb
11/6/2017	cis-1,3-Dichloropropene	<1	ppb
11/6/2017	Dibromochloromethane	<1	ppb
11/6/2017	Ethylbenzene	<1	ppb
11/6/2017	Methylene Chloride	<5	ppb
11/6/2017	o- xylene	<1	ppb
11/6/2017	p&m xylene	<1	ppb
11/6/2017	Tetrachlorethene	<1	ppb
11/6/2017	Toluene	1.7	ppb
11/6/2017	Trans-1,2-Dichloroethene	<1	ppb
11/6/2017	Trans-1,3-Dichloropropene	<1	ppb
11/6/2017	Trichlorethene	<1	ppb
11/6/2017	Trichlorofluoromethane	<1	ppb
11/6/2017	Vinyl Chloride	<1	ppb
12/4/2017	1,1,1-Trichloroethane	<1	ppb
12/4/2017	1,1,2,2-Tetrachlorethane	<1	ppb
12/4/2017	1,1,2-Trichloroethane	<1	ppb
12/4/2017	1,1-Dichloroethane	<1	ppb
12/4/2017	1,1-Dichloroethene	<1	ppb
12/4/2017	1,2-dichlorobenzene	<1	ppb
12/4/2017	1,2-Dichloroethane	<1	ppb
12/4/2017	1,2-Dichloropropane	<1	ppb
12/4/2017	1,3-dichlorobenzene	<1	ppb
12/4/2017	1,4-dichlorobenzene	<1	ppb
12/4/2017	2-Chloroethylvinylether	<2	ppb
12/4/2017	Benzene	<1	ppb
12/4/2017	Bromodichloromethane	<1	ppb
12/4/2017	Bromoform	<1	ppb
12/4/2017	Bromomethane	<10	ppb
12/4/2017	Carbon Tetrachloride	<1	ppb
12/4/2017	Chlorobenzene	<1	ppb
12/4/2017	Chloroethane	<10	ppb
12/4/2017	Chloroform	3.1	ppb
12/4/2017	Chloromethane	<10	ppb
12/4/2017	cis-1,3-Dichloropropene	<1	ppb
12/4/2017	Dibromochloromethane	<1	ppb
12/4/2017	Ethylbenzene	<1	ppb
12/4/2017	Methylene Chloride	<5	ppb
12/4/2017	o- xylene	<1	ppb
12/4/2017	p&m xylene	<1	ppb
12/4/2017	Tetrachlorethene	3.8	ppb
12/4/2017	Toluene	3.3	ppb
12/4/2017	Trans-1,2-Dichloroethene	<1	ppb
12/4/2017	Trans-1,3-Dichloropropene	<1	ppb
12/4/2017	Trichlorethene	<1	ppb
12/4/2017	Trichlorofluoromethane	<1	ppb
12/4/2017	Vinyl Chloride	<1	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	**Parameter**	**Result**	**Units**
11/7/2017	Benzene	<1	ppb
11/7/2017	Bromodichloromethane	<1	ppb
11/7/2017	Bromoform	<1	ppb
11/7/2017	Bromomethane	<10	ppb
11/7/2017	Carbon Tetrachloride	<1	ppb
11/7/2017	Chlorobenzene	<1	ppb
11/7/2017	Chloroethane	<10	ppb
11/7/2017	Chloroform	<1	ppb
11/7/2017	Chloromethane	<10	ppb
11/7/2017	cis-1,3-Dichloropropene	<1	ppb
11/7/2017	Dibromochloromethane	<1	ppb
11/7/2017	Ethylbenzene	<1	ppb
11/7/2017	Methylene Chloride	<5	ppb
11/7/2017	o- xylene	<1	ppb
11/7/2017	p&m xylene	<1	ppb
11/7/2017	Tetrachlorethene	<1	ppb
11/7/2017	Toluene	<1	ppb
11/7/2017	Trans-1,2-Dichloroethene	<1	ppb
11/7/2017	Trans-1,3-Dichloropropene	<1	ppb
11/7/2017	Trichlorethene	<1	ppb
11/7/2017	Trichlorofluoromethane	<1	ppb
11/7/2017	Vinyl Chloride	<1	ppb
12/5/2017	1,1,1-Trichloroethane	<1	ppb
12/5/2017	1,1,2,2-Tetrachlorethane	<1	ppb
12/5/2017	1,1,2-Trichloroethane	<1	ppb
12/5/2017	1,1-Dichloroethane	<1	ppb
12/5/2017	1,1-Dichloroethene	<1	ppb
12/5/2017	1,2-dichlorobenzene	<1	ppb
12/5/2017	1,2-Dichloroethane	<1	ppb
12/5/2017	1,2-Dichloropropane	<1	ppb
12/5/2017	1,3-dichlorobenzene	<1	ppb
12/5/2017	1,4-dichlorobenzene	<1	ppb
12/5/2017	2-Chloroethylvinylether	<2	ppb
12/5/2017	Benzene	<1	ppb
12/5/2017	Bromodichloromethane	<1	ppb
12/5/2017	Bromoform	<1	ppb
12/5/2017	Bromomethane	<10	ppb
12/5/2017	Carbon Tetrachloride	<1	ppb
12/5/2017	Chlorobenzene	<1	ppb
12/5/2017	Chloroethane	<10	ppb
12/5/2017	Chloroform	<1	ppb
12/5/2017	Chloromethane	<10	ppb
12/5/2017	cis-1,3-Dichloropropene	<1	ppb
12/5/2017	Dibromochloromethane	<1	ppb
12/5/2017	Ethylbenzene	<1	ppb
12/5/2017	Methylene Chloride	<5	ppb
12/5/2017	o- xylene	<1	ppb
12/5/2017	p&m xylene	<1	ppb
12/5/2017	Tetrachlorethene	<1	ppb
12/5/2017	Toluene	<1	ppb
12/5/2017	Trans-1,2-Dichloroethene	<1	ppb
12/5/2017	Trans-1,3-Dichloropropene	<1	ppb
12/5/2017	Trichlorethene	<1	ppb
12/5/2017	Trichlorofluoromethane	<1	ppb
12/5/2017	Vinyl Chloride	<1	ppb

Sanitary Manhole Sampling Data 2017

Date	Location	As (ppb)	BOD (ppm)	Cd (ppb)	Cr (ppb)	Cu (ppb)	CN (ppb)	Total Nitrogen (ppm)	Pb (ppb)	Hg (ppt)	Mo (ppb)	NH3-N (ppm)	Ni (ppb)	NO3NO2 (mg/L)	Se (ppb)	Ag (ppb)	Sn (ppb)	TKN (mgN/L)	TSS (ppm)	Zn (ppb)
1/4/2017	BS09	<0.500	158.10	0.122	0.732	18.768	5.170	19.950	3.293	33.40	0.506	13.30	0.921	0.350	<1.000	0.062	<5	19.600	208.00	62.461
1/11/2017	FS37	0.630	278.47	0.172	2.050	26.272	8.200	42.000	30.419	42.80	0.960	12.10	2.371	<0.100	<1.000	0.240		42.000	348.00	163.695
1/18/2017	BS13	0.840	357.69	0.066	0.714	39.105	<4.00	104.165	2.963	31.70	0.780	101.0	3.091	0.165	<1.000	0.085	<5	104.000	59.00	184.890
1/25/2017	FS43	1.345	484.63	0.379	3.698	70.266	<4.00	104.000	41.782	44.70	1.757	53.10	4.731	<0.100	<1.000	0.294		104.000	796.00	272.966
2/1/2017	BS17	<0.500	224.26	0.222	2.416	29.122	<4.00	73.600	2.627	51.70	0.933	49.00	3.646	<0.100	<1.000	0.261	<5	73.600	242.00	173.887
2/15/2017	BS05	3.456	152.18	0.077	0.817	19.668	9.720	71.921	1.183	20.30	0.787	19.90	1.852	0.921	<1.000	0.279	<5	71.000	55.33	89.599
2/22/2017	FS03	1.189	316.98	0.251	1.534	27.269	<4.00	123.000	58.596	42.00	1.280	70.30	3.716	<0.100	<1.000	0.055		123.000	276.00	182.263
3/1/2017	BS24	<0.500	92.51	0.569	0.617	21.996	<4.00	29.400	2.275	18.20	0.465	19.70	2.705	<0.100	<1.000	0.638	<5	29.400	89.60	74.461
3/8/2017	FS17	0.721	465.45	0.570	2.252	200.747	4.470	113.000	25.052	54.30	1.342	74.10	3.702	<0.100	<1.000	0.548		113.000	162.00	248.356
3/22/2017	FS24	<0.500	347.22	0.098	1.773	20.373	<4.00	84.200	5.950	16.80	0.719	62.20	3.387	<0.100	<1.000	0.132		84.200	196.00	110.927
3/29/2017	BS03	<0.500	37.10	0.061	0.479	5.281	4.270	14.780	0.513	9.890	<0.300	6.880	1.927	1.680	<1.000	0.042	<5	13.100	52.00	34.692
4/26/2017	BS10	0.610	330.50	0.108	2.704	55.000	<4.00	82.604	2.622	28.80	0.976	48.00	8.599	0.104	<1.000	0.072	<5	82.500	190.00	226.354
5/17/2017	BS04	<0.500	272.55	0.216	2.114	18.278	<4.00	30.180	0.404	57.70	1.369	2.470	4.036	1.780	<1.000	0.500	<5	28.400	468.00	176.313
5/25/2017	FS07	0.607	14.70	0.100	2.196	26.358	7.580	12.272	12.635	7.710	0.774	0.7570	8.103	0.572	<1.000	0.092		11.700	9.20	54.600
5/31/2017	BS02	<0.500	217.88	0.169	0.993	33.016	<4.00	33.300	5.118	33.30	0.919	19.60	2.467	<0.100	<1.000	0.700	<5	33.300	210.00	102.587
6/7/2017	FS19	1.104	856.43	0.245	1.436	30.123	<4.00	167.000	8.935	82.80	2.411	86.70	3.377	<0.100	1.547	0.589		167.000	884.00	178.497
6/14/2017	BS19	3.091	1604.24	0.747	10.996	203.456	<4.00	207.000	22.648	24.00	3.843	112.0	10.206	<0.100	1.833	1.006	<5	207.000	2813.33	857.759
6/21/2017	FS19	2.776	825.63	0.423	2.536	48.738	<10	183.000	26.622	18.00	2.442	123.0	4.862	<0.100	2.425	0.819		183.000	868.00	288.359
7/12/2017	BS15	<0.500	173.59	0.095	4.863	26.044	4.310	27.500	3.217	15.70	0.609	16.90	6.851	<0.100	<1.000	0.083	<5	27.500	248.00	82.872
7/19/2017	FS34	<0.500	277.96	0.152	1.585	15.009	4.480	30.900	40.600	21.00	0.540	17.30	1.839	<0.100	<1.000	0.268		30.900	393.33	78.306
7/26/2017	BS06	0.958	422.34	0.376	3.707	100.354	4.130	69.437	22.241	30.50	1.570	45.00	4.538	0.137	<1.000	0.296	<5	69.300	500.00	240.727
8/2/2017	FS14	<0.500	194.07	0.162	4.258	51.728	<4.00	34.200	3.449	48.40	0.911	21.10	4.073	<0.100	<1.000	0.240		34.200	216.92	123.679
8/9/2017	BS08	0.665	208.51	0.158	1.875	37.497	<4.00	70.300	9.415	32.60	0.846	50.50	2.544	<0.100	<1.000	0.149	<5	70.300	89.00	91.153
8/20/2017	FS42	<0.500	346.61	0.115	5.780	11.107	5.800	134.000	5.990	20.70	1.062	62.00	2.198	<0.100	<1.000	0.053		134.000	171.00	114.356
8/23/2017	BS01	0.621	516.79	0.161	1.994	50.788	<4.00	105.000	31.462	67.80	1.723	71.10	3.608	<0.100	<1.000	0.142	<5	105.000	596.00	168.181
8/30/2017	FS29	0.815	815.65	0.446	4.710	128.240	<4.00	72.800	12.880	72.10	1.860	39.50	4.348	<0.100	<1.000	0.652		72.800	2120.00	358.762
9/6/2017	BS20	0.605	208.50	0.105	0.664	20.122	<4.00	53.900	2.132	22.70	2.167	43.20	1.732	<0.100	<1.000	0.043	<5	53.900	69.00	82.126
9/14/2017	FS15	<0.500	290.73	0.145	2.317	46.498	<4.00	50.600	47.095	125.0	1.302	26.50	3.392	<0.100	<1.000	0.203		50.600	254.00	285.767
9/20/2017	BS07	0.649	315.56	0.138	2.109	55.589	4.080	84.000	11.111	20.10	1.366	70.20	2.912	<0.100	<1.000	0.087	<5	84.000	354.00	204.012
9/27/2017	BS03	<0.500	191.82	0.103	1.095	73.399	4.050	60.000	1.248	19.80	0.645	34.60	3.428	<0.100	<1.000	0.168	<5	60.000	188.00	121.912
10/4/2017	FS43	0.607	180.69	0.129	1.334	38.265	4.920	51.540	38.795	30.80	0.983	26.20	3.265	0.140	1.011	0.132		51.400	128.00	133.295
10/11/2017	BS23	<0.500	154.41	0.101	3.436	30.895	4.200	36.100	22.780	50.60	0.678	25.90	1.976	<0.100	<1.000	0.142	<5	36.100	164.00	112.575
10/18/2017	BS16	<0.500	230.45	0.141	1.141	27.796	<4.00	45.800	4.539	50.50	0.601	38.60	3.094	<0.100	<1.000	0.423	<5	45.800	176.00	117.356
10/25/2017	FS30	<0.500	171.61	0.051	0.624	8.276	<4.00	33.300	4.772	13.00	0.463	26.50	1.478	<0.100	<1.000	0.024		33.300	70.00	50.423
11/8/2017	FS38	<0.500	23.45	0.134	0.619	1.509	4.900	5.550	4.317	3.190	0.571	0.2990	1.856	3.830	<1.000	0.100		1.720	35.50	10.674
11/15/2017	FS16	1.222	125.79	1.163	3.421	182.725	5.660	27.200	28.510	11.90	0.952	14.90	8.441	<0.100	<1.000	19.777		27.200	118.00	196.568
11/29/2017	BS26	0.769	711.85	0.292	5.195	76.630	<8.00	55.700	12.349	3.170	1.070	29.90	6.058	<0.100	<1.000	0.340	<5	55.700	142.00	201.253
12/6/2017	FS01	3.157	1550.17	0.741	15.546	455.744	6.880	207.000	36.607	13.30	5.543	57.50	12.573	<0.100	<4.000	0.998		207.000	3820.00	824.970
12/13/2017	BS04	<0.500	143.95	0.092	0.763	8.616	4.780	18.762	0.478	9.900	0.477	7.250	1.272	0.362	<1.000	0.107	<5	18.400	140.00	62.862

BS= Bucklin Point Sanitary Manhole FS= Field's Point Sanitary Manhole

Table 26: Sanitary Manhole Sampling Data

NBC Significant Industrial User Sample Results

User Name	Location	Sample Date	Type (Grab or Composite)	District	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Ni mg/L	Ag mg/L	Zn mg/L	As mg/L	Hg ng/L	CN ppb	TTO* ppb	BOD mg/L	TSS mg/L	Oil and Grease mg/L	Ammonia mg/L	Total Kjeldahl Nitrogen mg/L	NO3NO2 mg/L	Total Nitrogen mg/L	Total Residual Chlorine ppb	n-Amyl Acetate ug/L	Acetone* ug/L	Isopropyl Acetate ug/L	Ethyl Acetate ug/L
9W HALO OPCO	#1	7/17/2017	C	BP												507.55	60.00	31.85	0.3450	9.880	0.848	10.728					
9W HALO OPCO	#1	11/20/2017	C	BP												178.29	45.00	18.49	1.100	11.100	1.110	12.210					
A. Harrison & Company, Inc.	#1	3/8/2017	G	FP											28.9			5.137	<0.1	0.974	<0.100	0.974					
A. Harrison & Company, Inc.	#1	9/20/2017	G	FP											<100			8.282	<0.1	0.503	<0.100	0.503					
Accent Plating Company	#1	5/17/2017	C	BP	<0.0150	<0.0750	0.219	<0.0750	<0.0500	<0.0250	<0.0600			4.540					0.1710	4.310	1.380	5.690					
Accent Plating Company	#1	11/17/2017	C	BP	<0.015	<0.075	0.433	<0.075	0.107	<0.025	0.117			16.60													
A & F Plating Company	#1	5/2/2017	C	FP	<0.0150	<0.0750	0.0867	<0.0750	0.282	<0.0250	<0.0600	<0.005		137.0					0.1880	0.518	0.140	0.658					
A & F Plating Company	#1	10/24/2017	C	FP	<0.015	<0.075	0.135	<0.075	0.237	<0.025	<0.060	<0.005		116.0					0.2160	<0.500	<0.100	<0.500					
Al-Jac Produce	#1	5/25/2017	C	FP												14764.00	33460.00		44.20	902.000	10.100	912.100					
Al-Jac Produce	#1	12/5/2017	C	FP												3821.75	21533.33		169.0	222.000	761.000	983.000					
Alloy Holdings, LLC	#1	1/31/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.535	<0.005							<0.1	<0.500	<0.100	<0.500					
Alloy Holdings, LLC	#1	8/29/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005							<0.1	<0.500	0.117	<0.500					
Angelica Textile Service	#1	2/20/2017	C	BP												311.89	33.79	11.98	1.380	12.000	1.580	13.580					
Angelica Textile Service	#1	6/12/2017	C	BP												412.29	36.97	20.68	1.060	10.400	1.100	11.500					
Armbrust International, Ltd.	#1	2/15/2017	C	FP	<0.0150	<0.0750	0.302	<0.0750	0.202	0.139	0.196	<0.005		56.30					0.2930	15.200	<0.100	15.200					
Armbrust International, Ltd.	#1	8/9/2017	C	FP	<0.0150	<0.0750	0.235	<0.0750	0.434	0.0558	0.128	<0.005		25.40					0.1380	13.200	<0.100	13.200					
Aspen Aerogels Rhode Island, LLC	#1	4/19/2017	C	BP											<10	15234.25	3292.00		8300	8890.000	0.463	8890.463					
Aspen Aerogels Rhode Island, LLC	#1	12/4/2017	C	BP											1.6	13995.50	280.00		13700	14600.000	<0.100	14600.094					
Aspen Aerogels Rhode Island, LLC	#2	4/19/2017	G	BP											4.6	59096.00	< 2		3750	3850.000	<0.100	3850.0696					
Aspen Aerogels Rhode Island, LLC	#2	12/4/2017	G	BP											<100	62158.00	< 2		5290	5380.000	<0.100	5380.0483					
B. Deltoro & Sons, Inc.	#1	5/31/2017	C	FP												5150.86	6016.00		10.60	263.000	2.350	265.350					
B. Deltoro & Sons, Inc.	#1	12/7/2017	C	FP												6189.30	12800.00		10.10	146.000	2.590	148.590					
Bliss Manufacturing Co., Inc.	#1	3/15/2017	C	BP	<0.0150	<0.0750	0.464	<0.0750	<0.0500	0.196	<0.0600			104.0					<0.1	1.030	1.730	2.760					
Bliss Manufacturing Co., Inc.	#1	10/18/2017	C	BP	<0.015	<0.075	0.387	<0.075	<0.050	<0.025	<0.060			5.840					<0.1	1.820	2.910	4.730					
Chemart Company	#1	2/28/2017	C	BP	<0.0150	<0.0750	0.334	<0.0750	0.377	<0.0250	<0.0600			25.50					1.260	6.400	<0.100	6.400					
Chemart Company	#1	8/29/2017	C	BP	<0.0150	<0.0750	0.650	<0.0750	0.401	<0.0250	0.0796			15.9					0.5660	3.360	0.128	3.488					
Cintas Corporation	#1	4/20/2017	C	BP	<0.0150	<0.0750	0.0588	<0.0750	0.0857	<0.0250	0.241			10.20	60.2	324.65	81.00	135.1	<0.1	10.300	<0.100	10.300					
Cintas Corporation	#1	11/21/2017	C	BP	<0.015	<0.075	0.112	<0.075	<0.050	<0.025	0.767			8.950	13.6	299.93	82.00	NA	<0.1	13.500	<0.100	13.500					
Cintas Corporation	#1	12/18/2017	C	BP														35.23									
Conopco, Inc. (Site #1)	#1	3/28/2017	C	BP											763.9				<0.1	<0.500	1.070	1.070					
Conopco, Inc. (Site #1)	#1	11/29/2017	C	BP											131				<0.1	<0.500	1.160	1.160					
Contract Specialties, Inc.	#1	4/5/2017	C	FP	<0.0150	<0.0750	0.0663	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		4.150					<0.1	<0.500	0.219	<0.500					
Contract Specialties, Inc.	#1	11/13/2017	C	FP	<0.015	<0.075	0.111	<0.075	<0.050	<0.025	<0.060	<0.005		4.770					<0.1	1.280	<0.100	1.280					
Darlene Group	#1	1/9/2017	C	BP	<0.0150	<0.0750	0.272	<0.0750	<0.0500	<0.0250	0.0692			4.730					0.1050	2.730	0.763	3.493					
Darlene Group	#1	1/10/2017	C	BP	<0.0150	<0.0750	0.258	<0.0750	<0.0500	<0.0250	0.0624			4.530					<0.1	0.657	0.743	1.400					
Denison Acquistion Company, LLC	#1	2/21/2017	G	BP	<0.0150	<0.0750	0.065	<0.0750	<0.0500	<0.0250	0.290				1238.4	505.21	12.04	17.74	<0.1	1.470	<0.100	1.470		<10	1200	<10	<10
Denison Acquistion Company, LLC	#1	8/24/2017	G	BP	<0.0150	<0.0750	0.0249	<0.0750	<0.0500	<0.0250	0.089				322.7	178.58	17.33	63.09	<0.1	0.908	<0.100	0.908		<10	290	<10	<10
DFI-EP, LLC	#1	1/3/2017	C	FP	<0.0150	<0.0750	0.091	<0.0750	0.130	<0.0250	0.510	<0.005		339.0					<0.1	<0.500	0.655	0.655					
DFI-EP, LLC	#1	1/9/2017	C	FP	<0.0150	<0.0750	0.044	<0.0750	0.316	<0.0250	2.45	<0.005		61.40					<0.1	<0.500	0.161	<0.500					
DFI-EP, LLC	#1	1/24/2017	C	FP	<0.0150	<0.0750	0.0255	<0.0750	0.170	<0.0250	0.250	<0.005		219.0					<0.1	<0.500	<0.100	<0.500					
DiFruscia Industries, Inc.	#1	1/11/2017	C	FP	<0.0150	0.165	0.125	<0.0750	0.448	<0.0250	0.175	<0.005		11.40					0.4110	<0.500	16.900	16.900					
DiFruscia Industries, Inc.	#1	10/4/2017	C	FP	0.041	0.125	1.312	<0.075	1.323	<0.025	2.905	<0.005		81.50					<0.1	0.867	23.000	23.867					
DiFruscia Industries, Inc.	#1	11/7/2017	C	FP	<0.015	0.848	0.366	<0.075	1.093	<0.025	11.728	<0.005		7.290					<0.1	<0.500	27.600	27.600					
DiFruscia Industries, Inc.	#1	11/30/2017	C	FP	<0.015	0.130	0.401	<0.075	1.347	<0.025	1.913	<0.005		15.10					<0.1	<0.500	11.600	11.600					
Dominion Energy Manchester St., Inc.	#1	5/3/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005							<0.1	<0.500	0.126	<0.500					
Dominion Energy Manchester St., Inc.	#1	10/31/2017	C	FP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060	<0.005							0.1310	1.670	1.560	3.230					
Eagle Laundry Inc.	#1	4/18/2017	C	FP												194.98	46.00	50.99	1.450	6.890	0.227	7.117					
Eagle Laundry Inc.	#1	11/20/2017	C	FP												139.46	77.00	20.71	2.160	9.090	0.309	9.399					
Eaton Aerospace	#1	10/12/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			5.820					<0.1	<0.500	0.263	<0.500					
Eaton Aerospace	#1	10/24/2017	C	BP	<0.015	<0.075	0.036	<0.075	0.054	<0.025	<0.060			<4.00					<0.1	<0.500	6.950	6.950					
Ecological Fibers, Inc.	#1	2/6/2017	C	BP	<0.0150	<0.0750	<0.0200	<0.0750	0.0827	<0.0250	0.977				12.3	122.00	8.00		60.60	87.500	0.536	88.036					
Ecological Fibers, Inc.	#1	9/12/2017	C	BP	<0.0150	<0.0750	0.0224	<0.0750	0.0792	<0.0250	1.77				23.7	173.58	36.00		119.0	151.000	0.312	151.312					

*TTO (Total Toxic Organics) includes volatile organic compounds, shown in detail in Table 27B. Acetone is included in the TTO as well as shown seperately.

NBC Significant Industrial User Sample Results

User Name	Location	Sample Date	Type (Grab or Composite)	District	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Ni mg/L	Ag mg/L	Zn mg/L	As mg/L	Hg ng/L	CN ppb	TTO* ppb	BOD mg/L	TSS mg/L	Oil and Grease mg/L	Ammonia mg/L	Total Kjeldahl Nitrogen mg/L	NO3NO2 mg/L	Total Nitrogen mg/L	Total Residual Chlorine ppb	n-Amyl Acetate ug/L	Acetone* ug/L	Isopropyl Acetate ug/L	Ethyl Acetate ug/L
Ecological Fibers, Inc.	#1	11/2/2017	C	BP	<0.015	<0.075	0.032	<0.075	0.071	<0.025	0.503				24.1	285.87	2.86		124.0	158.000	0.358	158.358					
Electrolizing, Inc.	#1	1/12/2017	C	FP	<0.0150	0.268	0.0623	<0.0750	<0.0500	<0.0250	1.05	<0.005		4.870					0.6710	NR	29.400	29.400					
Electrolizing, Inc.	#1	7/26/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	1.85	<0.005		5.490					0.4510	<2.500	27.800	27.800					
E&M Enterprises, LTD	#1	1/17/2017	C	FP	<0.0150	<0.0750	0.358	<0.0750	0.302	<0.0250	<0.0600	<0.005		356.0					<0.1	<0.500	<0.100	<0.500					
E&M Enterprises, LTD	#1	7/18/2017	C	FP	<0.0150	<0.0750	0.252	<0.0750	0.626	0.111	<0.0600	<0.005		128.0					0.180	0.700	0.115	0.815					
Finlay Extracts & Ingredients USA, Inc.	#1	6/13/2017	C	BP												5624.50	142.67		5.980	105.000	1.540	106.540					
Finlay Extracts & Ingredients USA, Inc.	#1	10/3/2017	C	BP												14371.20	94.00		1.920	17.100	0.366	17.466					
G. Tanury Plating Company	#1	1/25/2017	C	FP	<0.0150	<0.0750	0.435	<0.0750	0.254	<0.0250	0.0865	<0.005		43.30					<0.1	<0.500	0.355	<0.500					
G. Tanury Plating Company	#1	7/31/2017	C	FP	<0.0150	<0.0750	0.691	<0.0750	0.262	<0.0250	0.110	<0.005		884.0					0.1090	1.070	0.281	1.351					
General Cable Industries, LLC	#1	1/24/2017	C	BP	<0.0150	<0.0750	0.202	0.0814	<0.0500	<0.0250	0.667					598.89	116.00	7.941	<0.1	14.300	<0.100	14.300					
General Cable Industries, LLC	#1	7/31/2017	C	BP	<0.0150	<0.0750	0.216	<0.0750	<0.0500	<0.0250	0.719					330.50	109.00	8.831	<0.1	17.800	<0.100	17.800					
Godfrey and Wing Inc.	#1	5/9/2017	C	BP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600				49.9				<0.1	<0.500	<0.100	<0.500					
Godfrey and Wing Inc.	#1	10/24/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060				49.2				<0.1	<0.500	0.152	<0.500					
Hillview Auto Body	#1	4/25/2017	G	FP	<0.0150	<0.0750	0.175	<0.0750	<0.0500	<0.0250	0.267	<0.005			7.2			27.47	0.4710	3.590	0.229	3.819					
Hillview Auto Body	#1	10/24/2017	G	FP	<0.015	<0.075	0.081	<0.075	<0.050	<0.025	0.448	<0.005			4.7			10.77	<0.1	1.500	0.199	1.699					
Hord Crystal Corporation	#1	3/8/2017	G	BP	<0.0150	<0.0750	0.272	<0.0750	<0.0500	<0.0250	0.0914			12.30					3.920	66.500	12.800	79.300					
Hord Crystal Corporation	#1	10/18/2017	G	BP	<0.015	<0.075	0.111	<0.075	<0.050	<0.025	<0.060			13.10					4.900	112.000	18.700	130.700					
HP Services, Inc.	#1	4/20/2017	G	BP	<0.0150	<0.0750	0.0235	<0.0750	<0.0500	<0.0250	<0.0600			7.620				<4.0	<0.1	<0.500	0.569	0.568					
HP Services, Inc.	#1	10/3/2017	G	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			4.840				<4.0	<0.1	<0.500	0.310	<0.500					
Ideal Plating & Polishing Co., Inc.	#1	1/31/2017	C	FP	<0.0150	0.149	0.276	<0.0750	0.355	<0.0250	0.386	<0.005		133.0					<0.1	<0.500	<0.100	<0.500					
Ideal Plating & Polishing Co., Inc.	#1	8/1/2017	C	FP	<0.0150	0.525	0.418	<0.0750	0.409	<0.0250	0.336	<0.005		165.0					0.8730	1.530	1.030	2.560					
Induplate LLC	#1	1/19/2017	C	FP	<0.0150	<0.0750	0.0931	<0.0750	0.0943	<0.0250	0.173	<0.005		5.580													
Induplate LLC	#1	7/24/2017	C	FP	<0.0150	<0.0750	0.0728	<0.0750	<0.0500	<0.0250	0.334	<0.005		17.70					<0.1	0.505	2.480	2.985					
Interplex Engineered Products, Inc.	#1	3/16/2017	C	BP	<0.0150	<0.0750	0.0502	<0.0750	0.159	<0.0250	<0.0600			22.50					0.4270	1.540	0.789	2.329					
Interplex Engineered Products, Inc.	#1	11/20/2017	C	BP	<0.015	<0.075	0.184	<0.075	0.428	<0.025	<0.060			7.820					<0.1	1.440	<0.100	1.440					
International Chromium Plating	#1	2/8/2017	C	FP	<0.0150	0.137	0.0317	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		8.440					<0.1	<0.500	<0.100	<0.500					
International Chromium Plating	#1	11/1/2017	C	FP	<0.015	<0.075	<0.020	<0.075	0.341	<0.025	<0.060	<0.005		6.760					0.2270	<0.500	0.782	0.782					
International Etching, Inc.	#1	1/26/2017	C	FP	<0.0150	<0.0750	0.146	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		6.050					2.330	16.900	<0.100	16.900					
International Etching, Inc.	#1	8/23/2017	C	FP	<0.0150	<0.0750	5.46	<0.0750	0.0566	<0.0250	0.491	<0.005		18.60					22.10	337.000	0.284	337.284					
International Etching, Inc.	#1	11/1/2017	C	FP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060	<0.005		6.140					<0.1	<0.500	0.102	<0.500					
International Insignia Corporation	#1	3/28/2017	C	FP	<0.0150	<0.0750	0.295	<0.0750	0.455	<0.0250	0.0795	<0.005		7.830					1.510	8.970	0.146	9.116					
International Insignia Corporation	#1	9/21/2017	C	FP	<0.015	<0.075	1.922	<0.075	0.762	<0.025	0.359	<0.005		8.130					2.950	18.600	1.000	19.600					
International Insignia Corporation	#1	11/16/2017	C	FP	<0.015	<0.075	0.434	<0.075	0.527	<0.025	0.117	<0.005		6.240					1.470	13.300	0.128	13.428					
Ira Green, Inc.	#1	3/7/2017	C	FP	<0.0150	<0.0750	0.263	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		5.410					<0.1	0.609	<0.100	0.612					
Ira Green, Inc.	#1	9/6/2017	C	FP	<0.0150	<0.0750	0.113	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		7.81					<0.1	<0.500	0.128	<0.500					
Sample Location #1: Final wastewater collection sump	#1	4/20/2017	C	BP												1499.75	54.00		0.860	17.300	1.280	18.580					
Sample Location #1: Final wastewater collection sump	#1	11/29/2017	C	BP												39.68	< 2		<0.1	0.725	0.779	1.504					
John H. Collins & Sons Company	#1	2/28/2017	C	BP	<0.0150	<0.0750	0.0598	<0.0750	<0.0500	<0.0250	0.246			18.00	51948			<4.0	13.60	23.500	5.010	28.510					
John H. Collins & Sons Company	#1	10/18/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	0.189			26.50	841.6			9.360	0.1910	9.640	0.462	10.102					
Lincoln Manufacturing, Inc.	#1	2/22/2017	G	BP														544.0	1.430	300.000	6.410	306.410					
Lincoln Manufacturing, Inc.	#1	3/7/2017	G	BP														45.32	<0.1	30.100	18.200	48.300					
Liquid Blue	#1	3/13/2017	G	BP	<0.0150	<0.0750	0.0231	<0.0750	<0.0500	<0.0250	0.156					1739.04	202.00		2.550	61.500	<1.000	61.500					
Liquid Blue	#1	8/24/2017	G	BP	<0.0150	0.141	<0.0200	<0.0750	<0.0500	<0.0250	0.0621					710.23	48.50		9.270	253.000	<0.100	253.000					
Liquid Blue	#2	3/13/2017	G	BP	<0.0150	<0.0750	0.0725	<0.0750	<0.0500	<0.0250	0.108					95.54	100.00		0.4590	3.280	<0.100	3.280					
Mahr Federal Inc.	#1	3/13/2017	C	FP	<0.0150	1.11	0.0572	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		5.780	0.6			<4.0		<0.500	0.119						
Mahr Federal Inc.	#1	9/20/2017	C	FP	<0.015	0.615	0.036	<0.075	<0.050	<0.025	<0.060	<0.005		<4.00	2.4			<4.0	<0.1	<0.500	0.219	<0.500					
Lincoln Manufacturing, Inc.	#1	4/25/2017	G	BP														4.167	0.1670	12.000	17.000	29.000					
Lincoln Manufacturing, Inc.	#1	10/20/2017	G	BP														92.27	0.3370	113.000	5.340	118.340					

*TTO (Total Toxic Organics) includes volatile organic compounds, shown in detail in Table 27B. Acetone is included in the TTO as well as shown seperately.

Table 27A: NBC SIU Data

NBC Significant Industrial User Sample Results

User Name	Location	Sample Date	Type (Grab or Composite)	District	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Ni mg/L	Ag mg/L	Zn mg/L	As mg/L	Hg ng/L	CN ppb	TTO* ppb	BOD mg/L	TSS mg/L	Oil and Grease mg/L	Ammonia mg/L	Total Kjeldahl Nitrogen mg/L	NO3NO2 mg/L	Total Nitrogen mg/L	Total Residual Chlorine ppb	n-Amyl Acetate ug/L	Acetone* ug/L	Isopropyl Acetate ug/L	Ethyl Acetate ug/L
Materion Technical Materials, Inc.	#1	1/25/2017	C	BP	<0.0150	<0.0750	0.0592	<0.0750	<0.0500	0.0312	<0.0600			4.700					1.050	6.960	<0.100	6.960					
Materion Technical Materials, Inc.	#1	5/2/2017	C	BP	<0.0150	<0.0750	0.0847	<0.0750	1.14	0.081	<0.0600			<4.00					0.750	28.100	0.185	28.285					
Materion Technical Materials, Inc.	#1	10/17/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			<4.00					0.1880	2.090	0.167	2.257					
Metallurgical Solutions, Inc.	#1	2/22/2017	G	FP	<0.0150	2.17	0.479	<0.0750	0.445	<0.0250	0.112	0.00678		49.50					0.9920	<2.500	646.000	646.000					
Metallurgical Solutions, Inc.	#1	9/6/2017	G	FP	<0.0150	1.61	0.430	<0.0750	0.736	<0.0250	0.311	0.0075		80.3					<0.1	<0.500	1380.000	1380.000					
Monarch Metal Finishing Co., Inc.	#1	2/22/2017	C	FP	<0.0150	<0.0750	0.0347	<0.0750	0.0826	<0.0250	<0.0600	<0.005		70.10					<0.1	1.340	<0.100	1.340					
Monarch Metal Finishing Co., Inc.	#1	10/12/2017	C	FP	<0.015	<0.075	1.043	<0.075	0.383	<0.025	0.091	<0.005		793.0					4.650	4.800	19.100	23.900					
Monarch Metal Finishing, Inc.	#1	1/24/2017	C	FP	<0.0150	<0.0750	0.680	<0.0750	1.42	<0.0250	0.597	<0.005		206.0					21.80	25.100	0.579	25.679					
Monarch Metal Finishing, Inc.	#1	8/1/2017	C	FP	<0.0150	<0.0750	0.790	<0.0750	0.847	<0.0250	0.620	<0.005		<4.00					15.80	19.200	0.556	19.756					
Murdock Webbing Co., Inc.	#1	2/2/2017	C	BP	<0.0150	0.538	0.122	<0.0750	<0.0500	<0.0250	<0.0600					1302.44	274.52	87.47	10.30	76.600	1.310	77.910					
Murdock Webbing Co., Inc.	#1	8/10/2017	C	BP	<0.0150	0.0930	0.644	<0.0750	<0.0500	<0.0250	0.0644					1338.44	54.91	146.9	23.10	69.200	0.654	69.854					
Narragansett Jewelry	#1	2/6/2017	C	FP	<0.0150	<0.0750	0.0899	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		<4.00					<0.1	<0.500	0.210	<0.500					
Narragansett Jewelry	#1	8/23/2017	C	FP	<0.0150	<0.0750	0.0701	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		4.660					<0.1	0.614	0.213	0.827					
New England Linen Supply, Inc.	#1	2/28/2017	C	BP												121.73	102.00	219.0	1.080	6.290	1.470	7.760					
New England Linen Supply, Inc.	#1	11/20/2017	C	BP												727.82	154.00	185	0.5090	8.780	1.070	9.850					
NGC INC.	#1	6/5/2017	C	FP												6057.60	258.00	71.25	29.10	947.000	0.409	947.409					
Ocean State Peeled Potatoes	#1	5/31/2017	C	FP												2754.96	3388.00		2.270	59.100	0.121	59.221					
Ocean State Peeled Potatoes	#1	12/13/2017	C	FP												4847.14	6676.00		12.50	130.000	0.820	130.820					
The Okonite Company	#1	5/15/2017	C	BP	<0.0150	<0.0750	0.114	<0.0750	<0.0500	<0.0250	0.266							<4.0	<0.1	2.620	3.870	6.490					
The Okonite Company	#1	12/12/2017	C	BP	<0.015	<0.075	0.254	<0.075	<0.050	<0.025	0.679							7.664	<0.1	3.090	4.250	7.340					
Organic Dyes and Pigments, LLC	#1	4/25/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.129	<0.005			<100	49.51	72.00	9.441	4.740	15.900	<0.100	15.900					
Organic Dyes and Pigments, LLC	#1	8/8/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.0964	<0.005			10.4	23.55	16.00	<4.0	0.2040	1.200	0.406	1.606					
Pawtucket Power Associates	#1	5/17/2017	G	BP	<0.0150	<0.0750	0.0294	<0.0750	<0.0500	<0.0250	<0.0600							<4.0	3.270	6.900	1.060	7.960					
Pawtucket Power Associates	#1	7/19/2017	G	BP	<0.0150	<0.0750	0.0499	<0.0750	<0.0500	<0.0250	<0.0600							<4.0	5.700	9.030	0.530	9.560					
Pawtucket Power Associates	#2	7/27/2017	G	BP	<0.0150	0.0867	<0.0200	<0.0750	0.0656	<0.0250	0.130								<0.1	0.724	3.490	4.214					
Pawtucket Power Associates	#3	7/12/2017	G	BP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600								<0.1	<0.500	0.778	0.778					
Pawtucket Power Associates	#4	5/17/2017	C	BP	<0.0150	<0.0750	0.0308	<0.0750	<0.0500	<0.0250	<0.0600								<0.1	2.030	1.960	3.990					
Pawtucket Power Associates	#4	7/19/2017	C	BP	<0.0150	<0.0750	0.0447	<0.0750	<0.0500	<0.0250	0.0607								<0.1	1.890	1.320	3.210					
Pilgrim Screw Corporation	#1	4/10/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.164	<0.005		36.00				<4.0	8.520	NR	7890.000	7890					
Pilgrim Screw Corporation	#1	9/20/2017	G	FP	<0.0150	0.162	<0.0200	<0.0750	<0.0500	<0.0250	0.954	<0.005		94.20				<4.0	0.5960	15.400	542.000	557.400					
Prov. Journal Co. - Production Facility	#1	5/9/2017	C	FP	<0.0150	<0.0750	0.025	<0.0750	<0.0500	<0.0250	<0.0600	<0.005						4.561	1.760	36.600	0.110	36.710					
Prov. Journal Co. - Production Facility	#1	11/15/2017	C	FP	<0.015	<0.075	0.025	<0.075	<0.050	<0.025	0.091	<0.005						6.388	0.1710	34.000	<0.100	34.000					
Providence Specialty Products	#1	4/5/2017	G	FP												597.92	72.00	53.79	0.440	30.800	14.700	45.500					
Providence Specialty Products	#1	11/15/2017	G	FP												89.46	49.67	67.25	<0.1	2.840	14.600	17.440					
Providence Specialty Products	#2	3/30/2017	G	FP												10280.43	548.00	1800	3.500	296.000	0.195	296.195					
Providence Specialty Products	#2	11/15/2017	G	FP												7363.00	1136.00	197	8.270	476.000	0.120	476.120					
Providence Metallizing Company, Inc.	#1	5/31/2017		BP	<0.0150	0.303	0.0806	<0.0750	0.235	<0.0250	<0.0600			12.90					<0.1	<0.500	1.070	1.070					
Providence Metallizing Company, Inc.	#1	11/29/2017		BP	<0.015	0.272	0.174	<0.075	0.195	<0.025	<0.060			<4.00					<0.1	<0.500	0.767	0.767					
RI Resource Recovery	#4	6/1/2017	G	FP															<0.1	18.800	25.700	44.500					
RI Resource Recovery	#1	4/18/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	0.122	6.820	63.10	20.5	55.92	92.00	<4.0	27.80	56.200	40.200	96.400					
RI Resource Recovery	#1	5/31/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	0.0509	<0.0250	<0.0600	0.153	3.230	18.90	4.3	42.44	61.33	<4.0	0.5320	23.600	2.270	25.870					
RI Resource Recovery	#1	7/11/2017	C	FP	<0.0150	0.0773	<0.0200	<0.0750	0.0725	<0.0250	0.088	0.152	2.170	32.20	<10	54.72	21.84	NR	<0.1	14.800	0.532	15.332					
RI Resource Recovery	#1	8/29/2017	C	FP	<0.0150	0.120	<0.0200	<0.0750	0.0676	<0.0250	<0.0600	0.224	2.740	32.5	<10	<14.10	36.67	4.775	0.1230	25.800	0.159	25.959					
RI Resource Recovery	#1	10/31/2017	C	FP	<0.015	0.118	<0.020	<0.075	0.074	<0.025	<0.060	0.185	2.530	53.00	<10	12.94	31.67	<4.0	0.180	26.400	5.420	31.820					
RI Resource Recovery	#1	12/12/2017	C	FP	<0.015	0.087	<0.020	<0.075	0.060	<0.025	<0.060	0.168	37.00	101.0	<10	34.50	30.00	<4.0	2.410	28.600	41.900	70.500					
Stackbin Corporation	#1	5/5/2017	G	BP	<0.0150	<0.0750	0.0956	<0.0750	<0.0500	<0.0250	0.132			9.400				17.62	<0.1	21.000	<0.100	21.000					
Stackbin Corporation	#1	10/5/2017	G	BP	<0.015	<0.075	0.106	<0.075	<0.050	<0.025	0.210			12.40				28.05	<0.1	16.100	0.174	16.274					

*TTO (Total Toxic Organics) includes volatile organic compounds, shown in detail in Table 27B. Acetone is included in the TTO as well as shown seperately.

Table 27A: NBC SIU Data

NBC Significant Industrial User Sample Results

User Name	Location	Sample Date	Type (Grab or Composite)	District	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Ni mg/L	Ag mg/L	Zn mg/L	As mg/L	Hg ng/L	CN ppb	TTO* ppb	BOD mg/L	TSS mg/L	Oil and Grease mg/L	Ammonia mg/L	Total Kjeldahl Nitrogen mg/L	NO3NO2 mg/L	Total Nitrogen mg/L	Total Residual Chlorine ppb	n-Amyl Acetate ug/L	Acetone* ug/L	Isopropyl Acetate ug/L	Ethyl Acetate ug/L
Stackbin Corporation	#2	5/5/2017	G	BP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600			17.80					<0.1	3.170	11.000	14.170					
Stackbin Corporation	#2	10/5/2017	G	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			13.30					<0.1	3.110	19.900	23.010					
Summit Manufacturing Corporation	#1	3/9/2017	C	BP	<0.0150	2.67	0.553	<0.0750	0.0811	<0.0250	<0.0600			10.50					<0.1	<0.500	11.200	11.200					
Summit Manufacturing Corporation	#1	11/7/2017	C	BP	<0.015	0.158	0.402	<0.075	0.304	<0.025	<0.060			6.430					<0.1	<0.500	6.370	6.370					
Surface Coatings Division, MFB LLC	#1	3/13/2017	C	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		7.190						1.040	<0.100						
Surface Coatings Division, MFB LLC	#1	7/12/2017	C	FP	<0.0150	<0.0750	0.0427	<0.0750	0.514	<0.0250	0.0638	<0.005		8.350					1.080	1.430	0.539	1.969					
Tanury Industries	#1	2/8/2017	C	BP	<0.0150	1.18	0.373	<0.0750	0.659	0.123	<0.0600			92.00					1.310	3.130	0.721	3.851					
Tanury Industries	#1	8/16/2017	C	BP	<0.0150	0.465	0.358	<0.0750	0.384	0.0298	<0.0600			40.30					1.670	3.820	0.640	4.46					
Technodic, Inc.	#1	4/19/2017	C	FP	<0.0150	0.759	0.237	<0.0750	0.0786	<0.0250	<0.0600	<0.005		15.10					0.3820	<0.500	8.360	8.360					
Technodic, Inc.	#1	11/7/2017	C	FP	<0.015	0.834	0.235	<0.075	0.054	<0.025	0.075	<0.005		13.30					<0.1	0.506	6.580	7.086					
Tedor Pharma Inc.	#1	3/9/2017	G	BP	<0.0150	<0.0750	0.303	<0.0750	0.0657	<0.0250	0.419				593.4	90.62	152.00	<4.0	5.180	22.000	<0.100	22.000		<10	590	<10	<10
Tedor Pharma Inc.	#1	9/12/2017	G	BP	<0.0150	<0.0750	0.0623	<0.0750	<0.0500	<0.0250	0.217				352.6	115.10	26.67	<4.0	4.150	12.900	<0.100	12.900		<10	350	<10	<10
Teknicote Tank T-7	#1	5/3/2017	C	BP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600			4.970					1.040	19.000	0.124	19.124					
Teknicote Tank T-7	#1	11/7/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			5.220					<0.1	19.200	25.500	44.700					
TEKNOR_APEX	#1	5/1/2017	C	BP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.256							<4.0	<0.1	0.683	0.674	1.357					
TEKNOR_APEX	#1	11/28/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	1.880							26.06	<0.1	0.954	<0.100	0.954					
Tiffany and Company	#1	3/27/2017	C	BP	<0.0150	<0.0750	0.0261	<0.0750	<0.0500	<0.0250	<0.0600			<4.00					0.2190	2.020	<0.100	2.020					
Tiffany and Company	#1	12/5/2017	C	BP	<0.015	<0.075	<0.020	<0.075	<0.050	<0.025	<0.060			4.460					<0.1	0.606	<0.100	0.606					
Tri-Jay Company	#1	1/11/2017	C	FP	<0.0150	0.0867	1.15	<0.0750	0.349	<0.0250	0.630	<0.005		19.90					1.320	8.840	25.000	33.840					
Tri-Jay Company	#1	7/25/2017	C	FP	<0.0150	<0.0750	1.16	<0.0750	0.303	0.269	0.153	<0.005		6.430					0.3010	6.490	1.130	7.620					
Truex, Inc.	#1	3/7/2017	C	BP	<0.0150	<0.0750	0.435	<0.0750	<0.0500	<0.0250	0.287			4.900				4.508	<0.1	2.270	<0.100	2.270					
Truex, Inc.	#1	11/1/2017	C	BP	<0.015	<0.075	0.075	<0.075	<0.050	<0.025	0.077			<4.00				<4.0	<0.1	0.709	<0.100	0.709					
Umicore USA, Incorporated	#1	2/15/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	0.00616							10800	30500.000	0.576	30500.576					
Umicore USA, Incorporated	#1	8/3/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	0.00891							12200	34100.000	210.000	34310.000					
Umicore USA, Incorporated	#100	2/15/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005							603.0	614.000	1.210	615.210					
Umicore USA, Incorporated	#100	8/3/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005							139.0	149.000	0.247	149.247					
Umicore USA, Incorporated	#2	2/15/2017	G	FP	<0.0150	<0.0750	0.110	<0.0750	0.164	<0.0250	0.281	<0.005							4450	5890.000	33.600	5923.6					
Umicore USA, Incorporated	#2	8/3/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005							50.70	133.000	12.500	145.500					
Unique Plating Company	#1	4/11/2017	C	FP	<0.0150	<0.0750	0.469	<0.0750	0.638	<0.0250	<0.0600	<0.005		43.20					<0.1	<0.500	2.380	2.380					
Unique Plating Company	#1	9/20/2017	C	FP	<0.015	<0.075	1.337	<0.075	0.287	<0.025	<0.060	<0.005		42.70					<0.1	<0.500	1.040	1.040					
Unique Plating Company	#1	11/7/2017	C	FP	<0.015	<0.075	0.973	<0.075	0.434	<0.025	<0.060	0.0053		57.50					2.290	4.380	0.694	5.074					
Univar USA, Inc.	#1	4/11/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	<0.0600	<0.005		5.960	32.3				<0.1	<0.500	0.195	<0.500	152				
Univar USA, Inc.	#1	9/19/2017	G	FP	<0.0150	<0.0750	<0.0200	<0.0750	<0.0500	<0.0250	0.137	<0.005		5.170	14.2				<0.1	<0.500	0.299	<0.500					
Universal Plating Company, Inc.	#1	5/3/2017	C	FP	0.0197	<0.0750	0.781	<0.0750	0.0693	<0.0250	0.0985	<0.005		134.0					0.1940	2.400	<0.100	2.400					
Universal Plating Company, Inc.	#1	11/16/2017	C	FP	<0.015	<0.075	0.047	<0.075	<0.050	<0.025	<0.060	<0.005		9.550					<0.1	<0.500	<0.100	<0.500					

*TTO (Total Toxic Organics) includes volatile organic compounds, shown in detail in Table 27B. Acetone is included in the TTO as well as shown seperately.

Table 27A: NBC SIU Data

NBC Significant Industrial User Sample Results

Company	Sample Location	Sample Date	Sample Type	District	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-dichlorobenzene	1,4-dichlorobenzene	2-Chloroethylvinylether	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Methylene Chloride	o- xylene	p&m xylene	Tetrachlorethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Acetone	TTO*
					ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ug/L	ppb
A. Harrison & Company, Inc.	#1	3/8/17	G	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	2.9	<1	<10	<1	<1	<10	26	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		28.9
A. Harrison & Company, Inc.	#1	9/20/17	G	FP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<100	<10	<10	<100	<10	<100	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10		<100
Aspen Aerogels Rhode Island, LLC	#1	4/19/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		<10
Aspen Aerogels Rhode Island, LLC	#1	12/4/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	1.6	<1	<1	<1	<1	<1		1.6
Aspen Aerogels Rhode Island, LLC	#2	4/19/17	G	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	4.6	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		4.6
Aspen Aerogels Rhode Island, LLC	#2	12/4/17	G	BP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<100	<10	<10	<100	<10	<100	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10		<100
Cintas Corporation	#1	4/20/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	5.5	<10	<1	<1	2.2	<5	5	10.2	22.5	14.8	<1	<1	<1	<1	<1		60.2
Cintas Corporation	#1	11/21/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	5.9	<10	<1	<1	<1	<5	<1	0.8	2.6	4.3	<1	<1	<1	<1	<1		13.6
Conopco, Inc. (Site #1)	#1	3/28/17	C	BP	57	<1	<1	3.3	3.3	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	643	<1	3.9	<1	109	1.4	<1		763.9
Conopco, Inc. (Site #1)	#1	11/29/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	107	<1	<1	<1	24	<1	<1		131
Denison Acquistion Company, LLC	#1	2/21/17	G	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	3.4	<1	<10	<1	<1	<10	35	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	1200	1238.4
Denison Acquistion Company, LLC	#1	8/24/17	G	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	1.2	1.5	<1	<10	<1	<1	<10	30	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	290	322.7
Ecological Fibers, Inc.	#1	2/6/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	1.8	<1	<10	<1	0.3	<10	4.2	<10	<1	0.7	<1	<5	1.2	2.1	<1	2	<1	<1	<1	<1	<1		12.3
Ecological Fibers, Inc.	#1	9/12/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	4.9	<1	<10	<1	<1	<10	11.2	<10	<1	1.3	0.4	<5	1.3	2.9	<1	1.7	<1	<1	<1	<1	<1		23.7
Ecological Fibers, Inc.	#1	11/2/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	2.7	<1	<10	<1	<1	<10	7.7	<10	<1	<1	0.3	<5	2.7	5	<1	5.7	<1	<1	<1	<1	<1		24.1
Godfrey and Wing Inc.	#1	5/9/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	3.4	<1	<10	<1	<1	<10	42	<10	<1	<1	1.4	<5	0.9	1.6	<1	0.6	<1	<1	<1	<1	<1		49.9
Godfrey and Wing Inc.	#1	10/24/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	3.2	<1	<10	<1	<1	<10	46	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		49.2
Hillview Auto Body	#1	4/25/17	G	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	4.2	<10	<1	<1	<1	<50	<1	1.3	<1	1.7	<1	<1	<1	<1	<1		7.2
Hillview Auto Body	#1	10/24/17	G	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	4.7	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		4.7
John H. Collins & Sons Company	#1	2/28/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	6.3	<1	<10	<1	<1	<10	10.5	<10	<1	2.9	1.5	323	0.8	3	<1	51600	<1	<1	<1	<1	<1		51948
John H. Collins & Sons Company	#1	10/18/17	C	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	11.4	<1	<10	<1	<1	<10	195	<10	<1	4.2	<1	31	<1	<1	<1	600	<1	<1	<1	<1	<1		841.6
Mahr Federal Inc.	#1	3/13/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	0.6	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		0.6
Mahr Federal Inc.	#1	9/20/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	2.4	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		2.4
Organic Dyes and Pigments, LLC	#1	4/25/17	C	FP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<100	<10	<10	<100	<10	<100	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10		<100
Organic Dyes and Pigments, LLC	#1	8/8/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	8.3	<10	<1	<1	0.3	<5	1.5	0.3	<1	<1	<1	<1	<1	<1	<1		10.4
RI Resource Recovery	#1	4/18/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	1.5	<10	<1	<1	<1	<5	<1	<1	<1	19	<1	<1	<1	<1	<1		20.5
RI Resource Recovery	#1	5/31/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	4.3	<1	<1	<1	<1	<1		4.3
RI Resource Recovery	#1	7/11/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		<10
RI Resource Recovery	#1	8/29/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		<10
RI Resource Recovery	#1	10/31/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		<10
RI Resource Recovery	#1	12/12/17	C	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	<1	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		<10
Tedor Pharma Inc.	#1	3/9/17	G	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	3.4	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	590	593.4
Tedor Pharma Inc.	#1	9/12/17	G	BP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<10	<1	<1	<10	2.6	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	350	352.6
Univar USA, Inc.	#1	4/11/17	G	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	3.3	<1	<10	<1	<1	<10	29	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		32.3
Univar USA, Inc.	#1	9/19/17	G	FP	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	1.2	<1	<10	<1	<1	<10	13	<10	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1		14.2

*TTO and additional NBC SIU data shown in Table 27A

Table 27B: NBC SIU TTO Result Detail

Septage Monitoring Data - 2017

Results in ppm

Sample No.	Date	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BB59473	1/3/2017	0.0165	0.015	0.1390	0.075	15.00	0.02	0.4510	0.075	0.1750	0.05	0.0437	0.04	18.20	0.06
BB59474	1/4/2017	<0.0150	0.015	<0.0750	0.075	6.150	0.02	0.3630	0.075	0.0833	0.05	<0.0400	0.04	8.220	0.06
BB59475	1/6/2017	<0.0150	0.015	0.5620	0.075	11.40	0.02	1.140	0.075	0.5070	0.05	<0.0400	0.04	24.20	0.06
BB60207	1/9/2017	<0.0150	0.015	<0.0750	0.075	1.480	0.02	0.0811	0.075	<0.0500	0.05	<0.0400	0.04	2.700	0.06
BB60206	1/10/2017	0.0177	0.015	0.1410	0.075	5.010	0.02	0.4920	0.075	0.130	0.05	<0.0400	0.04	13.80	0.06
BB60205	1/11/2017	0.0259	0.015	0.1590	0.075	19.00	0.02	0.8520	0.075	0.4560	0.05	<0.0400	0.04	18.10	0.06
BB60710	1/17/2017	<0.0150	0.015	<0.0750	0.075	2.320	0.02	0.0983	0.075	0.0567	0.05	<0.0400	0.04	2.910	0.06
BB60711	1/18/2017	0.0195	0.015	0.2890	0.075	33.40	0.02	0.670	0.075	0.280	0.05	<0.0400	0.04	32.30	0.3
BB60712	1/19/2017	<0.0150	0.015	1.170	0.075	9.510	0.02	0.3340	0.075	4.930	0.05	<0.0400	0.04	17.20	0.06
BB61493	1/24/2017	<0.0150	0.015	0.0794	0.075	8.960	0.02	0.5580	0.075	0.1280	0.05	<0.0400	0.04	12.30	0.06
BB61494	1/25/2017	0.0427	0.015	0.1610	0.075	38.20	0.02	2.090	0.075	0.8780	0.05	0.0690	0.04	22.20	0.06
BB61495	1/26/2017	0.0156	0.015	0.1250	0.075	8.240	0.02	0.7150	0.075	0.2120	0.05	<0.0400	0.04	18.50	0.06
BB62045	2/1/2017	0.0205	0.015	<0.0750	0.075	5.390	0.02	0.3210	0.075	0.1310	0.05	<0.0400	0.04	13.50	0.06
BB62046	2/2/2017	<0.0150	0.015	<0.0750	0.075	4.200	0.02	0.4590	0.075	0.0762	0.05	<0.0400	0.04	7.600	0.06
BB62047	2/3/2017	<0.0150	0.015	0.0762	0.075	15.80	0.02	0.4340	0.075	0.2550	0.05	<0.0400	0.04	14.30	0.06
BB62795	2/6/2017	0.0238	0.015	0.1230	0.075	11.20	0.02	3.460	0.075	0.1330	0.05	0.0787	0.04	15.10	0.06
BB62796	2/7/2017	0.0160	0.015	0.0986	0.075	12.10	0.02	0.5110	0.075	0.1880	0.05	<0.0400	0.04	15.80	0.06
BB62797	2/8/2017	<0.0150	0.015	<0.0750	0.075	5.090	0.02	0.190	0.075	0.0895	0.05	<0.0400	0.04	8.370	0.06
BB63242	2/14/2017	0.0329	0.015	0.2220	0.075	34.90	0.02	0.2460	0.075	0.3110	0.05	<0.0400	0.04	35.55	0.3
BB63241	2/17/2017	<0.0150	0.015	<0.0750	0.075	0.7660	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.380	0.06
BB63240	2/20/2017	<0.0150	0.015	<0.0750	0.075	4.990	0.02	0.1120	0.075	0.0718	0.05	<0.0400	0.04	6.660	0.06
BB64090	2/21/2017	<0.0150	0.015	0.1730	0.075	15.10	0.02	0.2880	0.075	0.1780	0.05	<0.0400	0.04	13.80	0.06
BB64091	2/22/2017	<0.0150	0.015	<0.0750	0.075	2.340	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	3.010	0.06
BB64092	2/23/2017	<0.0150	0.015	0.1150	0.075	9.040	0.02	0.2060	0.075	0.1350	0.05	0.0511	0.04	14.10	0.06
BB64615	3/1/2017	<0.0150	0.015	0.1120	0.075	11.30	0.02	0.3160	0.075	0.1630	0.05	<0.0400	0.04	12.60	0.06
BB64616	3/2/2017	<0.0150	0.015	0.1330	0.075	6.030	0.02	1.200	0.075	0.1070	0.05	<0.0400	0.04	12.00	0.06
BB64617	3/3/2017	<0.0150	0.015	<0.0750	0.075	2.840	0.02	0.2770	0.075	0.0842	0.05	<0.0400	0.04	9.500	0.06
BB65399	3/8/2017	0.0255	0.015	0.1090	0.075	10.70	0.02	0.6990	0.075	0.2110	0.05	<0.0400	0.04	19.70	0.06
BB65400	3/9/2017	0.0164	0.015	<0.0750	0.075	8.700	0.02	0.3050	0.075	0.1490	0.05	0.0427	0.04	15.30	0.06
BB65401	3/10/2017	<0.0150	0.015	<0.0750	0.075	3.590	0.02	0.9540	0.075	0.1060	0.05	<0.0400	0.04	11.00	0.06
BB65930	3/13/2017	<0.0150	0.015	0.0806	0.075	5.420	0.02	0.3290	0.075	0.1030	0.05	<0.0400	0.04	11.60	0.06
BB65929	3/15/2017	0.3540	0.015	0.1570	0.075	10.40	0.02	1.550	0.075	0.1680	0.05	<0.0400	0.04	12.10	0.06
BB65928	3/17/2017	<0.0150	0.015	0.1210	0.075	15.50	0.02	0.1140	0.075	0.1020	0.05	<0.0400	0.04	9.810	0.06
BB66648	3/22/2017	<0.0150	0.015	<0.0750	0.075	7.800	0.02	0.3080	0.075	0.0919	0.05	<0.0400	0.04	8.960	0.06
BB66649	3/24/2017	<0.0150	0.015	<0.0750	0.075	4.590	0.02	0.2690	0.075	0.0814	0.05	<0.0400	0.04	9.320	0.06
BB66650	3/25/2017	0.0186	0.015	0.1310	0.075	4.650	0.02	0.5290	0.075	0.2430	0.05	<0.0400	0.04	14.50	0.06
BB66653	3/28/2017	0.0153	0.015	0.0771	0.075	15.80	0.02	0.650	0.075	0.2260	0.05	<0.0400	0.04	14.40	0.06
BB66652	3/30/2017	<0.0150	0.015	<0.0750	0.075	0.4650	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.330	0.06
BB66651	3/31/2017	<0.0150	0.015	<0.0750	0.075	5.010	0.02	0.220	0.075	0.1260	0.05	<0.0400	0.04	9.030	0.06
BB68028	4/6/2017	<0.0150	0.015	<0.0750	0.075	7.470	0.02	0.2160	0.075	0.1270	0.05	<0.0400	0.04	10.90	0.06
BB68029	4/7/2017	<0.0150	0.015	0.1230	0.075	11.30	0.02	0.4840	0.075	0.3010	0.05	<0.0400	0.04	16.60	0.06
BB68030	4/8/2017	<0.0150	0.015	<0.0750	0.075	1.450	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	2.470	0.06
BB68598	4/13/2017	<0.0150	0.015	0.0846	0.075	11.60	0.02	0.6980	0.075	0.2660	0.05	<0.0400	0.04	13.20	0.06
BB68599	4/14/2017	<0.0150	0.015	<0.0750	0.075	5.120	0.02	0.1870	0.075	0.0707	0.05	<0.0400	0.04	6.340	0.06
BB68600	4/15/2017	0.0151	0.015	<0.0750	0.075	13.70	0.02	0.4180	0.075	0.2010	0.05	<0.0400	0.04	12.00	0.06

Table 28: Septage Sampling Data

Septage Monitoring Data - 2017

Results in ppm

Sample No.	Date	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BB67219	4/17/2017	0.0178	0.015	<0.0750	0.075	5.990	0.02	0.2830	0.075	0.0960	0.05	<0.0400	0.04	9.620	0.06
BB67221	4/19/2017	<0.0150	0.015	<0.0750	0.075	7.050	0.1	0.2170	0.075	0.1090	0.05	<0.0400	0.04	8.330	0.06
BB67223	4/21/2017	0.0177	0.015	0.0757	0.075	16.80	0.02	0.5650	0.075	0.2330	0.05	<0.0400	0.04	17.70	0.06
BB69892	4/27/2017	<0.0150	0.015	<0.0750	0.075	3.340	0.02	0.2080	0.075	0.0984	0.05	<0.0400	0.04	12.50	0.06
BB69891	4/28/2017	<0.0150	0.015	<0.0750	0.075	7.630	0.02	0.1240	0.075	0.1280	0.05	<0.0400	0.04	6.390	0.06
BB69890	4/29/2017	0.0176	0.015	0.0907	0.075	18.20	0.02	0.3410	0.075	0.1950	0.05	0.1060	0.04	13.80	0.06
BB69377	5/2/2017	<0.0150	0.015	<0.0750	0.075	6.450	0.02	0.3070	0.075	0.0931	0.05	<0.0400	0.04	11.80	0.06
BB69376	5/3/2017	<0.0150	0.015	<0.0750	0.075	4.650	0.02	0.200	0.075	0.120	0.05	<0.0400	0.04	13.10	0.06
BB69375	5/5/2017	<0.0150	0.015	<0.0750	0.075	7.000	0.02	0.3310	0.075	0.1090	0.05	<0.0400	0.04	13.30	0.06
BB71290	5/8/2017	<0.0150	0.015	0.100	0.075	11.10	0.02	0.7830	0.075	0.110	0.05	<0.0400	0.04	14.10	0.06
BB71291	5/11/2017	<0.0150	0.015	<0.0750	0.075	13.40	0.02	0.3190	0.075	0.1750	0.05	<0.0400	0.04	8.080	0.06
BB71292	5/12/2017	<0.0150	0.015	<0.0750	0.075	8.050	0.02	0.4070	0.075	0.1080	0.05	<0.0400	0.04	11.60	0.06
BB71293	5/18/2017	<0.0150	0.015	<0.0750	0.075	4.480	0.02	0.1410	0.075	0.0913	0.05	<0.0400	0.04	10.70	0.06
BB71294	5/19/2017	<0.0150	0.015	<0.0750	0.075	2.440	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	4.310	0.06
BB71295	5/20/2017	<0.0150	0.015	0.0867	0.075	5.790	0.02	0.2220	0.075	0.1510	0.05	<0.0400	0.04	11.90	0.06
BB72598	5/25/2017	<0.0150	0.015	<0.0750	0.075	3.500	0.02	0.1040	0.075	0.0838	0.05	<0.0400	0.04	8.510	0.06
BB72599	5/26/2017	<0.0150	0.015	0.0939	0.075	13.20	0.02	0.8320	0.075	0.1760	0.05	0.0567	0.04	16.30	0.06
BB72600	5/27/2017	<0.0150	0.015	<0.0750	0.075	5.830	0.02	0.1490	0.075	0.1330	0.05	<0.0400	0.04	9.860	0.06
BB70680	6/1/2017	<0.0150	0.015	<0.0750	0.075	3.640	0.02	0.1910	0.075	0.1080	0.05	<0.0400	0.04	11.20	0.06
BB70681	6/2/2017	<0.0150	0.015	<0.0750	0.075	2.940	0.02	<0.0750	0.075	0.0718	0.05	<0.0400	0.04	5.010	0.06
BB70682	6/3/2017	<0.0150	0.015	<0.0750	0.075	0.4470	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.660	0.06
BB73292	6/8/2017	<0.0150	0.015	0.0857	0.075	10.50	0.02	0.280	0.075	0.2510	0.05	<0.0400	0.04	18.30	0.06
BB73291	6/9/2017	<0.0150	0.015	<0.0750	0.075	1.780	0.02	<0.0750	0.075	0.0515	0.05	<0.0400	0.04	2.930	0.06
BB73290	6/10/2017	<0.0150	0.015	<0.0750	0.075	8.310	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	3.520	0.06
BB71932	6/13/2017	<0.0150	0.015	<0.0750	0.075	3.980	0.02	0.3270	0.075	0.0917	0.05	<0.0400	0.04	11.10	0.06
BB71931	6/14/2017	<0.0150	0.015	<0.0750	0.075	0.2880	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.450	0.06
BB71930	6/15/2017	<0.0150	0.015	0.0756	0.075	14.80	0.02	0.3490	0.075	0.1370	0.05	<0.0400	0.04	17.50	0.06
BB75236	6/19/2017	<0.0150	0.015	<0.0750	0.075	2.710	0.02	0.1590	0.075	0.0791	0.05	<0.0400	0.04	8.820	0.06
BB75237	6/20/2017	<0.0150	0.015	<0.0750	0.075	0.9790	0.02	<0.0750	0.075	0.0908	0.05	<0.0400	0.04	2.390	0.06
BB75238	6/21/2017	<0.0150	0.015	<0.0750	0.075	6.910	0.02	0.1330	0.075	0.1170	0.05	<0.0400	0.04	5.570	0.06
BB73293	6/29/2017	<0.0150	0.015	<0.0750	0.075	5.040	0.02	0.4040	0.075	0.1650	0.05	<0.0400	0.04	9.430	0.06
BB73294	6/30/2017	<0.0150	0.015	<0.0750	0.075	2.100	0.02	0.0925	0.075	0.0896	0.05	<0.0400	0.04	3.560	0.06
BB73295	7/1/2017	0.0162	0.015	<0.0750	0.075	2.840	0.02	0.130	0.075	<0.0500	0.05	<0.2	0.2	3.730	0.06
BB74632	7/3/2017	<0.0150	0.015	<0.0750	0.075	0.840	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.330	0.06
BB74633	7/6/2017	<0.0150	0.015	<0.0750	0.075	1.920	0.02	0.1030	0.075	0.0757	0.05	<0.0400	0.04	6.950	0.06
BB74634	7/7/2017	<0.0150	0.015	<0.0750	0.075	1.540	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	3.290	0.06
BB71935	7/11/2017	<0.0150	0.015	<0.0750	0.075	6.070	0.02	0.2870	0.075	0.1790	0.05	<0.0400	0.04	12.10	0.06
BB71934	7/14/2017	<0.0150	0.015	<0.0750	0.075	3.770	0.02	0.1610	0.075	0.2320	0.05	<0.0400	0.04	10.60	0.06
BB71933	7/15/2017	<0.0150	0.015	<0.0750	0.075	1.830	0.02	0.0940	0.075	0.1020	0.05	<0.0400	0.04	6.280	0.06
BB74636	7/18/2017	<0.0150	0.015	<0.0750	0.075	1.120	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	1.810	0.06
BB74635	7/19/2017	<0.0150	0.015	<0.0750	0.075	10.10	0.02	0.3370	0.075	0.1380	0.05	<0.0400	0.04	7.620	0.06
BB74637	7/21/2017	0.0183	0.015	0.0808	0.075	12.10	0.02	0.3250	0.075	0.640	0.05	<0.0400	0.04	20.00	0.06
BB73899	7/24/2017	<0.0150	0.015	<0.0750	0.075	8.970	0.02	0.2870	0.075	0.4560	0.05	<0.0400	0.04	13.90	0.06
BB73900	7/25/2017	0.0327	0.015	0.1860	0.075	19.50	0.02	0.4820	0.075	0.3180	0.05	0.0727	0.04	34.25	0.3

Table 28: Septage Sampling Data

Septage Monitoring Data - 2017

Results in ppm

Sample No.	Date	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BB73901	7/29/2017	<0.0150	0.015	<0.0750	0.075	6.710	0.02	0.2120	0.075	0.3320	0.05	<0.0400	0.04	14.10	0.06
BB79087	7/31/2017	<0.0150	0.015	<0.0750	0.075	2.610	0.02	<0.0750	0.075	0.0578	0.05	<0.0400	0.04	4.440	0.06
BB79086	8/1/2017	<0.0150	0.015	<0.0750	0.075	3.950	0.02	0.1250	0.075	0.3230	0.05	<0.0400	0.04	6.420	0.06
BB79085	8/2/2017	<0.0150	0.015	<0.0750	0.075	6.180	0.02	0.2260	0.075	0.2160	0.05	<0.0400	0.04	11.00	0.06
BB79836	8/10/2017	<0.0150	0.015	<0.0750	0.075	4.280	0.02	0.4170	0.075	<0.0500	0.05	<0.0400	0.04	3.690	0.06
BB79835	8/11/2017	<0.0150	0.015	<0.0750	0.075	2.780	0.02	0.2460	0.075	<0.0500	0.05	<0.0400	0.04	2.410	0.06
BB79834	8/12/2017	0.0708	0.015	0.2050	0.075	19.20	0.02	1.200	0.075	0.8660	0.05	0.2580	0.04	33.50	0.3
BB80266	8/15/2017	<0.0150	0.015	<0.0750	0.075	0.7720	0.02	<0.0750	0.075	0.0945	0.05	<0.0400	0.04	2.000	0.06
BB80265	8/16/2017	<0.0150	0.015	<0.0750	0.075	0.6020	0.02	0.2680	0.075	<0.0500	0.05	<0.0400	0.04	5.550	0.06
BB80264	8/18/2017	0.0675	0.015	0.2510	0.075	42.10	0.02	1.010	0.075	0.3240	0.05	<0.0400	0.04	46.95	0.3
BB79082	8/24/2017	<0.0150	0.015	<0.0750	0.075	5.070	0.02	0.2730	0.075	0.4190	0.05	<0.0400	0.04	8.860	0.06
BB79084	8/25/2017	<0.0150	0.015	<0.0750	0.075	1.510	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	2.560	0.06
BB79083	8/26/2017	<0.0150	0.015	<0.0750	0.075	0.8060	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	0.9470	0.06
BB82202	8/30/2017	<0.0150	0.015	<0.0750	0.075	4.410	0.02	<0.0750	0.075	<0.0500	0.05	<0.0400	0.04	3.310	0.06
BB82201	9/1/2017	<0.0150	0.015	<0.0750	0.075	2.250	0.02	<0.0750	0.075	0.0655	0.05	<0.0400	0.04	3.640	0.06
BB82200	9/2/2017	<0.0150	0.015	<0.0750	0.075	4.490	0.02	0.0798	0.075	0.0529	0.05	<0.0400	0.04	4.110	0.06
BB82407	9/6/2017	<0.0150	0.015	<0.0750	0.075	3.710	0.02	0.1310	0.075	0.110	0.05	<0.0400	0.04	8.270	0.06
BB82406	9/7/2017	<0.015	0.015	<0.075	0.075	4.830	0.02	0.131	0.075	0.204	0.05	<0.040	0.04	4.678	0.06
BB82405	9/9/2017	0.0158	0.015	<0.0750	0.075	9.100	0.02	0.450	0.075	0.0812	0.05	<0.0400	0.04	12.90	0.06
BB83010	9/14/2017	<0.015	0.015	<0.075	0.075	0.620	0.02	<0.075	0.075	<0.050	0.05	<0.040	0.04	1.398	0.06
BB83009	9/15/2017	<0.015	0.015	<0.075	0.075	4.034	0.02	0.233	0.075	0.103	0.05	<0.040	0.04	11.250	0.06
BB83008	9/16/2017	<0.015	0.015	<0.075	0.075	3.383	0.02	0.133	0.075	<0.050	0.05	<0.040	0.04	3.739	0.06
BB83857	9/18/2017	<0.015	0.015	<0.075	0.075	5.450	0.02	0.151	0.075	<0.050	0.05	<0.040	0.04	2.866	0.06
BB83855	9/19/2017	0.016	0.015	0.084	0.075	12.107	0.02	0.449	0.075	0.136	0.05	<0.040	0.04	19.745	0.06
BB83856	9/20/2017	0.017	0.015	<0.075	0.075	13.015	0.02	0.311	0.075	0.106	0.05	<0.040	0.04	14.528	0.06
BB81090	9/28/2017	<0.015	0.015	0.111	0.075	13.753	0.02	0.370	0.075	0.142	0.05	<0.040	0.04	16.012	0.06
BB81091	9/29/2017	<0.015	0.015	<0.075	0.075	5.129	0.02	0.385	0.075	0.111	0.05	<0.040	0.04	10.602	0.06
BB81092	9/30/2017	0.015	0.015	<0.075	0.075	7.048	0.02	0.323	0.075	0.141	0.05	<0.040	0.04	16.661	0.06
BB85087	10/2/2017	0.021	0.015	0.076	0.075	12.801	0.02	0.321	0.075	0.157	0.05	<0.040	0.04	17.102	0.06
BB85086	10/3/2017	<0.015	0.015	0.114	0.075	8.560	0.02	0.804	0.075	0.156	0.05	<0.040	0.04	16.070	0.06
BB85085	10/4/2017	0.025	0.015	0.169	0.075	51.225	0.1	1.996	0.075	0.329	0.05	0.046	0.04	41.535	0.3
BB81689	10/10/2017	<0.015	0.015	<0.075	0.075	3.104	0.02	0.116	0.075	0.066	0.05	<0.040	0.04	7.101	0.06
BB81688	10/11/2017	0.023	0.015	0.136	0.075	31.183	0.02	0.548	0.075	0.345	0.05	<0.040	0.04	38.425	0.06
BB81687	10/13/2017	<0.015	0.015	<0.075	0.075	0.321	0.02	<0.075	0.075	<0.050	0.05	<0.040	0.04	1.173	0.06
BB86332	10/16/2017	<0.015	0.015	<0.075	0.075	2.220	0.02	0.101	0.075	<0.050	0.05	<0.040	0.04	4.091	0.06
BB86331	10/17/2017	<0.015	0.015	<0.075	0.075	4.987	0.02	0.296	0.075	0.106	0.05	<0.040	0.04	12.564	0.06
BB86330	10/18/2017	<0.015	0.015	<0.075	0.075	6.156	0.02	0.186	0.075	0.078	0.05	<0.040	0.04	7.252	0.06
BB86889	10/23/2017	<0.015	0.015	<0.075	0.075	5.779	0.02	0.227	0.075	0.098	0.05	<0.040	0.04	10.203	0.06
BB86888	10/24/2017	<0.015	0.015	<0.075	0.075	8.846	0.02	0.324	0.075	0.103	0.05	<0.040	0.04	11.047	0.06
BB86887	10/25/2017	0.019	0.015	0.128	0.075	15.103	0.02	0.618	0.075	0.166	0.05	<0.040	0.04	20.593	0.06
BB85088	11/2/2017	<0.015	0.015	<0.075	0.075	3.352	0.02	0.201	0.075	0.081	0.05	<0.040	0.04	8.825	0.06
BB85089	11/3/2017	0.015	0.015	0.226	0.075	11.545	0.02	1.960	0.075	0.186	0.05	<0.040	0.04	16.416	0.06
BB85090	11/4/2017	<0.015	0.015	<0.075	0.075	0.236	0.02	<0.075	0.075	<0.050	0.05	<0.040	0.04	0.836	0.06
BB84354	11/8/2017	<0.015	0.015	<0.075	0.075	9.528	0.02	0.178	0.075	0.055	0.05	<0.040	0.04	7.229	0.06

Table 28: Septage Sampling Data

Septage Monitoring Data - 2017

Results in ppm

Sample No.	Date	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BB84353	11/10/2017	<0.015	0.015	<0.075	0.075	1.289	0.02	<0.075	0.075	0.051	0.05	<0.040	0.04	3.551	0.06
BB84352	11/11/2017	<0.015	0.015	<0.075	0.075	1.495	0.02	<0.075	0.075	<0.050	0.05	<0.200	0.2	2.546	0.06
BB88918	11/13/2017	0.027	0.015	0.102	0.075	11.591	0.02	0.944	0.075	0.214	0.05	<0.040	0.04	19.110	0.06
BB88919	11/14/2017	<0.015	0.015	<0.075	0.075	6.034	0.02	0.651	0.075	0.180	0.05	<0.040	0.04	14.074	0.06
BB88920	11/17/2017	<0.015	0.015	<0.075	0.075	5.422	0.02	1.280	0.075	0.133	0.05	<0.040	0.04	11.213	0.06
BB89483	11/20/2017	<0.015	0.015	<0.075	0.075	2.351	0.02	0.098	0.075	0.059	0.05	<0.040	0.04	9.114	0.06
BB89482	11/22/2017	<0.015	0.015	<0.075	0.075	2.246	0.02	0.572	0.075	0.078	0.05	<0.040	0.04	9.209	0.06
BB89484	11/25/2017	0.016	0.015	0.144	0.075	8.170	0.02	0.414	0.075	0.231	0.05	0.044	0.04	19.606	0.06
BB90376	11/30/2017	0.016	0.015	0.125	0.075	15.261	0.02	2.633	0.075	0.156	0.05	<0.040	0.04	15.058	0.06
BB90377	12/1/2017	0.017	0.015	0.111	0.075	8.447	0.02	0.776	0.075	0.151	0.05	<0.040	0.04	14.670	0.06
BB90378	12/2/2017	<0.015	0.015	<0.075	0.075	2.345	0.02	0.139	0.075	0.062	0.05	<0.040	0.04	6.531	0.06
BB90912	12/7/2017	0.015	0.015	0.076	0.075	15.496	0.02	0.530	0.075	0.124	0.05	<0.040	0.04	14.785	0.06
BB90911	12/8/2017	<0.015	0.015	0.084	0.075	9.766	0.02	0.219	0.075	0.374	0.05	<0.040	0.04	11.057	0.06
BB90913	12/9/2017	<0.015	0.015	<0.075	0.075	2.518	0.02	0.093	0.075	0.055	0.05	<0.040	0.04	2.834	0.06
BB91500	12/13/2017	<0.015	0.015	0.081	0.075	7.817	0.02	0.248	0.075	0.114	0.05	<0.040	0.04	12.739	0.06
BB91499	12/14/2017	<0.015	0.015	0.083	0.075	5.288	0.02	0.318	0.075	0.111	0.05	<0.040	0.04	13.758	0.06
BB91498	12/16/2017	<0.015	0.015	<0.075	0.075	0.367	0.02	<0.075	0.075	<0.050	0.05	<0.040	0.04	1.168	0.06
BB92139	12/19/2017	<0.015	0.015	<0.075	0.075	2.813	0.02	0.222	0.075	<0.050	0.05	<0.040	0.04	4.340	0.06
BB92140	12/20/2017	<0.015	0.015	<0.075	0.075	1.019	0.02	<0.075	0.075	<0.050	0.05	<0.040	0.04	3.883	0.06
BB92141	12/21/2017	0.027	0.015	0.126	0.075	14.418	0.02	1.234	0.075	0.176	0.05	0.071	0.04	20.042	0.06
BB92760	12/27/2017	<0.015	0.015	<0.075	0.075	1.175	0.02	0.147	0.075	<0.050	0.05	<0.040	0.04	2.013	0.06
BB92761	12/28/2017	<0.015	0.015	<0.075	0.075	0.972	0.02	<0.075	0.075	0.051	0.05	<0.040	0.04	2.073	0.06
BB92762	12/29/2017	<0.015	0.015	<0.075	0.075	6.672	0.02	0.367	0.075	0.074	0.05	0.054	0.04	7.715	0.06

Table 28: Septage Sampling Data

Metals Loading to Bucklin Point from Septage (lbs/yr)

Year	Cadmium	Chromium	Copper	Lead	Nickel	Silver	Zinc	Total Metals	Total Septage Volume (MGY)
1996	4.5	77.6	946.0	167.0	33.9	19.6	1414	2663	14.760
1997	3.9	33.2	806.0	113.0	27.4	10.3	1060	2054	14.220
1998	4.5	29.2	830.0	93.0	31.0	5.7	1016	2009	17.530
1999	3.4	26.5	623.0	61.0	20.0	4.1	849	1587	21.500
2000	2.8	21.8	591.0	53.0	26.7	4.1	873	1572	23.340
2001	1.5	20.7	436.0	42.3	22.4	4.2	633	1160	17.390
2002	0.95	8.2	322.6	30.4	22.8	33.1	473	892	17.036
2003	0.89	3.8	196.4	15.9	7.1	4.2	299	527	13.033
2004	0.90	5.0	256.3	15.9	8.9	3.3	321	612	9.100
2005	0.93	7.9	349.9	25.5	11.3	1.9	458	855	8.961
2006	1.35	8.8	416.0	24.2	13.2	3.3	495	961	9.363
2007	1.49	11.45	532.25	28.18	14.82	4.20	604.82	1197	8.526
2008	2.81	10.5	440.3	19.8	9.5	5.3	508	996	9.301
2009	1.5	12.1	435.4	23.0	11.6	4.2	554.4	1042	9.080
2010	1.4	12.5	505.1	30.7	15.5	3.3	639.8	1208	8.023
2011	1.6	21.1	558.4	35.8	16.8	5.1	745.3	1384	7.069
2012	1.6	17.7	775.6	39.0	22.5	3.4	988.6	1848	7.077
2013	1.9	9.7	545.4	35.9	17.0	5.0	687.9	1303	7.242
2014	1.5	10.5	606.7	36.2	15.9	7.0	780.8	1459	7.922
2015	1.5	10.5	547.7	37.9	14.3	3.1	950.3	1565	8.421
2016	1.2	6.8	399.6	25.4	8.8	2.9	657.8	1102	7.839
2017	1.2	6.2	494.2	24.2	10.6	2.9	699.6	1239	7.683

Table 29: Septage Summary 1996-2017

River-Bay Nutrient Results
2017

NR = Not Reportable

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NUTRIENT PARAMETERS: NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS AND CHLOROPHYLL PARAMETERS: TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	COMMENTS
BAY																		
01/04/17	9:30 AM	Conimicut Point Surface	BAY	0.5	24.40	4.85	8.22	214	9.85	95.8	34.6	803	1110	367	34.35	8.472	1.892	
01/04/17	1:10 PM	Edgewood Yacht Club Surface	BAY	0.5	25.15	5.27	8.26	209	9.92	107	42.2	544	1040	462	33.41	12.53	2.091	
01/04/17	8:45 AM	Pomham Rocks Surface	BAY	0.5	21.65	4.92	8.09	174	7.76	66.4	32.9	595	941	356	29.8	8.762	2.345	
01/04/17	8:45 AM	Pomham Rocks Surface (Duplicate)	BAY	0.5	21.65	4.92	8.09	173	7.28	65.6	32.4	695	921	355	29.17	1.347	0.5358	
01/04/17	1:30 PM	India Point Park Surface	BAY	0.5	17.76	5.40	8.12	306	9	107	34.6	1230	1020	522	23.75	3.467	1.362	
01/04/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.5	25.68	4.80	8.24	124	6.9	36.2	24	507	917	272	41.7	10.87	2.855	
01/04/17	9:10 AM	Pawtuxet Cove Surface	BAY	0.5	9.54	4.70	7.90	990	13.3	162	19.9	2120	1670	1310	13.67	3.834	1.795	
01/04/17	8:25 AM	Edgewood Shoals Surface	BAY	0.5	25.01	4.98	7.99	213	11.2	162	44.6	757	1000	548	28.57	5.898	1.591	
01/04/17	8:30 AM	Edgewood Shoals Bottom	BAY					92.1	6.7	31.7	23	403	728	272	31.68			
01/04/17	2:00 PM	Phillipsdale Landing Surface	BAY	0.5	5.47	4.82	7.79	602	12.7	109	38.6	2240	1110	931	9.07	3.101	1.926	
01/18/17	9:25 AM	Conimicut Point Surface	BAY	0.5	21.24	3.65	8.34	226	6.38	106	19.3	1070	1090	422	10.74	45.83	6.847	
01/18/17	9:30 AM	Conimicut Point Bottom	BAY					14.7	<1.5	<7	<5	205	543	<100.0	12.55			
01/18/17	1:45 PM	Edgewood Yacht Club Surface	BAY	0.5	22.80	4.39	8.46	169	5.53	225	28.9	865	869	458	12.63	12.22	2.591	
01/18/17	1:55 PM	Edgewood Yacht Club Bottom	BAY					30.2	2.02	19.4	<5	337	551	100	10.97			
01/18/17	1:20 PM	Pomham Rocks Surface	BAY	0.5	21.88	4.30	8.41	152	5.21	133	17.9	822	783	363	5.6	15.7	3.12	
01/18/17	1:25 PM	Pomham Rocks Bottom	BAY					18.9	<1.5	<7	<5	218	525	<100.0	12.26			
01/18/17	12:55 PM	India Point Park Surface	BAY	0.5	17.03	4.03	8.30	191	6.29	78.5	13.6	992	736	348	5.77	8.958	2.065	
01/18/17	1:00 PM	India Point Park Bottom	BAY					20	2.39	26.6	<5	257	507	104	8.91			
01/18/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.5	15.42	3.71	8.39	311	6.74	104	13.5	1260	1010	481	7.75	22.58	2.704	
01/18/17	9:45 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.5	15.42	3.71	8.39	312	7.13	104	15.2	1240	1010	478	6.39	19.17	2.956	
01/18/17	9:50 AM	Bullock Reach Buoy Bottom	BAY					29.5	<1.5	<7	<5	250	570	<100.0	25.6			
01/18/17	9:00 AM	Pawtuxet Cove Surface	BAY	0.5	3.79	3.74	8.01	1020	12.9	85	5.92	2990	1520	1180	3.64	3.36	1.968	
01/18/17	9:05 AM	Pawtuxet Cove Bottom	BAY					145	4.44	46.6	<5	731	662	253	8.94			
01/18/17	9:25 AM	Phillipsdale Landing Surface	BAY	0.5	7.38	1.24	7.25	609	15.3	490	140	2370	1510	1190	4.24	2	1.468	
01/18/17	9:30 AM	Phillipsdale Landing Bottom	BAY	2.2	18.67	1.51	7.29	229	5.98	106	20.6	1090	841	437	NR			
02/01/17	10:20 AM	Conimicut Point Surface	BAY	0.0	24.42	2.87	8.41	147	4.4	51	6.63	713	863	336	8.48	8.189	1.533	
02/01/17	10:00 AM	Edgewood Yacht Club Surface	BAY	0.0	22.01	3.29	8.26	202	7.21	167	29.7	926	937	536	5.89	2.353	1.106	
02/01/17	2:30 PM	Pomham Rocks Surface	BAY	0.0	20.37	4.02	8.31	223	7.34	126	27	1050	883	505	5.77	2.541	1.124	
02/01/17	2:30 PM	Pomham Rocks Surface (Duplicate)	BAY	0.0	20.37	4.02	8.31	230	7.71	125	27.9	1040	857	507	6.53	4.267	1.433	
02/01/17	2:00 PM	India Point Park Surface	BAY	0.0	14.53	3.57	8.09	417	11.2	107	33.4	1500	1010	705	8.21	1.659	1.037	
02/01/17	10:40 AM	Bullock Reach Buoy Surface	BAY	0.0	25.92	3.06	8.46	89.3	2.99	16.6	<5	541	781	295	9.67	8.571	2.108	
02/01/17	2:50 PM	Edgewood Shoals Surface	BAY	0.0	26.81	4.39	8.41	78.7	3.31	45.8	5.93	496	813	330	5.87	6.697	1.742	
02/01/17	2:55 PM	Edgewood Shoals Bottom	BAY					37.7	2.6	37.3	14.3	344	633	190	9.57			
02/01/17	1:35 PM	Phillipsdale Landing Surface	BAY	0.0	6.39	4.25	7.47	779	20.6	193	274	2380	1490	1260	2.77	0.8498	1.149	
03/01/17	9:30 AM	Conimicut Point Surface	BAY	0.5	24.37	6.29	8.25	32.6	3.56	<7.0	<5	139	687	152	6	30.72	3.38	
03/01/17	9:35 AM	Conimicut Point Bottom	BAY					<6.0	<1.5	<7.0	<5	<20	761	189	18.96			
03/01/17	2:05 PM	Edgewood Yacht Club Surface	BAY	0.5	16.78	7.32	8.25	339	13.3	154	18.4	1040	1140	673	5.05	18.08	2.859	
03/01/17	2:10 PM	Edgewood Yacht Club Bottom	BAY					135	5.48	57	<5	407	657	326	10.61			
03/01/17	2:20 PM	Pomham Rocks Surface	BAY	0.5	17.91	7.25	8.28	294	11.4	117	14.8	913	728	591	6.6	16.15	2.53	
03/01/17	2:25 PM	Pomham Rocks Bottom	BAY					150	6.83	70.2	9.7	479	710	404	9.18			
03/01/17	2:40 PM	India Point Park Surface	BAY	0.5	11.53	7.41	8.08	446	16.8	183	20	1440	1150	849	5.1	8.191	1.764	
03/01/17	2:45 PM	India Point Park Bottom	BAY					264	10.1	117	8.12	913	667	620	9.17			
03/01/17	9:50 AM	Bullock Reach Buoy Surface	BAY	0.5	23.31	6.44	8.40	56.6	4.58	8.9	<5	205	573	224	8.2	23.09	2.875	
03/01/17	9:50 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.5	23.31	6.44	8.40	57.7	4.46	<7.0	<5	203	613	207	11.84	23.14	2.207	
03/01/17	9:55 AM	Bullock Reach Buoy Bottom	BAY					<6.0	<1.5	40.1	<5	<20	684	108	22.5			
03/01/17	9:05 AM	Pawtuxet Cove Surface	BAY	0.5	12.64	6.84	8.10	996	10.7	39.5	42.7	2170	1750	1470	5.25	8.189	1.912	
03/01/17	9:10 AM	Pawtuxet Cove Bottom	BAY					142	6.25	245	<5	408	871	352	16.91			
03/01/17	1:15 PM	Phillipsdale Landing Surface	BAY	0.6	9.55	6.25	7.15	639	23	57.6	91.8	1910	1480	1260	5.51	3.71	2.549	
03/01/17	1:20 PM	Phillipsdale Landing Bottom	BAY	2.0	22.04	4.72	7.70	426	16.5	198	62.3	1290	1140	829	13.98			
03/29/17	9:35 AM	Conimicut Point Surface	BAY	0.5	24.25	4.47	8.10	149	3.93	48.2	<5	260	783	321	10.89	26.03	4.93	
03/29/17	9:40 AM	Conimicut Point Bottom	BAY					19.6	<1.5	<7.0	<5	21	677	105	36.29			
03/29/17	12:50 PM	Edgewood Yacht Club Surface	BAY	0.5	25.99	4.79	8.17	102	3.27	53.5	<5	144	865	274	11.61	27.11	6.03	
03/29/17	1:00 PM	Edgewood Yacht Club Bottom	BAY					15.6	<1.5	21.8	<5	45.2	672	147	14.19			
03/29/17	1:15 PM	Pomham Rocks Surface	BAY	0.5	27.63	4.45	8.05	44.8	<1.5	20.6	<5	103	669	188	11.56	18.63	3.724	
03/29/17	1:25 PM	Pomham Rocks Bottom	BAY					17.6	<1.5	<7.0	<5	24.2	804	116	41.33			
03/29/17	1:55 PM	India Point Park Surface	BAY	0.5	15.04	5.22	7.96	502	10.6	367	35.9	1130	1400	1050	9.57	10.06	4.41	
03/29/17	2:00 PM	India Point Park Bottom	BAY					29.1	1.77	36.3	<5	70.8	652	182	15.73			
03/29/17	10:00 AM	Bullock Reach Buoy Surface	BAY	0.5	26.63	4.36	8.15	93.9	2.66	28.6	<5	156	674	293	9.9	17.86	3.242	
03/29/17	10:10 AM	Bullock Reach Buoy Bottom	BAY					13.9	<1.5	<7.0	<5	28.9	604	218	18.9			
03/29/17	8:55 AM	Pawtuxet Cove (Duplicate)	BAY	0.5	4.64	5.64	7.79	796	7.77	101	5.11	1720	1370	1070	5.23	10.69	3.555	

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
03/29/17	8:55 AM	Pawtuxet Cove Surface	BAY	0.5	4.64	5.64	7.79	788	7.93	99.8	5.9	1710	1380	1090	5.81	9.888	4.042	
03/29/17	9:05 AM	Pawtuxet Cove Bottom	BAY					199	4.86	120	11.3	355	918	470	12.13			
03/29/17	9:45 AM	Phillipsdale Landing Surface	BAY	0.2	8.85	3.83	7.04	105	2.73	72.5	7.42	226	797	307	10.21	24.79	8.335	
03/29/17	9:50 AM	Phillipsdale Landing Bottom	BAY	2.5	26.96	2.87	7.53	231	4.89	182	29.7	501	941	559	6.6			
04/12/17	9:15 AM	Conimicut Point Surface	BAY	0.1	11.48	11.08	8.14	349	8.01	23	<5	1100	1120	511	2.83	38.44	4.58	
04/12/17	2:35 PM	Edgewood Yacht Club Surface	BAY	0.1	9.45	12.21	7.99	484	10.7	94.1	<5	1460	1150	732	4.21	17.09	3.996	
04/12/17	2:15 PM	Pomham Rocks Surface	BAY	0.1	8.51	12.54	7.78	491	14.2	120	6.71	1630	1240	837	5.81	14.98	4.861	
04/12/17	2:00 PM	India Point Park Surface	BAY	0.1	4.97	17.44	7.18	620	15.2	159	18.4	1970	1360	943	4	9.516	8.277	
04/12/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.1	13.74	11.21	8.18	450	8.53	39.1	<5	1340	1160	725	4.26	19.23	3.11	
04/12/17	9:00 AM	Pawtuxet Cove Surface	BAY	0.1	0.91	11.94	7.72	747	6.93	66.2	<5	1880	1220	1050	3.44	3.988	1.84	
04/12/17	8:30 AM	Edgewood Shoals Surface	BAY	0.1	9.66	11.11	7.70	544	14.1	166	14	1580	1350	651	5	14.73	3.839	
04/12/17	8:35 AM	Edgewood Shoals Bottom	BAY					73.9	4.06	22.6	<5	368	872	206	11.75			
04/12/17	1:25 PM	Phillipsdale Landing Surface	BAY	0.1	0.72	14.30	7.24	740	18.8	151	30.8	2180	1320	1090	< 2	4.82	3.494	
04/12/17	9:45 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.1	13.74	11.21	8.18	453	8.52	38.6	<5	1350	1140	641	3.75	18.11	3.988	
04/26/17	9:20 AM	Conimicut Point Surface	BAY	0.5	9.52	11.58	7.78	210	7.5	23	9.55	516	825	396	5.33	20.37	2.668	
04/26/17	9:25 AM	Conimicut Point Bottom	BAY					<6.0	<1.5	<7.0	<5	96.9	558	<100.0	13.04			
04/26/17	8:50 AM	Edgewood Yacht Club Surface	BAY	0.5	19.06	10.55	7.86	265	7.53	112	20.5	644	972	523	5.11	8.992	2.704	
04/26/17	8:55 AM	Edgewood Yacht Club Bottom	BAY					91.1	2.99	40.4	<5	261	828	199	21.65			
04/26/17	2:25 PM	Pomham Rocks Surface	BAY	0.5	17.02	10.52	7.81	267	7.82	128	30	686	940	448	8.64	6.675	2.197	
04/26/17	2:30 PM	Pomham Rocks Bottom	BAY					87.3	2.64	45.3	7.37	269	831	234	27.8			
04/26/17	2:00 PM	India Point Park Surface	BAY	0.5	13.24	11.03	7.63	417	13.8	233	37	946	1130	640	7.39	1.457	2.042	
04/26/17	2:05 PM	India Point Park Bottom	BAY					42	1.54	40.4	<5	200	651	307	12.13			
04/26/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.5	19.27	10.84	8.06	221	7.01	42.2	<5	539	900	348	9.16	16.36	3.362	
04/26/17	9:45 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.5	19.27	10.84	8.06	219	6.88	45.8	<5	550	894	339	8.57	15.19	2.406	
04/26/17	9:50 AM	Bullock Reach Buoy Bottom	BAY					<6.0	<1.5	<7.0	<5	117	849	133	69.78			
04/26/17	12:50 PM	Pawtuxet Cove Surface	BAY	0.5	1.07	12.15	7.76	521	7.29	60.4	<5	1360	999	762	7.76	3.473	2.621	
04/26/17	12:55 PM	Pawtuxet Cove Bottom	BAY					182	6.77	92.7	8.77	478	909	321	10.23			
04/26/17	1:00 PM	Phillipsdale Landing Surface	BAY	0.5	12.15	9.82	6.76	539	16.1	214	84.6	1160	1350	825	15	2.515	2.931	
04/26/17	1:05 PM	Phillipsdale Landing Bottom	BAY	1.6	17.50	8.93	6.89	321	11.9	168	41.4	823	1180	515	25.96			
05/10/17	9:45 AM	Conimicut Point Surface	BAY	0.1	17.9	12.49	7.55	216	6.92	111	21.5	948	1040	407	21.26	1.237	1.103	
05/10/17	2:00 PM	Edgewood Yacht Club Surface	BAY	0.1	17.79	13.06	7.57	247	9.06	130	39.6	969	1030	461	22.29	1.942	1.943	
05/10/17	2:00 PM	Edgewood Yacht Club Surface (Duplicate)	BAY	0.1	17.79	13.06	7.57	246	9.25	132	40.5	963	1030	448	21.04	1.604	1.789	
05/10/17	9:10 AM	Pomham Rocks Surface	BAY	0.1	15.3	12.39	7.82	244	6.9	139	36.9	1100	953	491	17.45	1.514	2.271	
05/10/17	1:35 PM	India Point Park Surface	BAY	0.1	8.3	13.21	7.2	316	7.36	134	41.6	1510	1070	604	17.33	1.744	3.955	
05/10/17	10:00 AM	Bullock Reach Buoy Surface	BAY	0.1	16.34	12.6	7.54	263	7.47	133	32.8	1070	1030	504	22.29	2.498	2.426	
05/10/17	9:25 AM	Pawtuxet Cove Surface	BAY	0.1	2.43	12.51	7.38	518	5.21	109	6.43	1830	1070	812	5.26	1.548	1.905	
05/10/17	8:50 AM	Edgewood Shoals Surface	BAY	0.1	16.24	12.33	7.42	280	9.1	157	47	1080	1100	621	24.58	1.823	2.081	
05/10/17	8:55 AM	Edgewood Shoals Bottom	BAY					72.6	4.65	142	28.8	598	849	222	26.6			
05/10/17	1:15 PM	Phillipsdale Landing Surface	BAY	0.1	3.83	13.76	7.1	477	8.77	111	104	1960	1180	809	9.89	1.119	2.482	
05/24/17	9:10 AM	Conimicut Point Surface	BAY	0.0	21.54	15.96	7.44	83.7	4.77	NR	<5.00	697	761	213	38.16	5.92	2.894	
05/24/17	9:15 AM	Conimicut Point Bottom	BAY					24.4	3.09	NR	15.4	499	651	113	56.44			
05/24/17	8:22 AM	Edgewood Yacht Club Surface	BAY	0.0	17.84	16.06	7.28	255	7.45	NR	31.3	1140	959	452	24.44	4.982	2.294	
05/24/17	8:25 AM	Edgewood Yacht Club Bottom	BAY					88	5.35	NR	24.7	708	775	218	29.89			
05/24/17	1:55 PM	Pomham Rocks Surface	BAY	0.0	28.47	16.56	7.15	263	8.49	NR	48.8	1160	970	651	23.48	2.576	2.328	
05/24/17	2:00 PM	Pomham Rocks Bottom	BAY					141	6.96	NR	37.6	892	814	313	33.56			
05/24/17	1:35 PM	India Point Park Surface	BAY	0.0	12.62	16.6	6.87	363	10	NR	59.6	1340	987	639	20.67	1.098	2.558	
05/24/17	1:40 PM	India Point Park Bottom	BAY					55.4	4.5	NR	28	663	714	174	35.95			
05/24/17	9:30 AM	Bullock Reach Buoy Surface	BAY	0.0	17.91	16.13	7.43	282	7.37	NR	24.2	1150	648	457	28.09	2.767	2.195	
05/24/17	9:30 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.0	17.91	16.13	7.43	278	7.67	NR	20.1	1180	957	459	27.82	2.597	1.941	
05/24/17	9:45 AM	Bullock Reach Buoy Bottom	BAY					46.2	3.24	NR	5.76	560	656	140	33.18			
05/24/17	8:50 AM	Pawtuxet Cove Surface	BAY	0.0	5.41	16.37	7.14	653	6.36	NR	6.21	1880	1150	869	10	1.311	1.536	
05/24/17	8:55 AM	Pawtuxet Cove Bottom	BAY					110	6.32	NR	26.6	827	766	305	40.49			
05/24/17	1:05 PM	Phillipsdale Landing Surface	BAY	0.0	8.81	17.36	6.83	417	11.2	NR	83.6	1480	1180	812	20	0.6227	2.054	
05/24/17	1:10 PM	Phillipsdale Landing Bottom	BAY					348	10	NR	65.8	1400	925	628	24.71			
06/07/17	10:10 AM	Edgewood Shoals Bottom	BAY					31.9	3.96	102	32.7	674	766	224	11.79			
06/07/17	10:05 AM	Edgewood Shoals Surface	BAY	0.5	25.15	14.71	7.33	113	7.32	143	48.5	914	869	359	7.29	2.216	1.468	
06/07/17	10:25 AM	Edgewood Yacht Club Surface	BAY	0.5	23.4	14.52	7.41	162	8.58	<7.0	56.9	980	1000	432	9.74	5.38	3.814	
06/07/17	8:55 AM	Conimicut Point Surface	BAY	0.5	23.04	14.38	7.39	167	7.33	131	43.9	1030	919	434	7.27	1.911	1.526	
06/07/17	9:15 AM	Bullock Reach Buoy Surface	BAY	0.5	22.81	14.44	7.42	173	7.97	136	47.5	1020	1010	434	9.9	3.195	1.702	
06/07/17	2:50 PM	Pomham Rocks Surface	BAY	0.5	20.84	15.91	7.33	193	7.3	132	47.6	1090	1020	609	7.47	1.534	1.66	
06/07/17	2:20 PM	India Point Park Surface	BAY	0.5	8.07	15.89	7.2	407	9.98	132	43.2	1690	1220	840	4.2	1.273	2.29	

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
06/07/17	9:40 AM	Pawtuxet Cove Surface (Duplicate)	BAY	0.5	5.47	14.58	7.41	549	8.98	105	22.9	2000	1330	828	5.98	2.29	1.619	
06/07/17	9:40 AM	Pawtuxet Cove Surface	BAY	0.5	5.47	14.58	7.41	553	8.91	108	23.4	1970	1260	822	4.84	1.758	1.436	
06/07/17	1:55 PM	Phillipsdale Landing Surface	BAY	0.5	5.05	16.08	7.16	563	10.7	105	76.7	1920	1050	845	6.2	2.401	5.708	
06/21/17	9:10 AM	Conimicut Point Surface	BAY	0.058	11.96	22.12	8.81	<6.0	<1.5	11.6	<5	138	870	350	29.68	29.05	5.143	
06/21/17	9:15 AM	Conimicut Point Bottom	BAY					<6.0	1.75	38.8	<5	164	678	259	29.4			
06/21/17	8:30 AM	Edgewood Yacht Club Surface	BAY	0.046	12.29	22.75	8.56	44.7	8.56	12.9	<5	450	977	296	22.6	52.25	7.885	
06/21/17	8:35 AM	Edgewood Yacht Club Bottom	BAY					28	4.12	103	21.7	415	749	303	26.46			
06/21/17	1:55 PM	Pomham Rocks Surface	BAY	0.047	11.32	23.64	8.27	185	12.1	13	19.2	980	971	437	25	53.96	9.992	
06/21/17	2:00 PM	Pomham Rocks Bottom	BAY					27.7	3.25	132	31.6	477	719	384	34.6			
06/21/17	1:15 PM	India Point Park Surface	BAY	0.048	9.8	23.27	7.31	350	12.8	129	62.7	1560	1030	707	18.98	4.849	4.936	
06/21/17	1:20 PM	India Point Park Bottom	BAY					65	4.93	182	50.7	748	705	374	32.71			
06/21/17	9:30 AM	Bullock Reach Surface	BAY	0.0856	14.23	22.27	8.63	<6.0	<1.5	12.8	<5	103	873	229	29.2	36	4.705	
06/21/17	9:30 AM	Bullock Reach Surface (Duplicate)	BAY	0.0856	14.23	22.27	8.63	11.3	<1.5	12.9	<5	106	957	224	29.17	51.53	3.934	
06/21/17	9:35 AM	Bullock Reach Bottom	BAY					15.4	<1.5	56.6	11.3	283	772	222	28.57			
06/21/17	8:50 AM	Pawtuxet Cove Surface	BAY	0.042	2.07	22.75	7.22	391	7.99	61.5	6.88	1820	1040	679	5.42	2.703	2.779	
06/21/17	8:55 AM	Pawtuxet Cove Bottom	BAY					237	7.57	119	23.3	1240	1030	546	28.86			
06/21/17	1:25 PM	Phillipsdale Landing Surface	BAY	0.565	2.21	24.39	6.98	454	15.2	12.5	95	2150	1370	878	25.56	2.326	7.126	
06/21/17	1:20 PM	Phillipsdale Landing Bottom	BAY	1.67	5.42	22.92	6.83	348	16.3	205	90.1	1810	1490	836	47.78			
07/06/17	9:30 AM	Conimicut Point Surface	BAY	0.373	25.05	23.57	8.09	11	<1.5	20.7	<5.00	211	644	183	30.51	3.494	0.637	
07/06/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.385	23.21	23.73	8.23	8.96	<1.5	18.9	5.46	265	725	188	37.71	8.783	2.029	
07/06/17	9:45 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.385	23.21	23.73	8.23	<6.0	<1.5	19.7	6.17	263	708	236	29	15.83	1.06	
07/06/17	1:15 PM	Edgewood Yacht Club Surface	BAY	0.338	21.4	24.89	8.23	<6.0	<1.5	18.3	29.8	403	859	194	36.8	52.18	7.592	
07/06/17	8:33 AM	Edgewood Shoals Surface	BAY	0.355	22.75	23.42	7.99	12.3	<1.5	19.6	29.9	446	963	204	38.6	13.3	3.388	
07/06/17	8:40 AM	Edgewood Shoals Bottom	BAY					14.2	4.83	158	83.3	946	828	312	40.4	6.646	2.591	
07/06/17	10:15 AM	Pomham Rocks Surface	BAY	0.368	22.53	23.71	8.25	<6.0	<1.5	20	17.9	286	854	379	33.6	29.13	4.948	
07/06/17	9:05 AM	Pawtuxet Cove Surface	BAY	0.365	9.82	23.14	7.74	86.3	4.41	21.1	18.6	608	859	307	32.2	15.21	3.919	
07/06/17	1:40 PM	India Point Park Surface	BAY	0.326	24.92	24.38	7.42	215	12.4	124	99.7	1530	1200	545	33.06	11.6	2.277	
07/06/17	2:00 PM	Phillipsdale Landing Surface	BAY	0.311	9	12.49	7.33	450	15.7	238	167	2010	1400	924	18.35	4.893	1.79	
07/19/17	10:10 AM	Conimicut Point Surface	BAY	0.5	18.9	25.39	8.39	11.3	1.61	16.5	13.7	1360	930	200	31.06	10.13	2.123	
07/19/17	10:15 AM	Conimicut Point Bottom	BAY					21.9	4.21	180	54.7	951	702	204	52.08			
07/19/17	2:20 PM	Edgewood Yacht Club Surface	BAY	0.5	17.09	25.95	8.1	122	7.93	18.5	29	1370	1140	323	26.67	26.81	2.666	
07/19/17	2:25 PM	Edgewood Yacht Club Bottom	BAY					10.4	2.08	268	199	1660	892	221	34.79			
07/19/17	1:25 PM	Pomham Rocks Surface	BAY	0.5	18.51	25.24	8.07	135	10.8	42.4	53	1590	1140	336	28.21	27.65	0.7838	
07/19/17	1:30 PM	Pomham Rocks Bottom	BAY					86.3	8.93	189	79.5	1600	939	306	42.29			
07/19/17	12:45 PM	India Point Park Surface	BAY	0.5	9.87	26.36	7.19	323	19	602	101	2200	1540	781	17.94	5.513	1.634	
07/19/17	12:50 PM	India Point Park Bottom	BAY					38.1	5.95	228	98	1150	746	209	23.76			
07/19/17	9:20 AM	Bullock Reach Buoy Surface	BAY	0.5	19.35	24.83	8.34	15.4	3.06	25.4	22.2	1350	870	201	30.99	15.48	3.668	
07/19/17	9:20 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.5	19.35	24.83	8.34	14.7	2.98	22.8	22.1	1350	834	202	30	17.63	3.222	
07/19/17	9:30 AM	Bullock Reach Bottom	BAY					18.6	3.89	145	64	1120	747	231	52.53			
07/19/17	1:55 PM	Pawtuxet Cove Surface	BAY	0.5	5.21	25.84	7.27	357	14.6	47.7	23.8	1980	1290	602	29.9	18.79	2.964	
07/19/17	2:00 PM	Pawtuxet Cove Bottom	BAY					46.4	8.25	68	36.4	1610	879	251	10.53			
07/19/17	9:05 AM	Phillipsdale Landing Surface	BAY	0.518	5.4	22.42	7.17	546	19	1080	132	2800	2140	1620	15.21	11.13	4.85	
07/19/17	9:10 AM	Phillipsdale Landing Bottom	BAY	1.89	18.92	21	7	428	22.9	1270	147	2480	1970	1080	28.25			
08/02/17	9:25 AM	Conimicut Point Surface	BAY	0.238	27.3	23.24	8.26	<6.0	<1.50	18.8	<5.00	320	718	188	34.57	9.851	3.609	
08/02/17	2:10 PM	Edgewood Yacht Club Surface	BAY	0.202	38.91	24.67	8.34	9.26	<1.50	15.6	<5.00	308	922	186	41.8	34.59	9.404	
08/02/17	9:05 AM	Pomham Rocks Surface	BAY	0.214	23.84	23.77	8.32	8.55	<1.50	15.3	41.5	550	872	278	34.89	29.39	9.887	
08/02/17	1:45 PM	India Point Park Surface	BAY	0.2	17.71	25.61	8.24	86.1	17.1	13.4	39.8	1570	1390	387	31.91	105.3	23.46	
08/02/17	9:45 AM	Bullock Reach Buoy Surface	BAY	0.228	26.33	23.52	8.24	9.52	<1.50	17.1	<5.00	315	783	204	35.16	14.05	5.349	
08/02/17	9:45 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.228	26.33	23.52	8.24	9.23	<1.50	15.5	<5.00	319	727	275	33.8	13.28	5.5	
08/02/17	8:50 AM	Pawtuxet Cove Surface	BAY	0.225	13.04	23.04	7.7	611	3.82	24.4	21.6	1610	1290	1020	20.64	10.16	5.082	
08/02/17	8:35 AM	Edgewood Shoals Surface	BAY	0.223	24.37	23.87	8.33	9.37	<1.50	16.2	18.1	430	870	220	35.88	27.92	7.848	
08/02/17	8:40 AM	Edgewood Shoals Bottom	BAY					29.7	5.63	124	94	1180	921	289	43.46			
08/02/17	1:25 PM	Phillipsdale Landing Surface	BAY	0.215	10.33	25.83	8.46	232	36	17	65.9	2270	1650	573	26.07	111.1	75.65	
08/17/17	9:50 AM	Conimicut Point Surface	BAY	0.313	25.24	22.56	7.71	47.8	3.83	7.28	65.9	1310	637	271	32.53	10.03	1.973	
08/17/17	9:55 AM	Conimicut Point Bottom	BAY					27.9	3.25	7.72	55.2	1230	609	217	34.14			
08/17/17	1:50 PM	Edgewood Yacht Club Surface	BAY	0.272	24.35	24.2	7.72	7.8	1.91	<7.00	84.3	1390	704	217	33.12	3.132	22.4	
08/17/17	2:00 PM	Edgewood Yacht Club Bottom	BAY					12.5	3.38	91.7	62.9	1260	657	273	44.49			
08/17/17	8:45 AM	Pomham Rocks Surface	BAY	0.292	23.71	22.43	7.71	55.7	4.82	72.2	67.4	1540	709	350	32.78	4.107	2.285	
08/17/17	8:50 AM	Pomham Rocks Bottom	BAY					22.3	3.92	72.4	55.7	1190	667	262	41.65			
08/17/17	1:05 PM	India Point Park Surface	BAY	0.344	24	23.33	7.16	101	8.13	131	92.7	1630	907	411	35.62	41.37	2.15	
08/17/17	1:10 PM	India Point Park Bottom	BAY					27.5	5.3	133	76.8	1220	723	323	41.88			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
08/17/17	10:20 AM	Bullock Reach Buoy Surface	BAY	0.315	25.32	22.96	7.76	20.6	3.14	7.4	57.3	1280	683	253	40.22	14.91	2.378	
08/17/17	10:20 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.315	25.32	22.96	7.76	21.1	2.78	<7.00	56.1	1310	675	240	36	15.31	1.767	
08/17/17	10:30 AM	Bullock Reach Buoy Bottom	BAY					12.2	2.72	34.3	45.5	1110	630	271	43.12			
08/17/17	9:20 AM	Pawtuxet Cove Surface	BAY	0.321	13.52	22.23	8.02	519	5.85	13.4	34.3	2050	1230	770	23.87	23.72	4.283	
08/17/17	9:25 AM	Pawtuxet Cove Bottom	BAY					201	2.61	<7.00	73.4	1770	909	526	36.89			
08/17/17	2:25 PM	Phillipsdale Landing Surface	BAY	0.662	19.45	23.88	7.43	6.3	2.88	<7.00	99.8	2010	1030	271	38.78	60.62	3.628	
08/17/17	2:35 PM	Phillipsdale Landing Bottom	BAY	2.521	25.18	22.17	7.21	60.4	9.83	178	110	1590	865	440	31.02			
08/30/17	9:55 AM	Conimicut Point Surface	BAY	0.500	27.76	21.15	7.71	52.9	4.97	26.1	52.2	1390	687	267	41.08	15.26		
08/30/17	2:33 PM	Edgewood Yacht Club Surface	BAY	0.500	27.68	22.08	7.51	76.5	7.37	131	80.8	1370	800	346	34.69	7.149		
08/30/17	1:40 PM	Pomham Rocks Surface	BAY	0.500	28.61	21.64	7.52	53.9	6.02	97.4	66.5	1320	707	314	9.13	10.12		
08/30/17	1:40 PM	Pomham Rocks Surface (Duplicate)	BAY	0.500	28.61	21.64	7.52	54.3	5.97	97.1	65.7	1320	722	320	11.33	10.35		
08/30/17	1:15 PM	India Point Park Surface	BAY	0.500	27.33	22.26	7.45	65.4	6.56	173	68.7	1340	791	419	9.79	3.938		
08/30/17	9:20 AM	Bullock Reach Buoy Surface	BAY	0.500	27.83	21.39	7.63	76.6	6.56	70.9	73.9	1400	793	337	9.28	13.17		
08/30/17	10:16 AM	Pawtuxet Cove Surface	BAY	0.500	13.78	20.72	7.38	475	6.75	75.1	52.2	2010	1270	943	5.21	20.87		
08/30/17	2:11 PM	Edgewood Shoals Surface	BAY	0.500	28.05	21.97	7.54	80.6	6.76	116	78.7	1420	776	396	12.42	10.47		
08/30/17	2:15 PM	Edgewood Shoals Bottom	BAY					32.8	5.77	184	68.3	1420	790	387	13.68			
08/30/17	12:50 PM	Phillipsdale Landing Surface	BAY	0.500	21.37	21.71	7.28	239	13.4	248	132	1640	1140	724	5.53	6.863		
09/13/17	10:10 AM	Conimicut Point Surface	BAY	0.167	27.5	21	7.67	84.4	8.49	<7.00	40.1	1280	728	270	36.96	14.67	4.61	
09/13/17	10:15 AM	Conimicut Point Bottom	BAY					46.9	7.85	86	43.1	1060	646	260	38.8			
09/13/17	2:05 PM	Edgewood Yacht Club Surface	BAY	0.143	26.27	22.86	7.88	86.4	9.69	<7.00	55.2	1320	848	289	37.8	27.05	3.05	
09/13/17	2:10 PM	Edgewood Yacht Club Bottom	BAY					67.1	9.2	154	74.2	1470	772	382	40.41			
09/13/17	1:50 PM	Pomham Rocks Surface	BAY	0.163	27.22	22.35	7.71	85.7	9.4	<7.00	64.7	1290	841	262	38.6	26.89	3.09	
09/13/17	1:55 PM	Pomham Rocks Bottom	BAY					86.8	9.29	18.3	53.3	1280	753	262	38.6			
09/13/17	1:25 PM	India Point Park Surface	BAY	0.232	25.17	23.66	7.12	183	11.6	142	69.1	1420	936	593	37.14	4.471	4.123	
09/13/17	1:30 PM	India Point Park Bottom	BAY					54.5	8.15	152	55.2	1280	742	354	37.4			
09/13/17	10:25 AM	Bullock Reach Buoy Surface	BAY	0.179	28.33	21.13	7.77	81.4	9.67	26.1	48.8	1280	726	286	34.08	8.385	4.981	
09/13/17	10:25 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.179	28.33	21.13	7.77	90.2	9.47	26.1	49.3	1300	710	294	36.4	11.99	5.139	
09/13/17	10:30 AM	Bullock Reach Buoy Bottom	BAY					50.5	9.17	97.1	48	1190	697	305	39			
09/13/17	10:50 AM	Pawtuxet Cove Surface	BAY	0.193	17.36	20.91	7.63	325	9.61	64.4	48.1	1620	993	658	37.4	6.497	2.723	
09/13/17	10:55 AM	Pawtuxet Cove Bottom	BAY					155	9.81	81.5	59	1440	854	478	34.8			
09/13/17	10:35 AM	Phillipsdale Landing Surface	BAY	0.47	22.46	21.66	7.3	269	13.8	204	104	1510	1130	677	34.74	6.793	3.34	
09/13/17	10:40 AM	Phillipsdale Landing Bottom	BAY	2	24.71	21.62	7.33	177	15.1	236	95.1	1510	1050	602	47.23			
09/27/17	8:55 AM	Conimicut Point Surface	BAY	0.5	29.33	21.39	7.86	70.2	8.93	13.4	45.5	1000	853	271	8	10.06	3.467	
09/27/17	10:35 AM	Edgewood Yacht Club Surface	BAY	0.5	27.6	22.61	7.73	149	11.6	75.1	78.5	1100	1070	381	8.42	7.792	2.62	
09/27/17	1:25 PM	Pomham Rocks Surface	BAY	0.5	28	23.33	7.75	82.4	10.1	7.13	51.3	1040	981	359	11.16	14.05	2.55	
09/27/17	1:05 PM	India Point Park Surface	BAY	0.5	24.33	24.83	7.48	185	14.1	157	78.4	1230	1110	535	9.05	4.842	2.077	
09/27/17	9:15 AM	Bullock Reach Buoy Surface	BAY	0.5	28.95	21.83	7.8	86.1	9.69	37.9	42.8	1030	908	276	10.21	5.458	2.78	
09/27/17	1:45 PM	Pawtuxet Cove Surface	BAY	0.5	15.39	23.79	7.39	178	8.91	14.1	47.3	1320	1130	474	5.45	18.69	-0.254	
09/27/17	1:45 PM	Pawtuxet Cove Surface (Duplicate)	BAY	0.5	15.39	23.79	7.39	178	8.69	14.1	47.4	1300	1110	368	7.16	14.92	3.839	
09/27/17	2:05 PM	Edgewood Shoals Surface	BAY	0.5	27.49	23.43	7.78	129	11.1	12	67.2	1060	1050	304	7.96	9.981	2.778	
09/27/17	2:10 PM	Edgewood Shoals Bottom	BAY					53.3	9.15	212	80.8	1330	913	409	8.7			
09/27/17	12:45 PM	Phillipsdale Landing Surface	BAY	0.500	15.29	24.88	7.57	385	17.7	203	122	1530	1480	851	5.43	7.182	2.811	
10/11/17	9:00 AM	Conimicut Point Surface	BAY	0.095	27.8	20.13	7.59	124	11.6	191	92.1	1140	1050	472	5.62	1.775	1.061	
10/11/17	9:05 AM	Conimicut Point Bottom	BAY					44.2	6.88	89.9	47.6	891	921	281	12			
10/11/17	12:40 PM	Edgewood Yacht Club Surface	BAY	0.092	10.66	25.46	7.48	155	13.3	184	107	1170	1070	528	7.55	2.436	1.332	
10/11/17	12:45 PM	Edgewood Yacht Club Bottom	BAY					78.3	10.1	158	70.1	1100	995	402	13.47			
10/11/17	8:20 AM	Pomham Rocks Surface	BAY	0.065	26.78	19.7	7.53	162	13	184	107	1170	1010	622	6.26	1.291	1.226	
10/11/17	8:25 AM	Pomham Rocks Bottom	BAY					100	10.6	158	80.8	1120	974	414	11.61			
10/11/17	1:05 PM	India Point Park Surface	BAY	0.111	10.59	22.76	7.59	149	13	192	95.8	1220	972	541	7.55	2.174	1.665	
10/11/17	1:10 PM	India Point Park Bottom	BAY					64.3	10.1	214	88.5	1120	915	414	8.63			
10/11/17	9:30 AM	Bullock Reach Buoy Surface	BAY	0.065	27.55	19.68	7.57	130	11.9	170	93.1	1120	1000	488	6.33	1.88	1.344	
10/11/17	9:30 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.065	27.55	19.68	7.57	129	11.6	176	94.1	1130	1470	478	5.93	2.795	1.833	
10/11/17	9:35 AM	Bullock Reach Buoy Bottom	BAY					49.2	7.98	107	58.7	954	838	385	18.75			
10/11/17	8:35 AM	Pawtuxet Cove Surface	BAY	0.096	11.8	20.03	7.22	546	12.7	155	119	1920	1400	945	5.15	1.515	1.541	
10/11/17	8:40 AM	Pawtuxet Cove Bottom	BAY					153	12.6	190	102	1230	1030	599	10.2			
10/11/17	9:25 AM	Phillipsdale Landing Surface	BAY	0.471	21.28	20.46	6.89	266	20.2	299	142	1370	1310	791	8.78	3.74	4.185	
10/11/17	9:30 AM	Phillipsdale Landing Bottom	BAY	1.991	23.84	20.66	6.97	226	19	305	135	1240	1210	753	16.99			
10/25/17	10:00 AM	Conimicut Point Surface	BAY	0.500	28.75	17.97	7.75	104	11.2	88.5	63.3	867	665	366	9.03	4.269	3.53	
10/25/17	10:20 AM	Bullock Reach Buoy Surface	BAY	0.500	28.52	17.98	7.78	108	11.2	89.6	64.8	880	652	365	8.82	3.587	2.998	
10/25/17	10:20 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.500	28.52	17.98	7.78	116	11.3	88.7	64.6	871	667	371	8.6	3.554	3.272	
10/25/17	1:35 PM	Phillipsdale Landing Surface	BAY	0.500	10.6	18.93	7.04	500	16.6	214	205	1370	1240	1010	16.21	3.775	3.548	

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
11/08/17	8:45 AM	Pawtuxet Cove Surface	BAY	0.500	7.9	12.59	7.33	710	7.79	105	35	2550	1430	1170	4.13	0.9488	1.674	
11/08/17	8:50 AM	Pawtuxet Cove Bottom	BAY					188	14.6	169	79.2	1280	1010	544	22.37			
11/08/17	9:10 AM	Conimicut Point Surface	BAY	0.500	23.53	13.02	7.73	199	12.5	145	67.4	1280	1270	528	9.44	1.58	1.932	
11/08/17	9:15 AM	Conimicut Point Bottom	BAY					172	12.1	140	67.2	1140	915	491	11.36			
11/08/17	9:30 AM	Bullock Reach Buoy Surface	BAY	0.500	25.87	14.12	7.67	149	11.1	129	64.7	1070	934	452	12.86	1.791	1.308	
11/08/17	9:35 AM	Bullock Reach Buoy Bottom	BAY					103	8.85	96	53.2	799	759	457	10.1			
11/08/17	1:10 PM	India Point Park Surface	BAY	0.500	22.35	14.21	7.66	204	12	150	72.3	1360	936	554	8.66	1.182	1.882	
11/08/17	1:10 PM	India Point Park Surface (Duplicate)	BAY	0.500	22.35	14.21	7.66	204	11.8	147	73.2	1380	844	544	7.84	1.236	1.841	
11/08/17	1:15 PM	India Point Park Bottom	BAY					134	11.5	138	64.4	1040	904	436	7.47			
11/08/17	1:30 PM	Pomham Rocks Surface	BAY	0.500	26.07	14.56	7.74	152	11.7	125	60	1070	865	448	4.9	1.525	1.294	
11/08/17	1:35 PM	Pomham Rocks Bottom	BAY					106	10.1	106	55.9	851	776	366	11.67			
11/08/17	1:50 PM	Edgewood Yacht Club Surface	BAY	0.500	25.51	14.37	7.73	157	12.7	146	79.7	1150	933	586	9.89	1.961	1.29	
11/08/17	2:00 PM	Edgewood Yacht Club Bottom	BAY					130	12.6	151	74.3	1020	960	449	8.45			
11/08/17	2:15 PM	Phillipsdale Landing Surface	BAY	0.483	12.86	13.05	6.97	404	11.7	146	139	2250	1150	801	6.67	1.063	1.468	
11/08/17	2:20 PM	Phillipsdale Landing Bottom	BAY	1.570	24.91	15.22	7	157	13.1	170	77.3	1200	1160	510	33.83			
12/06/17	8:50 AM	Pomham Rocks Surface	BAY	0.056	23.42	10.1	7.62	300	17.3	138	108	1350	1020	610	28.57	1.238	1.29	
12/06/17	8:55 AM	Pomham Rocks Bottom	BAY					228	12.8	86.2	62.8	1140	886	463	32.42			
12/06/17	9:10 AM	Pawtuxet Cove Surface	BAY	0.056	6.89	9.2	7.52	932	7.38	112	34.4	2610	1600	1210	14.83	1.666	1.861	
12/06/17	9:15 AM	Pawtuxet Cove Bottom	BAY					194	11.5	83.1	50.7	1070	800	399	42.05			
12/06/17	9:40 AM	Conimicut Point Surface	BAY	0.054	28.5	9.26	7.75	159	11.8	65.1	46.4	901	732	348	38.22	1.421	2.907	
12/06/17	9:50 AM	Conimicut Point Bottom	BAY					155	11.5	63.3	46.3	854	712	339	43.12			
12/06/17	10:00 AM	Bullock Reach Buoy Surface	BAY	0.061	28.1	9.59	7.75	172	11.4	67.3	45.2	980	791	350	39.09	1.86	2.733	
12/06/17	10:00 AM	Bullock Reach Buoy Surface (Duplicate)	BAY	0.061	28.1	9.59	7.75	172	11.3	67.1	44.2	953	781	349	38.44	1.519	2.413	
12/06/17	10:10 AM	Bullock Reach Bottom	BAY					155	11.9	63	48.6	886	787	338	40.66			
12/06/17	1:00 PM	India Point Park Surface	BAY	0.058	15.32	9.1	7.59	488	11.7	123	78.3	2060	1210	791	26.38	1.6	3.1	
12/06/17	1:10 PM	India Point Park Bottom	BAY					393	13.2	115	82.5	1670	1130	674	27.96			
12/06/17	1:30 PM	Edgewood Yacht Club Surface	BAY	0.057	26.05	9.67	7.73	234	12.6	92.5	55	1210	863	452	31.58	1.448	2.021	
12/06/17	1:40 PM	Edgewood Yacht Club Bottom	BAY					210	12.3	89.3	55.8	1080	855	423	45.05			
12/06/17	2:45 PM	Phillipsdale Landing Surface	BAY	0.446	7.45	7.66	7.26	501	13	122	121	2140	1210	802	23.88	1.201	2.177	
12/06/17	2:50 PM	Phillipsdale Landing Bottom	BAY	0.989	16.89	7.92	7.22	403	13.9	127	88.1	1810	1140	778	27.02			
12/20/17	9:25 AM	Bullock Reach Buoy Surface	BAY	0.500	27.58	5.3	7.8	231	10.5	56.5	41.2	1020	783	413	33.26	1.09	0.5538	
12/20/17	10:00 AM	Conimicut Point Surface	BAY	0.500	27.46	5.1	7.46	182	8.84	46.9	37.5	774	816	343	29.78	1.455	0.7913	
12/20/17	10:20 AM	Pawtuxet Cove Surface	BAY	0.500	11.3	4.92	7.51	566	9.24	86.7	46.2	1640	1180	842	30	1.238	0.8748	
12/20/17	10:20 AM	Pawtuxet Cove Surface (Duplicate)	BAY	0.500	11.3	4.92	7.51	560	9.87	86.4	46.8	1620	1170	794	28.3	1.035	0.6374	
12/20/17	12:50 PM	Edgewood Shoals Surface	BAY	0.500	27.72	6.22	7.8	215	10.7	68	46	874	786	399	29.17	2.098	0.9349	
12/20/17	12:55 PM	Edgewood Shoals Bottom	BAY					164	13.5	48.6	43.5	776	768	336	32.84			
12/20/17	1:10 PM	Pomham Rocks Surface	BAY	0.500	26.64	6.27	7.8	230	10.1	83.4	61.1	1090	854	446	33.85	1.428	0.9691	
12/20/17	1:30 PM	India Point Park Surface	BAY	0.500	14.33	4.8	7.73	498	11	89.9	55.4	1930	1080	729	21.32	0.8769	1.265	
12/20/17	1:55 PM	Phillipsdale Landing Surface	BAY	0.500	7.82	4.23	7.53	590	10.4	99.1	58.9	2240	1240	896	17.08	1.199	1.97	
12/20/17	2:30 PM	Edgewood Yacht Club Surface	BAY	0.500	28.04	6.31	7.79	188	9.25	64.8	44.9	847	785	370	31.49	2.06	1.071	
RIVER																		
01/04/17	8:30 AM	Blackstone River @ Slater Mill	RIVER	0.277	0.29	1.72	7.86	688	12	38.2	22.1	2210	1020	948	7.29			
01/04/17	8:30 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.277	0.29	1.72	7.86	674	12	43.7	22.5	2270	983	932	4.89			
01/04/17	9:30 AM	Blackstone River @ Stateline	RIVER	0.688	0.23	1.40	8.06	566	13.5	58.6	13.2	2190	927	860	8.09			
01/04/17	11:00 AM	Pawtuxet River @ Broad St.	RIVER	0.625	0.30	2.70	7.84	1250	14.3	126	15.2	2620	1670	1550	8.75			
01/04/17	1:15 PM	Woonasquatucket River @ Valley St.	RIVER	0.406	0.36	3.16	7.83	435	1.91	<7.0	<5	1750	733	643	3.54			
01/04/17	12:45 PM	Moshassuck River @ Mill St.	RIVER	0.016	0.27	2.74	7.74	398	3.5	26.8	<5	2510	722	614	5			
01/04/17	10:35 AM	Warren Reservoir/Kickemuit River	RIVER	0.45	0.15	3.49	7.11	636	11.1	90	17.9	1920	1210	1140	4.58			
01/04/17	10:10 AM	Coles River @ Milford Rd.	RIVER	0.46	0.12	1.77	7.37	208	2.12	<7.0	<5	1840	734	607	2.71			
01/04/17	11:00 AM	Palmer River @ Rt. 6	RIVER	0.54	12.78	2.50	6.72	160	5.18	139	22.7	1890	1060	562	23.33			
01/04/17	1:10 PM	Runnins River @ River Rd.	RIVER	0.47	0.23	3.57	7.66	390	4.15	30.8	11.5	3360	787	741	2.71			
01/04/17	8:55 AM	Taunton River @ Berkley Bridge	RIVER	1.50	0.28	1.98	7.22	803	17.3	464	64.7	3570	1580	1620	5.21			
01/04/17	8:55 AM	Taunton River @ Berkley Bridge (Duplicate)	RIVER	1.50	0.28	1.98	7.22	802	17.4	455	65	3670	1580	1620	5			
01/04/17	2:50 PM	Ten Mile River @ Outlet of Omega Pond	RIVER	0.55	0.36	2.28	7.26	1900	11.2	16.2	17.2	2750	2250	2150	7.76			
01/04/17	1:45 PM	Ten Mile River @ Central Ave.	RIVER	0.44	0.29	4.21	7.20	1860	9.8	54.5	19.9	2620	2260	2220	8.28			
01/18/17	1:30 PM	Blackstone River @ Slater Mill	RIVER	0.24	0.23	0.94	7.70	722	19.2	96.10	6.95	2600	1110	1060	4.04			
01/18/17	2:45 PM	Woonasquatucket River @ Valley St.	RIVER	0.62	0.20	1.95	7.61	607	2.42	<7.0	<5	2260	891	775	< 2			
01/18/17	2:45 PM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.62	0.20	1.95	7.61	611	2.64	<7.0	<5	2280	938	770	2.2			
01/18/17	2:00 PM	Moshassuck River @ Mill St.	RIVER	0.37	0.30	2.39	7.44	507	5.78	53.50	<5	2860	835	686	2.27			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
01/18/17	1:00 PM	Moshassuck River @ Higginson Ave.	RIVER	0.82	0.36	1.54	7.78	510	3.57	22.50	<5	2990	787	696	10.64			
01/18/17	8:30 AM	Ten Mile River @ Outlet of Omega Pond	RIVER	0.80	0.34	1.30	7.24	1640	9.46	50.50	21.70	2860	1880	1930	4.09			
02/01/17	12:30 PM	Blackstone River @ Slater Mill	RIVER	0.51	0.25	1.28	7.62	767	25.7	158.00	8.08	2690	1180	1190	2.8			
02/01/17	10:05 AM	Blackstone River @ Stateline	RIVER	0.60	0.22	0.61	7.52	619	25.9	190.00	6.50	2590	1190	1100	< 2			
02/01/17	9:20 AM	Blackstone River @ Bikepath Bridge	RIVER	0.56	0.24	0.67	7.56	740	24.9	154.00	9.41	2710	1290	1160	< 2			
02/01/17	2:45 PM	Pawtuxet River @ Broad St.	RIVER	0.55	0.18	1.67	7.23	1120	3.17	36.40	9.64	2880	1540	1460	< 2			
02/01/17	2:45 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.55	0.18	1.67	7.23	1090	3.18	34.00	9.76	2690	1500	1450	< 2			
02/01/17	2:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.49	0.33	1.87	7.48	702	2.15	19.10	<5	2810	1030	992	< 2			
02/01/17	8:45 AM	Moshassuck River @ Higginson Ave.	RIVER	0.50	0.29	1.47	7.62	477	2.94	20.30	<5	2750	816	807	2.5			
02/01/17	1:35 PM	Moshassuck River @ Mill St.	RIVER	0.38	0.96	2.14	7.34	621	6.1	69.70	<5	3070	1030	926	2.29			
02/01/17	11:00 AM	Warren Reservoir/Kickemuit River	RIVER	0.26	0.16	0.26	7.34	811	9.45	116.00	24.20	1940	1860	1420	26.15			
02/01/17	10:30 AM	Coles River @ Milford Rd.	RIVER	0.80	0.10	0.46	7.83	184	2.04	<7.0	<5	880	824	698	< 2			
02/01/17	1:15 PM	Palmer River @ Rt. 6	RIVER	0.25	11.35	-0.92	7.00	143	1.87	<7.0	<5	2150	1370	482	17.39			
02/01/17	12:45 PM	Runnins River @ River Rd.	RIVER	0.88	0.71	-0.95	7.18	727	5.89	48.90	<5	3410	1240	1170	6.38			
02/01/17	9:15 AM	Taunton River @ Berkley Bridge	RIVER	0.23	0.33	-0.64	8.30	608	15.8	156.00	22.00	2050	1360	1230	4.3			
02/01/17	9:15 AM	Taunton River @ Berkley Bridge (Duplicate)	RIVER	0.23	0.33	-0.64	8.30	605	15.5	136.00	17.80	2100	1370	1230	3.19			
02/01/17	2:30 PM	Ten Mile River @ Omega Pond	RIVER	0.67	0.29	0.73	7.41	1190	5.82	12.50	12.30	2810	2330	1660	38.36			
02/01/17	2:00 PM	Ten Mile River @ Central Ave.	RIVER	0.40	0.40	1.44	7.50	<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0	< 2			
02/15/17	1:25 PM	Pawtuxet River @ Broad St.	RIVER	0.63	0.86	-0.31	7.04	1400	6.06	81.10	13.80	3290	2020	1730	2.58			
02/15/17	10:05 AM	Woonasquatucket River @ Valley St.	RIVER	0.06	0.28	-0.41	7.14	667	1.91	9.11	<5	2410	953	860	2.26			
02/15/17	10:25 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.05	0.27	-0.42	7.07	615	1.72	17.70	<5	2320	893	858	<2			
02/15/17	9:15 AM	Moshassuck River @ Mill St.	RIVER	0.14	0.41	-0.62	6.87	615	4.58	29.10	<5	2430	885	836	2.77			
02/15/17	8:40 AM	Moshassuck River @ Higginson Ave.	RIVER	0.24	0.39	-0.10	6.48	485	3.29	47.30	<5	2470	857	705	7.58			
03/01/17	8:30 AM	Blackstone River @ Slater Mill	RIVER	0.69	0.26	6.48	7.93	690	24.9	244.00	7.06	2250	1240	1240	3.37			
03/01/17	8:30 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.69	0.26	6.48	7.93	699	24.8	228.00	9.22	2250	1310	1260	3.51			
03/01/17	2:30 PM	Pawtuxet River @ Broad St.	RIVER	0.44	0.18	6.92	7.74	1250	14.2	451.00	61.90	2630	2060	1990	5.15			
03/01/17	10:15 AM	Woonasquatucket River @ Valley St.	RIVER	0.46	0.23	6.97	7.50	603	1.82	<7.0	<5	2250	944	897	4.63			
03/01/17	9:30 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.37	0.22	6.65	7.54	565	1.56	8.53	<5	2350	829	847	<2			
03/01/17	12:45 PM	Moshassuck River @ Mill St.	RIVER	0.28	0.37	7.77	7.47	627	5.9	16.10	<5	2470	1180	910	5.83			
03/01/17	9:00 AM	Moshassuck River @ Higginson Ave.	RIVER	0.49	0.43	6.80	7.44	485	3.72	8.18	<5	2410	742	684	<2			
03/01/17	1:45 PM	Ten Mile River @ Omega Pond	RIVER	0.47	0.34	7.78	8.39	1400	7.01	<7.0	9.91	2760	1950	1730	8.39			
03/15/17	10:10 AM	Blackstone River @ Stateline	RIVER	0.37	0.26	-0.92	7.63	707	17.1	1240.00	<5	2100	2240	2000	<2			
03/15/17	9:15 AM	Blackstone River @ Bikepath Bridge	RIVER	0.28	0.33	-0.21	7.66	957	15.7	472.00	<5	2160	2010	1850	4			
03/15/17	2:06 PM	Pawtuxet River @ Broad St.	RIVER	NR	NR	NR	NR	1000	12.8	164.00	8.42	2140	1420	1360	2.8			YSI sonde out of the water - field parameters not reportable
03/15/17	1:10 PM	Woonasquatucket River @ Valley St.	RIVER	0.19	0.38	1.14	7.52	705	2.59	27.30	<5	2200	1070	892	<2			
03/15/17	1:10 PM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.19	0.38	1.14	7.52	710	2.72	28.40	<5	2130	973	897	2.38			
03/15/17	12:41 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.14	0.37	-0.70	7.64	688	2.17	43.90	<5	2000	998	867	2			
03/15/17	1:35 PM	Moshassuck River @ Mill St.	RIVER	0.17	0.48	1.32	7.36	689	4.88	54.40	<5	2220	1040	915	3.96			
03/15/17	1:00 PM	Warren Reservoir/Kickemuit River	RIVER	0.49	0.17	1.40	7.69	525	4.21	84.50	12.70	839	1140	934	<2			
03/15/17	1:30 PM	Coles River @ Milford Rd.	RIVER	0.90	0.30	-0.28	7.34	328	2.28	20.30	<5	760	863	789	<2			
03/15/17	2:20 PM	Runnins River @ River Rd.	RIVER	1.25	0.77	-2.88	6.37	647	7.23	145.00	8.84	2350	1240	1090	2.8			
03/15/17	9:15 AM	Taunton River @ Berkley Bridge	RIVER	0.21	0.33	-2.68	7.24	796	12.4	146.00	20.70	1510	1400	1250	5.6			
03/15/17	10:25 AM	Ten Mile River @ Central Ave.	RIVER	0.55	0.43	-2.00	7.47	1930	19.5	154.00	13.70	2640	2510	2270	5			
03/15/17	10:25 AM	Ten Mile River @ Central Ave. (Duplicate)	RIVER	0.55	0.43	-2.00	7.47	1890	19.7	151.00	14.10	2370	2500	2320	4.2			
03/29/17	8:15 AM	Blackstone River @ Slater Mill	RIVER	0.51	0.25	3.95	7.73	991	21.3	822	8.92	2280	2110	2140	11.49			
03/29/17	3:00 PM	Pawtuxet River @ Broad St.	RIVER	0.76	0.16	5.26	7.61	1050	7	39.3	<5	2440	1320	1370	4.63			
03/29/17	1:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.10	0.22	5.08	7.90	633	2.21	10.1	<5	2090	831	950	2.86			
03/29/17	12:39 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.57	0.20	4.56	8.28	574	1.89	16.8	<5	1940	799	920	2.92			
03/29/17	1:20 PM	Moshassuck River @ Mill St.	RIVER	0.12	0.33	5.07	7.59	599	4.04	17.2	<5	2160	875	807	6.53			
03/29/17	1:20 PM	Moshassuck River @ Mill St. (Duplicate)	RIVER	0.12	0.33	5.07	7.59	598	3.57	17.8	<5	2170	842	849	6.74			
03/29/17	8:40 AM	Moshassuck River @ Higginson Ave.	RIVER	0.72	0.39	3.97	7.43	493	3.55	14.7	<5	2160	712	675	2.47			
03/29/17	9:30 AM	Ten Mile River @ Omega Pond	RIVER	0.36	0.33	4.31	7.51	1490	6.2	9.47	7.07	2120	1900	1750	5.4			
04/12/17	9:00 AM	Blackstone River @ Slater Mill	RIVER	0.50	0.21	11.65	7.65	746	20.7	127.00	7.08	2190	1280	1080	3.96			
04/12/17	9:00 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.50	0.21	11.65	7.65	776	20.7	120.00	7.03	2360	1270	1100	5.21			
04/12/17	10:35 AM	Blackstone River @ Stateline	RIVER	0.50	0.21	12.17	7.37	635	24.3	224.00	7.44	2170	1300	1080	4.57			
04/12/17	9:40 AM	Blackstone River @ Bikepath Bridge	RIVER	0.50	0.21	12.27	7.38	754	25.4	185.00	7.69	2220	1390	1200	3.23			
04/12/17	2:48 PM	Pawtuxet River @ Broad St.	RIVER	0.50	0.13	11.38	7.60	721	8.17	41.00	<5	2010	1150	1140	< 2			
04/12/17	1:34 PM	Woonasquatucket River @ Valley St.	RIVER	0.50	0.19	12.55	7.62	586	2.65	<7.0	<5	1910	926	775	2.08			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
04/12/17	12:45 PM	Moshassuck River @ Higginson Ave.	RIVER	0.50	0.29	13.05	7.48	528	5.2	15.00	<5	2130	893	689	3.16			
04/12/17	1:09 PM	Moshassuck River @ Mill St.	RIVER	0.50	0.28	12.45	7.46	642	5.41	10.60	<5	2210	1010	891	2.92			
04/12/17	9:55 AM	Warren Reservoir/Kickemuit River	RIVER	0.69	0.12	11.16	6.92	342	6.85	88.00	17.80	509	1230	998	6.52			
04/12/17	9:55 AM	Warren Reservoir/Kickemuit River (Duplicate)	RIVER	0.69	0.12	11.16	6.92	345	6.79	109.00	17.60	492	1240	973	6.21			
04/12/17	9:18 AM	Coles River @ Milford Rd.	RIVER	1.23	0.08	10.13	6.99	140	2.56	<7.0	<5	139	772	605	< 2			
04/12/17	10:26 AM	Palmer River @ Rt. 6	RIVER	1.62	1.08	9.68	6.81	163	3.36	<7.0	8.65	534	891	616	5.11			
04/12/17	12:52 PM	Runnins River @ River Rd.	RIVER	1.20	0.24	9.87	6.17	484	2.93	<7.0	5.81	1030	1050	934	2.14			
04/12/17	8:45 AM	Taunton River @ Berkley Bridge	RIVER	0.30	0.17	9.16	7.47	371	8.19	33.80	10.20	578	939	885	3.58			
04/12/17	2:09 PM	Ten Mile River @ Outlet of Omega Pond	RIVER	1.55	0.23	9.01	7.31	997	5.39	<7.0	14.40	1790	1450	1370	4.22			
04/12/17	1:31 PM	Ten Mile River @ Central Ave.	RIVER	0.82	0.30	11.09	7.17	1250	4.96	<7.0	6.76	1960	1690	1600	5.48			
04/26/17	8:20 AM	Blackstone River @ Slater Mill	RIVER	0.40	0.21	11.64	7.81	843	26.8	73.5	7.84	1470	1340	1140	9.47			
04/26/17	10:35 AM	Pawtuxet River @ Broad St.	RIVER	0.48	0.11	10.67	7.07	532	7.92	63	<5	1360	1020	787	13.83			
04/26/17	10:35 AM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.48	0.11	10.67	7.07	528	7.98	61.6	<5	1240	1010	789	12.69			
04/26/17	9:50 AM	Woonasquatucket River @ Valley St.	RIVER	0.42	0.15	10.88	7.16	475	2.76	9.81	<5	1070	907	715	10.82			
04/26/17	1:45 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.38	0.14	11.20	7.31	401	2.93	23.2	<5	1090	840	623	8.7			
04/26/17	9:20 AM	Moshassuck River @ Mill St.	RIVER	0.40	0.18	10.44	7.19	349	4.69	39.9	<5	1210	871	630	20.21			
04/26/17	8:50 AM	Moshassuck River @ Higginson Ave.	RIVER	0.47	0.28	11.18	7.11	211	3.01	26	5	909	661	518	7.79			
04/26/17	12:45 PM	Ten Mile River @ Omega Pond	RIVER	0.44	0.26	11.60	6.99	698	7.72	35.4	18	1550	1250	1030	7.17			
05/10/17	8:40 AM	Blackstone River @ Slater Mill	RIVER	0.868	0.16	8.55	7.3	420	6.8	33.7	10.8	1850	922	705	16.7			
05/10/17	8:40 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.868	0.16	8.55	7.3	421	6.73	31.9	10.1	1810	876	712	16.22			
05/10/17	9:58 AM	Blackstone River @ Stateline	RIVER	0.825	0.19	8.74	7.29	385	6.92	10.1	9.71	1720	837	655	7.2			
05/10/17	10:57 AM	Blackstone River @ Bikepath Bridge	RIVER	1.826	0.19	8.46	7.24	386	6.41	14.3	10.9	1770	807	679	7.66			
05/10/17	1:30 PM	Pawtuxet River @ Broad St.	RIVER	0.561	0.13	8.6	7.04	584	4.7	70.3	<5	1880	990	880	5.68			
05/10/17	2:20 PM	Woonasquatucket River @ Valley St.	RIVER	0.47	0.16	9.06	7.1	571	2.91	20.7	<5	1600	953	804	6.1			
05/10/17	2:55 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.146	0.18	8.97	7.2	513	2.67	25.3	<5	1460	902	760	5.91			
05/10/17	3:20 PM	Moshassuck River @ Mill St.	RIVER	0.216	0.24	8.92	7.08	465	5.98	77.2	<5	2560	901	763	7.33			
05/10/17	10:27 AM	Warren Reservoir/Kickemuit River	RIVER	0.394	0.1	12.02	6.79	301	7.23	38.8	20.9	779	1200	946	7.56			
05/10/17	9:53 AM	Coles River @ Milford Rd.	RIVER	0.666	0.06	11.57	6.67	110	4.93	8.1	20.4	236	978	824	2.79			
05/10/17	10:49 AM	Palmer River @ Rt. 6	RIVER	1.7	1.92	11.19	6.52	123	4.9	28.2	15.5	523	903	817	8.27			
05/10/17	12:45 PM	Runnins River @ River Rd.	RIVER	1.029	0.19	10.6	7.09	502	3.24	<7.0	7.86	1870	1060	1270	2.75			
05/10/17	8:51 AM	Taunton River @ Berkley Bridge	RIVER	0.908	0.16	11.83	7.48	380	6	<7.0	16.1	753	1040	892	4.29			
05/10/17	8:51 AM	Taunton River @ Berkley Bridge (Duplicate)	RIVER	0.908	0.16	11.83	7.48	382	5.63	<7.0	16.8	784	1090	917	4.19			
05/10/17	1:21 PM	Ten Mile River @ Outlet of Omega Pond	RIVER	0.8	0.19	12.39	7.01	569	7.62	53.7	20.9	1990	1200	1030	6.77			
05/10/17	1:52 PM	Ten Mile River @ Central Ave.	RIVER	0.677	0.26	11.8	7	704	6.07	32	11.6	2170	1220	1130	5.85			
05/24/17	9:00 AM	Blackstone River @ Slater Mill	RIVER	0.682	0.22	15.9	7.3	620	10	NR	14.9	1750	1110	919	16.3			
05/24/17	1:00 PM	Pawtuxet River @ Broad St.	RIVER	0.663	0.14	15.39	7.15	760	5.4	NR	<5.00	2260	1060	1020	5.96			
05/24/17	10:30 AM	Woonasquatucket River @ Valley St.	RIVER	0.399	0.36	16.09	7.39	557	4.93	NR	<5.00	1500	914	830	4.63			
05/24/17	11:00 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.398	0.16	16.32	7.29	497	4.3	NR	<5.00	1360	895	774	3.79			
05/24/17	9:35 AM	Moshassuck River @ Mill St.	RIVER	0.42	0.27	14.84	7.15	479	11.4	NR	<5.00	2670	863	762	6.24			
05/24/17	9:35 AM	Moshassuck River @ Mill St. (Duplicate)	RIVER	0.42	0.27	14.84	7.15	478	11.4	NR	<5.00	2580	822	756	6.74			
05/24/17	8:30 AM	Moshassuck River @ Higginson Ave.	RIVER	0.643	0.26	15.9	7.22	210	7.4	NR	5.4	1510	617	516	4.13			
05/24/17	1:45 PM	Ten Mile River @ Omega Pond	RIVER	1.31	0.23	18.15	7.1	589	12.1	NR	19.2	2070	1150	984	3.91			
06/07/17	10:22 AM	Coles River @ Milford Rd.	RIVER	1.383	0.08	14.34	7.3	165	8.96	67.1	31.9	941	1190	925	5.57			
06/07/17	1:05 PM	Moshassuck River @ Higginson Ave.	RIVER	0.61	0.24	15.07	7.42	210	7.29	66.3	<5	1780	758	493	4.6			
06/07/17	11:04 AM	Palmer River @ Rt. 6	RIVER	0.145	3.16	14.25	6.96	286	5.96	49.1	12.6	1800	1230	766	8.33			
06/07/17	2:30 PM	Moshassuck River @ Mill St.	RIVER	0.512	0.21	15.09	7.31	315	9.17	66.8	<5	1960	854	597	9.41			
06/07/17	10:45 AM	Warren Reservoir/Kickemuit River (Duplicate)	RIVER	0.661	0.11	13.55	7.07	322	13.5	54.4	19.4	1600	1320	983	5.45			
06/07/17	10:45 AM	Warren Reservoir/Kickemuit River	RIVER	0.661	0.11	13.55	7.07	324	13.5	33.9	19	1560	1360	977	5.58			
06/07/17	1:45 PM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.556	0.14	15.66	7.4	337	3.93	33.2	<5	1640	841	599	5.74			
06/07/17	1:45 PM	Woonasquatucket River @ Valley St.	RIVER	0.556	0.14	15.66	7.4	343	3.78	33.3	<5	1650	823	592	6.24			
06/07/17	10:50 AM	Blackstone River @ Stateline	RIVER	0.582	0.15	14.28	7.45	410	11.6	51	14.6	1880	966	697	15.6			
06/07/17	12:43 PM	Runnins River @ River Rd.	RIVER	0.762	0.21	13.41	7.41	460	4.8	<7.0	13.5	2980	1150	972	2.79			
06/07/17	9:07 AM	Taunton River @ Berkley Bridge	RIVER	0.401	0.67	14.43	7.16	493	5.02	22	26.4	1660	1180	910	4.03			
06/07/17	9:40 AM	Blackstone River @ Bikepath Bridge	RIVER	0.5	0.17	14.23	7.34	556	10.7	41.1	14.3	2150	1210	845	20.45			
06/07/17	2:05 PM	Ten Mile River @ Central Ave.	RIVER	0.938	0.22	14.63	7.25	562	14	47	14.5	2200	1280	1010	5.68			
06/07/17	8:30 AM	Blackstone River @ Slater Mill	RIVER	0.635	0.17	14.4	8.13	562	11.1	37.7	13.3	2060	1220	823	36.77			
06/07/17	3:05 PM	Pawtuxet River @ Broad St.	RIVER	0.53	0.12	15.59	7.37	559	7.16	29.4	7.62	2190	1060	832	9.39			
06/07/17	1:24 PM	Ten Mile River @ Outlet of Omega Pond	RIVER	1.613	0.25	16.31	7.24	666	17.6	18.9	22.6	2050	1450	1110	10.22			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
06/21/17	8:20 AM	Blackstone River @ Slater Dam	RIVER	0.416	0.19	23.17	6.93	542	9.48	13.8	22.2	2340	988	853	5.56			
06/21/17	2:40 PM	Pawtuxet River @ Broad St.	RIVER	0.52	0.12	23.17	7.01	373	5.95	<7.0	10.9	2140	796	619	11.11			
06/21/17	2:40 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.52	0.12	23.17	7.01	373	5.98	1.23	11.9	2110	985	616	7.17			
06/21/17	10:30 AM	Woonasquatucket River @ Valley St.	RIVER	0.456	0.15	22.67	6.8	451	5.63	9.94	6.09	1940	830	721	3.48			
06/21/17	9:50 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.507	0.14	22.65	6.76	384	5.46	10.9	7.29	1760	760	682	3.4			
06/21/17	10:50 AM	Moshassuck River @ Mill St.	RIVER	0.432	0.23	20.79	6.77	450	12.5	84.1	<5	3200	831	730	3.11			
06/21/17	8:50 AM	Moshassuck River @ Higginson Ave.	RIVER	0.455	0.22	21.97	6.77	208	10	72.4	8.99	2520	656	513	2.73			
06/21/17	1:00 PM	Ten Mile River @ Outlet of Omega Pond	RIVER	0.53	0.22	22.88	7.03	494	12	48.8	23.7	2390	1030	890	5.11			
07/06/17	8:28 AM	Blackstone River @ Slater Mill	RIVER	0.645	0.24	24.5	6.54	658	6.59	<7.0	25.4	2570	1150	969	9.26			
07/06/17	8:28 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.645	0.24	24.5	6.54	660	6.75	<7.0	26.5	2640	1010	966	7.14			
07/06/17	10:30 AM	Blackstone River @ Stateline	RIVER	0.584	0.25	23.48	7.09	608	5.82	<7.0	18	2200	1110	943	8.08			
07/06/17	9:33 AM	Blackstone River @ Bikepath Bridge	RIVER	0.645	0.24	24.18	6.91	623	6.29	<7.0	24.5	2480	1090	938	3.92			
07/06/17	2:20 PM	Pawtuxet River @ Broad St.	RIVER	0.779	0.17	24.03	7.19	970	22.1	<7.0	7.93	2840	1400	1260	2.42			
07/06/17	1:02 PM	Woonasquatucket River @ Valley St.	RIVER	0.535	0.21	23.57	7.12	665	3.76	<7.0	<5.00	2180	984	865	2			
07/06/17	12:37 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.46	0.18	24.66	7.03	582	7.11	<7.0	<5.00	2160	997	833	2.5			
07/06/17	1:31 PM	Moshassuck River @ Mill St.	RIVER	0.412	0.3	21.24	7.08	617	15.9	<7.0	<5.00	3890	961	869	3.51			
07/06/17	9:45 AM	Warren Reservoir/Kickemuit River	RIVER	0.55	0.15	22.08	6.97	11.8	3.01	<7.0	37.1	999	951	788	7.58			
07/06/17	9:17 AM	Coles River @ Milford Rd.	RIVER	0.88	0.09	21.04	7.24	125	11	12.4	51.5	1920	1250	1100	4.13			
07/06/17	10:04 AM	Palmer River @ Rt. 6	RIVER	0.82	11.63	24.74	6.98	24	1.68	10.8	<5.00	1700	1060	429	22.8			
07/06/17	10:26 AM	Runnins River @ River Rd.	RIVER	0.285	0.41	17.67	7.61	518	5.05	<7.0	5.12	4960	1080	995	3.54			
07/06/17	8:43 AM	Taunton River @ Berkley Bridge	RIVER	0.618	7.81	23.25	6.47	1140	7.94	<7.0	48.2	3710	1830	1590	10.2			
07/06/17	1:23 PM	Ten Mile River @ Omega Pond	RIVER	0.305	0.26	24.59	7.76	235	11.7	<7.0	8.56	2530	1030	651	8.48			
07/06/17	1:23 PM	Ten Mile River @ Omega Pond (Duplicate)	RIVER	0.305	0.26	24.59	7.76	234	11.6	<7.0	8.47	2510	984	643	8.09			
07/06/17	12:51 PM	Ten Mile River @ Central Ave.	RIVER	0.342	0.32	20.78	7.56	1060	6.81	12.5	17.5	3430	1440	1400	3.75			
07/19/17	8:30 AM	Blackstone River @ Slater Mill	RIVER	0.672	0.2	22.14	7.29	639	8.15	48.7	20	2760	936	981	2.45			
07/19/17	2:00 PM	Pawtuxet River @ Broad St.	RIVER	0.68	0.24	23.35	7.53	793	20.2	15.6	6.57	2630	1090	1130	2.65			
07/19/17	1:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.531	0.18	23.89	7.56	634	5.61	<7.0	7.02	2260	916	880	< 2			
07/19/17	1:00 PM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.531	0.18	23.89	7.56	633	5.49	<7.0	6.66	2280	918	863	< 2			
07/19/17	12:35 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.601	0.17	24.06	7.5	551	6.82	22.6	6.24	2100	860	992	< 2			
07/19/17	1:25 PM	Moshassuck River @ Mill St.	RIVER	0.461	0.24	21.8	7.44	517	12.7	65.8	5.77	3600	848	830	3			
07/19/17	10:45 AM	Moshassuck River @ Higginson Ave.	RIVER	0.72	0.23	21.94	7.28	173	9.53	58.4	10.8	2440	593	530	3.47			
07/19/17	10:00 AM	Ten Mile River @ Omega Pond	RIVER	1.76	0.21	22.55	7.58	407	8.93	<7.0	24.6	2590	895	915	3.47			
08/02/17	8:45 AM	Blackstone River @ Slater Mill	RIVER	0.45	0.23	21.95	7.7	728	4.78	19.5	17.8	2600	1130	1040	2.47			
08/02/17	10:45 AM	Blackstone River @ Stateline	RIVER	0.48	0.23	21.78	7.38	686	5.05	25.7	19.9	2290	954	990	2			
08/02/17	9:45 AM	Blackstone River @ Bikepath Bridge	RIVER	0.57	0.23	21.53	7.44	741	4.94	<7.0	24.4	2640	1150	1030	3.33			
08/02/17	2:40 PM	Pawtuxet River @ Broad St.	RIVER	0.54	0.52	22.46	7.29	995	11.4	<7.0	18.6	2610	1510	1420	4.68			
08/02/17	1:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.47	0.23	22.09	7.63	701	2.19	<7.0	<5.00	1890	882	877	< 2			
08/02/17	1:00 PM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.47	0.23	22.09	7.63	698	2.33	<7.0	<5.00	1920	974	897	< 2			
08/02/17	12:15 PM	Moshassuck River @ Higginson Ave.	RIVER	0.49	0.25	21.4	7.32	152	3.92	23.3	9.42	2080	531	422	< 2			
08/02/17	1:55 PM	Moshassuck River @ Mill St.	RIVER	0.43	0.3	19.99	7.41	628	12.2	36.6	<5.00	3820	861	826	2.44			
08/02/17	10:50 AM	Warren Reservoir/Kickemuit River	RIVER	0.454	0.15	23.5	7.01	<6.0	<1.50	<7.0	19.5	785	839	553	5.43			
08/02/17	10:05 AM	Coles River @ Milford Rd.	RIVER	0.465	0.1	22.05	7.33	242	7.22	63.7	49.2	3510	1290	1160	2.11			
08/02/17	10:05 AM	Coles River @ Milford Rd. (Duplicate)	RIVER	0.465	0.1	22.05	7.33	242	7.36	61.8	53	3500	1290	1160	2.08			
08/02/17	11:15 AM	Palmer River @ Rt. 6	RIVER	0.443	6.85	25.23	6.78	175	5.03	<7.0	5.58	2700	1040	722	17.23			
08/02/17	1:10 PM	Runnins River @ River Rd.	RIVER	0.522	0.4	20.74	7.2	548	5.74	10.4	<5.00	5230	913	890	3.33			
08/02/17	8:45 AM	Taunton River @ Berkley Bridge	RIVER	0.508	1.59	23.48	7.13	1150	7.26	14.6	74.4	2730	1890	1500	6.81			
08/02/17	3:00 PM	Ten Mile River @ Omega Pond	RIVER	0.43	0.26	25.65	8.29	54.3	8.52	<7.0	7.17	755	749	405	5.62			
08/02/17	1:53 PM	Ten Mile River @ Central Ave.	RIVER	0.514	0.34	23.16	7.37	1280	5.19	<7.0	13.7	3240	1680	1590	15.74			
08/17/17	8:30 AM	Blackstone River @ Slater Mill	RIVER	0.256	0.24	22.39	6.75	625	4.01	<7.00	19.9	2290	1000	907	2.65			
08/17/17	12:40 PM	Pawtuxet River @ Broad St.	RIVER	0.602	0.27	23.15	6.91	1410	8.94	<7.00	11.6	2840	1810	1710	< 2			
08/17/17	12:40 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.602	0.27	23.15	6.91	1420	8.93	<7.00	11.5	2850	1780	1690	< 2			
08/17/17	10:15 AM	Woonasquatucket River @ Valley St.	RIVER	0.353	0.25	21.12	7.12	729	2.01	<7.00	<5.00	1540	984	905	< 2			
08/17/17	10:45 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.385	0.21	22.31	7.05	606	3.26	<7.00	<5.00	1330	997	809	< 2			
08/17/17	9:45 AM	Moshassuck @ Mill St.	RIVER	0.361	0.32	18.78	6.9	677	10.2	21.5	<5.00	4250	921	822	4.58			
08/17/17	9:15 AM	Moshassuck @ Higginson Ave.	RIVER	0.468	0.26	19.25	6.82	189	3.26	26.3	7.49	2770	513	394	< 2			
08/17/17	2:00 PM	Ten Mile River @ Omega Pond	RIVER	0.792	0.28	24.28	7.07	100	5.45	<7.00	7.4	573	713	445	4.44			
08/30/17	9:00 AM	Blackstone River @ Slater Mill	RIVER	0.186	0.32	19.20	7.08	721	3.85	<7.0	13.3	1670	1030	1030	< 2			
08/30/17	10:30 AM	Blackstone River @ Stateline	RIVER	0.153	0.28	18.70	7.35	850	3.43	<7.0	20	1480	1210	1190	3.2			
08/30/17	9:50 AM	Blackstone River @ Bikepath Bridge	RIVER	0.363	0.31	20.18	7.20	725	3.82	<7.0	17.7	1650	1100	1070	< 2			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
08/30/17	2:50 PM	Pawtuxet River @ Broad St.	RIVER	0.697	25.43	21.96	6.94	987	6.35	45.5	29.4	2360	1670	1270	5			
08/30/17	2:50 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.697	25.43	21.96	6.94	938	7.35	68.1	23.9	2350	1670	1250	5.26			
08/30/17	1:35 PM	Woonasquatucket River @ Valley St.	RIVER	0.196	0.31	18.86	7.31	934	3.68	<7.0	<5.00	1630	1230	1270	6.74			
08/30/17	1:10 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.281	0.23	20.35	7.29	745	3.59	11.6	<5.00	1050	1030	1050	2.42			
08/30/17	2:10 PM	Moshassuck @ Mill St.	RIVER	0.228	0.3	17.68	7.27	775	17.9	66.1	<5.00	4280	1130	1100	7.2			
08/30/17	11:20 AM	Palmer River @ Rt. 6	RIVER	0.573	2.07	19.3	7.24	16	2.03	7.12	14.1	764	889	351	8.75			
08/30/17	11:05 AM	Runnins River @ River Rd.	RIVER	0.465	0.43	14.9	7.74	571	7.7	57.2	<5.00	4520	874	950	3.88			
08/30/17	1:30 PM	Taunton River @ Berkley Bridge	RIVER	0.645	7.24	20.32	8.12	1070	9.57	<7.0	71.9	590	1910	1360	7.58			
08/30/17	2:35 PM	Ten Mile River @ Central Ave.	RIVER	0.482	0.41	17.34	8.17	1460	3.39	<7.0	12.7	2380	1830	1780	< 2			
08/30/17	1:30 PM	Taunton River @ Berkley Bridge (Duplicate)	RIVER	0.645	7.24	20.32	8.12	1070	9.57	<7.0	71.7	597	1860	1370	4			
09/13/17	9:20 AM	Blackstone @ Slater Mill	RIVER	0.449	0.23	19.45	7.78	724	6.31	<7.0	16.7	1680	1000	970	8			
09/13/17	3:20 PM	Pawtuxet River @ Broad St.	RIVER	0.497	2.18	21.21	7.79	123	11.5	30.2	75.8	1440	873	488	36.94			
09/13/17	3:20 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	0.497	2.18	21.21	7.79	124	11.5	17.3	75.6	1420	814	443	38.37			
09/13/17	2:12 PM	Woonasquatucket River @ Valley St.	RIVER	0.156	0.24	20.5	7.76	717	1.89	<7.0	<5.00	1570	964	883	3.26			
09/13/17	1:50 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.163	0.21	21.64	7.88	659	2.42	<7.0	<5.00	1120	981	873	4.77			
09/13/17	2:35 PM	Moshassuck @ Mill St.	RIVER	0.167	0.33	18.69	7.57	717	13.3	77.1	7.45	4970	1090	1080	4.67			
09/13/17	8:45 AM	Moshassuck @ Higginson Ave.	RIVER	0.256	0.25	15.64	7.7	305	5.43	84.3	5.59	4560	485	555	3.26			
09/13/17	1:15 PM	Ten Mile River @ Omega Pond	RIVER	0.518	0.33	21.05	8.3	9.08	<1.5	<7.0	<5.00	513	739	338	10.11			
09/27/17	9:10 AM	Blackstone River @ Slater Mill	RIVER	0.500	0.3	21.85	8.26	904	5.18	7.57	16.7	1990	1300	1270	2.45			
09/27/17	10:40 AM	Blackstone River @ Stateline	RIVER	0.046	0.29	21.84	7.84	1160	5.96	16.7	31	1920	1520	1550	< 2			
09/27/17	9:50 AM	Blackstone River @ Bikepath Bridge	RIVER	0.004	0.28	22.42	7.87	968	6.28	<7.0	25.1	2210	1400	1360	2.11			
09/27/17	3:00 PM	Pawtuxet River @ Broad St.	RIVER	0.370	3.04	22.76	7.53	1100	3.73	9.68	43	2980	1580	1460	< 2			
09/27/17	2:15 PM	Woonasquatucket River @ Valley St.	RIVER	0.105	0.26	22.84	7.82	918	2.94	<7.0	<5.00	1780	1250	1180	13			
09/27/17	1:40 PM	Moshassuck @ Higginson Ave.	RIVER	0.017	0.26	20.01	7.82	297	7.3	91.9	5.66	4660	602	586	< 2			
09/27/17	1:50 PM	Moshassuck @ Mill St.	RIVER	0.004	0.34	20.83	7.67	798	24.9	89.4	5.94	5290	1210	1200	< 2			
09/27/17	1:50 PM	Moshassuck @ Mill St. (Duplicate)	RIVER	0.004	0.34	20.83	7.67	800	23.9	67.5	6.36	5190	1200	1210	< 2			
09/27/17	10:08 AM	Warren Reservoir/Kickemuit River	RIVER	0.413	0.13	22.35	6.84	<6.0	<1.5	<7.0	9.74	1400	1240	540	28			
09/27/17	9:15 AM	Coles River @ Milford Rd.	RIVER	1.150	0.16	18.74	7.1	557	6.6	24.9	18.6	3090	1170	1110	< 2			
09/27/17	9:15 AM	Coles River @ Milford Rd (Duplicate)	RIVER	1.150	0.16	18.74	7.1	556	6.54	<7.0	18	2750	1130	1110	2.29			
09/27/17	10:31 AM	Palmer River @ Rt. 6	RIVER	2.160	22.18	22.66	6.87	158	13.7	44.1	28.9	1460	1120	540	4.58			
09/27/17	12:45 PM	Runnins River @ River Rd.	RIVER	0.864	0.68	18.24	7.25	489	4.98	30.4	<5.00	5370	720	891	3.03			
09/27/17	8:37 AM	Taunton River @ Berkley Bridge	RIVER	0.197	0.53	20.75	7.6	1610	7.66	84.6	129	2900	2400	2160	62.47			
09/27/17	1:03 PM	Ten Mile River @ Omega Pond	RIVER	1.163	0.34	21.77	7.6	125	11.1	10.2	7.55	750	771	487	7.87			
09/27/17	1:50 PM	Ten Mile River @ Central Ave.	RIVER	0.529	0.43	22.23	7.41	1120	4.94	17.3	17.8	3400	1700	1670	12.73			
10/11/17	10:40 AM	Blackstone River @ Slater Mill	RIVER	0.429	0.35	19.49	7.94	934	3.52	10.4	17.1	1750	1300	1240	< 2			
10/11/17	10:40 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.429	0.35	19.49	7.94	929	3.48	<7.0	16.6	1750	1290	1240	< 2			
10/11/17	2:10 PM	Pawtuxet River @ Broad St.	RIVER	0.499	0.86	19.85	7.46	152	15.4	262	147	1280	1130	581	8.54			
10/11/17	1:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.253	0.24	18.85	7.54	636	2.19	<7.0	<5	1500	958	845	13.18			
10/11/17	11:50 AM	Woonasquatucket River @ Manton Ave.	RIVER	0.365	0.2	19.72	7.59	500	2.86	<7.0	<5	1100	836	791	< 2			
10/11/17	1:30 PM	Moshassuck @ Mill St.	RIVER	0.257	0.32	17.9	7.39	626	14.4	61.2	6	7570	1010	986	2.11			
10/11/17	11:15 AM	Moshassuck @ Higginson Ave.	RIVER	0.446	0.26	16.6	7.59	225	5.61	55.8	6.19	4310	528	546	4			
10/11/17	9:00 AM	Ten Mile River @ Omega Pond	RIVER	0.123	0.34	20.08	6.51	147	7.57	119	17.5	1290	745	596	4			
10/25/17	9:00 AM	Blackstone River @ Slater Mill	RIVER	1.500	0.21	17.5	7.33	681	2.52	<7.0	18.8	1410	950	985	3.06			
10/25/17	10:45 AM	Blackstone River @ Stateline	RIVER	1.500	0.2	17.87	7.12	669	3.92	<7.0	27.1	1470	942	986	10.68			
10/25/17	10:00 AM	Blackstone River @ Bikepath Bridge	RIVER	1.500	0.21	17.32	7.12	686	2.81	<7.0	20.2	1420	932	1010	3.12			
10/25/17	1:25 PM	Pawtuxet River @ Broad St.	RIVER	1.500	0.13	18.28	7.04	648	18	13.3	12.6	1560	922	899	6.33			
10/25/17	1:25 PM	Pawtuxet River @ Broad St. (Duplicate)	RIVER	1.500	0.13	18.28	7.04	653	17	13.7	13	1520	915	906	6.25			
10/25/17	2:30 PM	Woonasquatucket River @ Valley St.	RIVER	1.500	0.22	17.91	7.06	769	3.77	<7.0	<5	1300	910	994	3.16			
10/25/17	2:10 PM	Woonasquatucket River @ Manton Ave.	RIVER	1.500	0.21	18.17	6.96	837	4.1	9.58	<5	1320	1050	1080	< 2			
10/25/17	2:55 PM	Moshassuck @ Mill St.	RIVER	1.500	0.18	18.12	7.17	315	6.01	<7.0	9.13	2190	589	690	3.96			
10/25/17	1:10 PM	Warren Reservoir/Kickemuit River	RIVER	0.721	4.24	18.26	7.26	6.23	<1.5	36.5	<5	171	862	633	3.55			
10/25/17	1:30 PM	Coles River @ Milford Rd.	RIVER	0.835	0.15	16.16	8	41.9	1.88	13.6	11.4	1590	722	527	10.95			
10/25/17	2:20 PM	Palmer River @ Rt. 6	RIVER	1.500	26.33	17.5	7.03	19.5	2.76	37.1	13	565	701	285	31			
10/25/17	2:20 PM	Palmer River @ Rt. 6 (Duplicate)	RIVER	1.500	26.33	17.5	7.03	17.8	2.9	37.7	13	587	702	274	13.47			
10/25/17	2:00 PM	Runnins River @ River Rd.	RIVER	0.400	0.372	16.69	7.43	411	6.27	<7.0	56.8	2510	958	918	5.86			
10/25/17	9:15 AM	Taunton River @ Berkley Bridge	RIVER	0.431	6.24	16.46	7.81	2140	8.72	31.9	154	2450	2640	2520	10.69			
10/25/17	10:00 AM	Ten Mile River @ Omega Pond	RIVER	0.580	0.26	16.58	8.01	166	6.75	16.7	12.9	1040	681	535	6.73			
10/25/17	10:40 AM	Ten Mile River @ Central Ave.	RIVER	0.939	0.37	17.03	7.72	947	6.49	40.4	16	2660	1500	1280	28.36			
11/08/17	8:50 AM	Moshassuck @ Higginson Ave.	RIVER	0.495	0.21	10.75	7.01	256	11.2	70.8	9.23	3460	622	621	< 2			
11/08/17	9:55 AM	Blackstone River @ Slater Mill	RIVER	0.463	0.18	11.95	7.61	457	6.27	55.8	25.7	2800	972	821	5.42			
11/08/17	10:30 AM	Woonasquatcuket River @ Manton Ave.	RIVER	0.484	0.15	11.37	7.51	320	2.45	34.7	<5	1660	620	593	< 2			

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NUTRIENT PARAMETERS: NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS AND CHLOROPHYLL PARAMETERS: TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	COMMENTS
11/08/17	11:00 AM	Woonasquatucket River @ Valley St.	RIVER	0.410	0.15	11.26	7.48	363	2.35	18.6	<5	1670	719	610	< 2			
11/08/17	11:00 AM	Woonasquatucket River @ Valley St. (Duplicate)	RIVER	0.410	0.15	11.26	7.48	361	2.3	16.8	<5	1610	732	596	< 2			
11/08/17	12:40 PM	Moshassuck @ Mill St.	RIVER	0.372	0.23	10.45	7.32	445	8.04	58.1	<5	3800	844	755	2.27			
11/08/17	1:15 PM	Pawtuxet River @ Broad St.	RIVER	0.389	0.21	12.28	7.48	901	5.07	59.7	22	2980	1300	1260	3.67			
12/06/17	8:50 AM	Blackstone River @ Slater Mill	RIVER	0.526	0.19	6.8	7.58	760	7.08	<7.0	8.21	3090	1140	1020	5.36			
12/06/17	8:50 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.526	0.19	6.8	7.58	763	7.19	8.2	7.78	2590	1190	1030	5.66			
12/06/17	9:00 AM	Taunton River @ Berkley Bridge	RIVER	0.440	3.26	5.6	7.12	1080	6.52	41.7	66.5	4550	1790	1450	7.96			
12/06/17	9:45 AM	Blackstone River @ Bikepath Bridge	RIVER	0.553	0.19	6.57	7.96	873	10.4	24.5	12.9	2950	1310	1150	3.75			
12/06/17	10:25 AM	Coles River @ Milford Rd.	RIVER	0.441	0.09	5.24	7.15	183	4.05	7.24	14.2	1160	927	776	< 2			
12/06/17	10:25 AM	Coles River @ Milford Rd. (Duplicate)	RIVER	0.441	0.09	5.24	7.15	183	4	21.4	14.3	1450	966	745	< 2			
12/06/17	10:50 AM	Blackstone River @ Stateline	RIVER	0.489	0.17	7.01	7.88	611	13.7	13	9.66	2630	1040	897	4			
12/06/17	11:05 AM	Warren Reservoir/Kickemuit River	RIVER	0.465	0.18	7.85	7.12	560	16	130	12.8	3240	1270	1170	3.15			
12/06/17	11:35 AM	Palmer River @ Rt. 6	RIVER	0.463	20.62	7.67	7.09	152	7.83	16.2	12.1	1730	907	388	14.38			
12/06/17	1:00 PM	Moshassuck River @ Higginson Ave.	RIVER	0.500	0.24	7.49	7.81	314	8.65	27.8	7.72	3700	725	584	< 2			
12/06/17	1:20 PM	Runnins River @ River Rd.	RIVER	0.506	0.25	7.69	7.83	617	6.07	12.3	15.3	4100	1080	982	< 2			
12/06/17	1:30 PM	Moshassuck River @ Mill St.	RIVER	0.495	0.19	9.22	7.7	350	6.84	26	5.76	2910	751	634	3.04			
12/06/17	2:00 PM	Woonasquatucket River @ Valley St.	RIVER	0.470	0.16	8.47	7.79	638	4.21	<7.0	6.69	2000	955	861	2.08			
12/06/17	2:00 PM	Ten Mile River @ Central Ave.	RIVER	0.484	0.27	7.91	7.55	1850	12.4	14	20.1	3320	2360	2210	4.04			
12/06/17	2:45 PM	Pawtuxet River @ Broad St.	RIVER	0.530	0.13	7.92	7.69	1200	5.8	81.9	18.4	2870	1680	1520	4.26			
12/20/17	8:50 AM	Blackstone River @ Stateline	RIVER	0.518	0.21	2.54	7.05	736	9.41	<7.0	7.8	3180	1120	998	8			
12/20/17	9:10 AM	Taunton river @ Berkley Bride	RIVER					951	9.37	<7.0	58.4	3470	1090	1330	10			
12/20/17	10:05 AM	Blackstone River @ Bikepath Bridge	RIVER	0.425	0.23	2.75	8.35	780	11	7.37	42.3	3040	1190	1060	8.42			
12/20/17	10:19 AM	Coles River @ Milford Rd.	RIVER					260	3.95	<7.0	21.6	1730	999	861	2.79			
12/20/17	10:35 AM	Blackstone River @ Slater Mill	RIVER	0.529	0.24	2.49	8.04	825	9.27	<7.0	23.4	3370	1280	1100	17.55			
12/20/17	10:35 AM	Blackstone River @ Slater Mill (Duplicate)	RIVER	0.529	0.24	2.49	8.04	825	10	<7.0	23.9	3160	1350	1120	19.78			
12/20/17	10:35 AM	Warren Reservoir/Kickemuit River	RIVER					842	12.3	19.9	10.5	2880	1490	1340	5.26			
12/20/17	10:44 AM	Palmer River @ Route 6	RIVER					336	7.02	<7.0	15.9	2680	943	699	19.16			
12/20/17	11:10 AM	Pawtuxet River @ Broad St.	RIVER	0.521	0.6	3.67	7.89	1680	4.9	7.97	9.93	3480	2030	1910	6.22			
12/20/17	12:45 PM	Woonasquatucket River @ Manton Ave.	RIVER	0.486	0.16	3.44	8.01	532	7.19	19.6	<5	1880	865	883	3.62			
12/20/17	1:00 PM	Runnins River @ River Rd.	RIVER	0.623	0.36	2.39	6.95	889	11.4	17.3	6.99	4620	1340	1280	3.06			
12/20/17	1:00 PM	Runnins River @ River Rd. (Duplicate)	RIVER	0.623	0.36	2.39	6.95	878	9.92	36.8	8.08	4890	1350	1270	2.39			
12/20/17	1:10 PM	Woonasquatucket River @ Valley St.	RIVER	0.478	0.16	3.69	7.81	538	6.25	19.4	<5	2200	903	769	4.67			
12/20/17	1:24 PM	Moshassuck @ Mill St.	RIVER	0.481	0.28	4.89	7.59	581	11	79.2	<5	3700	1020	881	21.28			
12/20/17	1:40 PM	Ten Mile River @ Central Ave.	RIVER	0.300	0.35	4.54	7.68	3020	14.6	<7.0	22.6	3610	3590	1760	5.47			
SPECIAL STUDY SITES																		
NUTRIENT BLANKS																		
01/04/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
01/04/17	1:55 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
01/04/17	9:55 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
01/18/17	10:00 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
01/18/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
02/01/17	1:20 PM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
02/01/17	3:10 PM	Nutrient Blank	RIVER					24.7	<1.5	<7.0	<5	<20	<200.0	<100.0				
02/01/17	9:30 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
02/15/17	1:35 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/01/17	8:55 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/01/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/15/17	9:05 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/15/17	10:40 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/29/17	10:20 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
03/29/17	10:00 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
04/12/17	9:25 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
04/12/17	12:51 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
04/12/17	8:40 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
04/26/17	10:15 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
04/26/17	9:35 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
05/10/17	2:30 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
05/10/17	9:02 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
05/10/17	1:25 PM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				

Table 30: River and Bay Nutrients Data

River-Bay Nutrient Results
2017

NR = Not Reportable

								NUTRIENT PARAMETERS							TSS AND CHLOROPHYLL PARAMETERS			COMMENTS
Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Nitrogen (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeophytin (ug/L)	
05/24/17	8:40 AM	Nutrient Blank	BAY					<6.0	<1.5	NR	<5	<20	<200.0	<100.0				
05/24/17	8:35 AM	Nutrient Blank	RIVER					<6.0	<1.5	NR	<5	<20	<200.0	<100.0				
06/07/17	2:30 PM	Nutrient Blank	BAY					<6.0	<1.5	14	<5	<20	<200.0	<100.0				
06/07/17	9:00 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
06/07/17	9:12 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
06/21/17	8:20 AM	Nutrient Blank	BAY					10.8	<1.5	<7.0	<5	<20	<200.0	<100.0				
06/21/17	11:05 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
07/06/17	1:25 PM	Nutrient Blank	BAY					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
07/06/17	1:45 PM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
07/06/17	10:13 AM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
07/19/17	9:45 AM	Nutrient Blank	BAY					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
07/19/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/02/17	8:25 AM	Nutrient Blank	BAY					11.9	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/02/17	8:25 AM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/02/17	1:58 PM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/17/17	2:15 PM	Nutrient Blank	BAY					<6.0	<1.50	<7.0	<5.00	30.3	<200.0	<100.0				
08/17/17	8:40 AM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/30/17	9:30 AM	Nutrient Blank	BAY					8.92	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/30/17	1:25 PM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
08/30/17	1:45 PM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
09/13/17	1:15 PM	Nutrient Blank	BAY					15.1	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
09/13/17	2:50 PM	Nutrient Blank	RIVER					11.4	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
09/27/17	8:45 AM	Nutrient Blank	BAY					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
09/27/17	3:15 PM	Nutrient Blank	RIVER					7.07	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
09/27/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.50	<7.0	<5.00	<20	<200.0	<100.0				
10/11/17	8:15 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
10/11/17	12:05 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
10/25/17	9:45 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
10/25/17	8:45 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
10/25/17	10:45 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
11/08/17	9:50 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	101				
11/08/17	11:25 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
12/06/17	9:15 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
12/06/17	1:35 PM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	212	<100.0				
12/06/17	2:15 PM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	207	<100.0				
12/20/17	9:15 AM	Nutrient Blank	BAY					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
12/20/17	9:17 AM	Nutrient Blank	RIVER					<6.0	<1.5	<7.0	<5	<20	<200.0	<100.0				
12/20/17	1:30 PM	Nutrient Blank	RIVER					14.4	1.77	<7.0	<5	<20	<200.0	<100.0				

Table 30: River and Bay Nutrients Data

River Fecal Coliform Results 2017

(MPN/100mL)

	Woonasquatucket River							West River			Providence River	Seekonk River
Date	S-9-Manton Ave.	S-8D - Parking Bridge Olneyville	S-8C-Delaine St.	S-7B-Pleasant Valley Pkwy.	S-7BA-Footbridge at Bath St.	S-7A-Kinsley St.	W7C-Eagle Street	S-10-Douglas Ave. Bridge	S-10-B Veazie St. Bridge	S-11-West River St. Bridge	S-12- Crawford St. Bridge	SR-5A Pitman Street
1/3/2017	<30	40	<30		230	90	35				430	
1/4/2017						150	430	230	280	430	230	
1/9/2017	40	<30	40		40	40	35					
1/10/2017						<30	90	40	40	<30	90	
1/17/2017	90	40	90		40	<30	<30				70	40
1/18/2017						90	90	230	40	930	90	
1/23/2017	<30	40	<30		<30	<30	52				90	40
1/24/2017						430	430	2300	430	750	230	
1/30/2017	<30	<30	<30		<30	<30	<30				<30	<30
1/31/2017						<30	<30	40	90	40	<30	
2/6/2017	<30	<30	<30		90	<30	40				150	90
2/7/2017						390	230	90	230	40	90	
2/13/2017		<30	70			70	186				150	
2/14/2017						90	40	90	40	230	40	
2/20/2017	<30	<30	40		40	<30	<30				430	
2/21/2017						<30	<30	40	<30	90	70	
2/27/2017	90	230	40		150	150	53				90	<30
2/28/2017						40	40	<30	<30	90	40	
3/6/2017	40	<30	<30		<30	<30	35				70	<30
3/7/2017						40	40	40	<30	150	<30	
3/13/2017	90	40	90		<30	<30	35				40	<30
3/16/2017						90	90	390	40	430	40	
3/20/2017	40	40	<30		90	150	52				90	40
3/21/2017						40	40	40	70	40	430	
3/27/2017	<30	<30	150		<30	<30	60				230	
3/28/2017						40	90	40	90	430	230	
4/3/2017	40	40	150		90	40	96				<30	230
4/4/2017						4300	230	230	230	4300	9300	
4/10/2017	30	30	30		90	<30	<30				430	<30
4/11/2017						40	<30	230	70	4300	<30	
4/13/2017										230		
4/17/2017	40	230	40		40	90	79				150	90
4/18/2017						90	90	390	430	930	90	
4/24/2017	40	230	90		150	<30	60				90	90
4/25/2017						40	40	90	230	9300	430	
5/1/2017	<30	40	90		<30	40	60				230	90
5/2/2017						930	930	2300	2300	9300	2300	
5/8/2017	<30	90	150		230	90	548				930	230
5/9/2017						40	230	2300	1500	1500	430	
5/15/2017	230	430	90		2300	930	230				430	1500
5/16/2017						230	40	230	230	430	230	
5/22/2017	40	210	40		430	150	70				930	230
5/23/2017						230	430	430	430	1500	230	
5/30/2017	40	<30	40		430	230	230				430	90
5/31/2017						930	430	230	230	230	430	

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal Coliform Data

River Fecal Coliform Results 2017

(MPN/100mL)

	Woonasquatucket River							West River			Providence River	Seekonk River
Date	S-9-Manton Ave.	S-8D - Parking Bridge Olneyville	S-8C-Delaine St.	S-7B-Pleasant Valley Pkwy.	S-7BA-Footbridge at Bath St.	S-7A-Kinsley St.	W7C-Eagle Street	S-10-Douglas Ave. Bridge	S-10-B Veazie St. Bridge	S-11-West River St. Bridge	S-12- Crawford St. Bridge	SR-5A Pitman Street
6/5/2017	230	430	230		930	930	632				4300	2300
6/6/2017						2300	4300	9300	4300	9300	15000	
6/12/2017	70	150	90		750	430	289				230	230
6/13/2017						930	430	430	230	24000	430	
6/15/2017										1500		
6/19/2017	230	430	430		430	430	410				2300	430
6/20/2017						9300	930	4300	15000	4300	4300	
6/26/2017	70	230	230		230	430	632				90	430
6/27/2017						9300	930	930	230	9300	430	
7/3/2017	230	230	430		930	930	1313				230	230
7/5/2017						2300	230	930	230	390	230	
7/10/2017	90	90	430		930	430	314				4300	150
7/11/2017						15000	4300	9300	>240000	46000	11000	
7/17/2017	230	430	930		930	930	587				430	430
7/18/2017						430	430	230	2100	4300	150	
7/24/2017	90	430	230		430	930	6324				4300	<30
7/25/2017						390	2300	930	2300	2300	1500	
7/31/2017	90	430	430		230	430	230				4300	90
8/1/2017						230	230	930	230	9300	930	
8/3/2017										2300		
8/7/2017	430	230	430		430	430	430				430	230
8/8/2017						2100	430	750	2100	4300	930	
8/15/2017	90	230	430		230	930	632				2300	230
8/16/2017						1500	230	430	930	9300	430	
8/21/2017	90	90	230		430	430	430				2300	<30
8/22/2017						4300	430	4300	1500	2300	750	
8/28/2017	90	40	930		200	930	144				230	40
8/29/2017						2300	430	200	150	2300	930	
9/5/2017	90	40	230		230	2300	602				230	40
9/6/2017						1500	430	430	230	750	2300	
9/11/2017	90	70	150		930	430	242				230	90
9/12/2017						430	230	430	230	2300	430	
9/14/2017										2300		
9/18/2017	90	390	750		230	230	632				930	40
9/19/2017						930	4300	430	430	9300	230	
9/25/2017	230	40	430		930	2300	632				2300	40
9/26/2017						2300	150	280	90	930	230	
10/2/2017	40	430	40		40	930	1463				930	<30
10/3/2017						230	150	430	150	930	430	
10/10/2017	90	430	930		21000	>240000	9300				24000	
10/11/2017						1500	750	4300	230	930	930	
10/16/2017	40	40	150		230	430	314				430	230
10/17/2017						230	230	430	90	750	140	
10/23/2017	<30	150	40		230	430	144				90	
10/24/2017						24000	4300	24000	9300	24000	230	

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal Coliform Data

River Fecal Coliform Results 2017

(MPN/100mL)

	Woonasquatucket River							West River			Providence River	Seekonk River
Date	**S-9- Manton Ave.**	**S-8D - Parking Bridge Olneyville**	**S-8C- Delaine St.**	**S-7B- Pleasant Valley Pkwy.**	**S-7BA- Footbridge at Bath St.**	**S-7A- Kinsley St.**	**W7C-Eagle Street**	**S-10- Douglas Ave. Bridge**	**S-10-B Veazie St. Bridge**	**S-11-West River St. Bridge**	**S-12- Crawford St. Bridge**	**SR-5A Pitman Street**
10/30/2017	2300	6400	4300		4300	2300	6324				4300	7500
10/31/2017						9300	2300	750	1500	930	2300	
11/6/2017	40	230	90		90	150	67				230	70
11/7/2017						40	90	40	230	140	430	
11/13/2017	<30	40	40		150	90	60				150	40
11/14/2017						90	90	90	230	230	230	
11/20/2017	<30	<30	40		90	150	52				430	
11/21/2017						40	40	90	90	40	230	
11/27/2017	70	<30	<30		70	90	53				150	90
11/28/2017						40	<30	230	<30	30	90	
12/4/2017	<30	<30	40		30	40	40				930	70
12/5/2017						<30	<30	90	40	<30	390	
12/11/2017	<30	<30	40	150		40	144				430	
12/12/2017						1500	4300	<30	<30	150	1500	
12/18/2017	40	40	40	230		90	144				230	30
12/19/2017						40	70	40	<30	430	230	
12/26/2017	40	30	<30	<30		<30	53				430	930
12/27/2017						<30	40	<30	<30	40	40	

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal Coliform Data

River Fecal Coliform Results 2017

(MPN/100mL)

	Moshassuck River							Blackstone River		Pawtuxet River
Date	M-1- Higginson Ave. Bridge	M4A- Grenville St.	M4C- Grotto Ave. Bridge	M-5- Footbridge Mill St.	M-4- Cemetary St. Bridge	M-5A- Stevens St. Bridge	M-6- Park Row Bridge	B-2- Whipple Bridge	B-3- Slater Mill Dam	Pawtuxet River @ Broad Street
1/3/2017				2540				40	40	35
1/4/2017	430	994	930	314	930	930	930			
1/9/2017				462				30	40	40
1/10/2017	40	197	230	230	430	430	<30			
1/17/2017				96				90	<30	35
1/18/2017	40	632	430	462	930	930	930			
1/23/2017				462				<30	<30	60
1/24/2017	430	1463	930	994	430	1500	930			
1/30/2017				1181				90	40	<30
1/31/2017	40	197	930	144	930	230	40			
2/6/2017				77				<30	<30	83
2/7/2017	230	144	230	2540	140	40	430			
2/13/2017				90					150	60
2/14/2017	430		30	35	40	150	90			
2/20/2017				79					70	35
2/21/2017	70	314	70	116	150	<30	40			
2/27/2017				186				40	40	<30
2/28/2017	40	60	<30	234	70	40	150			
3/6/2017				83				<30	<30	<30
3/7/2017	<30	46	70	60	<30	90	230			
3/13/2017				430				<30	40	53
3/16/2017	90	150	930	116	210	90	90			
3/20/2017				90				40	40	35
3/21/2017	40	77	430	52	750	150	150			
3/27/2017				230				<30	<30	35
3/28/2017	150	186	<30	2000	750	4300	930			
4/3/2017				144				40	40	60
4/4/2017	90	71134	230	51381	>240000	110000	9300			
4/10/2017				110000				<30	<30	<30
4/11/2017	<30	186	90	1397	90	390	40			
4/13/2017				2941	90	230	430			
4/17/2017				994				<30	<30	<30
4/18/2017	90	462	430	632	750	750	430			
4/24/2017				4625				40	40	40
4/25/2017	90	186	90	314	<30	230	430			
5/1/2017				314				40	<30	52
5/2/2017	230	2000	2300	2300	2300	4300	2300			
5/8/2017				835				<30	40	230
5/9/2017	230	462	230	4300	930	1500	430			
5/15/2017				2300				210	230	632
5/16/2017	430	803	230	299	430	2300	430			
5/22/2017				3145				<30	40	40
5/23/2017	230	314	230	568	430	750	930			
5/30/2017				230				40	40	150
5/31/2017	90	90	150	314	230	230	430			
6/5/2017				930				90	90	930
6/6/2017	930	2941	2300	9300	9300	4300	4300			
6/12/2017				230				40	40	144
6/13/2017	40	230	230	2349	430	930	930			
6/15/2017				632		230	430			
6/19/2017				314				<30	230	462
6/20/2017	2300	10159	2300	18974	110000	2300	46000			
6/26/2017				314				90	230	197
6/27/2017	150	632	930	994	430	230	430			
7/3/2017				430				40	40	430
7/5/2017	90	568	430	632	750	430	430			
7/10/2017				6324				90	40	442
7/11/2017	4300	71134	21000	33226	110000	110000	110000			
7/17/2017				1661				<30	40	430
7/18/2017	430	1313	430	803	750	430	2100			
7/24/2017				10159				150	40	750
7/25/2017	430	1463	430	1463	4300	2300	9300			
7/31/2017				2300				<30	230	462
8/1/2017	230	632	4300	6324	280	4300	4300			
8/3/2017			2300	3145		4300	4300			
8/7/2017				462				70	430	35

Table 32: Moshassuck, Blackstone, and Pawtuxet Rivers Fecal Coliform Data

River Fecal Coliform Results 2017

(MPN/100mL)

	Moshassuck River							Blackstone River		Pawtuxet River
Date	M-1- Higginson Ave. Bridge	M4A- Grenville St.	M4C- Grotto Ave. Bridge	M-5- Footbridge Mill St.	M-4- Cemetary St. Bridge	M-5A- Stevens St. Bridge	M-6- Park Row Bridge	B-2- Whipple Bridge	B-3- Slater Mill Dam	Pawtuxet River @ Broad Street
8/8/2017	150	462	430	803	2300	2300	930			
8/15/2017				1181				40	90	373
8/16/2017	210	314	430	1397	230	1500	230			
8/21/2017				3145				<30	<30	230
8/22/2017	430	197	930	1181	90	930	430			
8/28/2017				462				90	90	90
8/29/2017	9300	314	150	410	2300	230	430			
9/5/2017				430				150	430	96
9/6/2017	230	116	430	430	150	90	430			
9/11/2017				6324				90	230	116
9/12/2017	1500	632	430	1360	930	1500	230			
9/14/2017	4300			2540		2300				
9/18/2017				1857				70	90	79
9/19/2017	230	727	750	6324	230	4300	9300			
9/25/2017				1463				<30	90	40
9/26/2017	7500	254	390	314	150	1500	4300			
10/2/2017				803				40	40	197
10/3/2017	930	24000	230	3145	150	930	4300			
10/4/2017										70
10/5/2017		197	430		<30	930				
10/10/2017				6324				90	930	197
10/11/2017	4300	2000	2300	803	1500	230	430			
10/16/2017				727				40	40	96
10/17/2017	2300	289	750	62	150	<30	30			
10/23/2017				90				40	30	90
10/24/2017	24000	5679	9300	10607	4300	4300	4300			
10/30/2017				2300				9300	4300	9300
10/31/2017	9300	4625	9300	2300	4300	2300	4300			
11/6/2017				632				30	<30	<30
11/7/2017	430	121	230	803	430	2300	430			
11/13/2017				632				<30	40	35
11/14/2017	90	1500	930	930	930	430	430			
11/20/2017				230				40	90	79
11/21/2017	<3	930	930	214	390	430	230			
11/27/2017				299				40	<30	<30
11/28/2017	430	230	150	186	390	230	150			
12/4/2017				131				<30	<30	52
12/5/2017	150	994	430	347	230	40	230			
12/11/2017				314				40	40	35
12/12/2017	30	410	430	2300	4300	7500	2300			
12/18/2017				314				<30	<30	35
12/19/2017	430	410	430	632	930	930	430			
12/26/2017				197				40	40	83
12/27/2017	2300	1463	930	230	930	430	430			

Table 32: Moshassuck, Blackstone, and Pawtuxet Rivers Fecal Coliform Data

River Enterococci Results 2017

(MPN/100mL)

	Moshassuck River			Blackstone River		Woonasquatucket River				West River	
Date	M-1-Higginson Ave. Bridge	M-5-Footbridge Mill St.	M-6-Park Row Bridge	B-2-Whipple Bridge	B-3-Slater Mill Dam	S-9-Manton Ave.	S-7BA-Footbridge at Bath St.	S-7A-Kinsley St.	W7C-Eagle Street	S-10-Douglas Ave. Bridge	S-11-West River St. Bridge
1/3/2017				22.8	14.6	11.9		35.0	36.9		
1/4/2017	83.9	502.4	410.6							259.5	613.1
1/9/2017				25.3	13.2	8.4		7.4	5.7		
1/10/2017	14.6	20.5	23.3							20.1	22.8
1/17/2017				6.3	4.1	21.1		11.9	9.9		
1/18/2017	18.8	100.6	120.7							33.5	53.1
1/23/2017				4.1	4.1	4.1		7.3	4.8		
1/24/2017	86.2	952.1	770.1							613.1	547.5
1/30/2017				23.1	6.3	13.5		9.8	9.4		
1/31/2017	26.9	41.5	58.3							17.3	35.5
2/6/2017				2.0	1.0	9.7		17.3	11.4		
2/7/2017	14.6	2419.6	275.5							23.3	31.1
2/13/2017					8.6			18.7	8.6		
2/14/2017	31.1	90.3	101.7							12.2	23.3
2/20/2017					3.1	9.7		13.2	20.0		
2/21/2017	21.6	52.9	52.8							4.1	25.6
2/27/2017				1.0	9.7	14.6		35.5	18.8		
2/28/2017	15.8	50.8	55.4							24.9	45.7
3/6/2017				2.0	3.0	3.1		3.1	2.9		
3/7/2017	48.7	116.2	123.6							18.7	16.9
3/13/2017				NR	NR	NR		NR	NR		
3/16/2017	4.1	44.9	34.5							19.7	49.6
3/20/2017				2.0	1.0	20.3		12.0	21.8		
3/21/2017	13.1	46.3	58.3							18.3	19.7
3/27/2017				2.0	3.0	8.5		13.2	21.8		
3/28/2017	6.3	116.4	95.9							18.3	37.7
4/3/2017				30.5	33.1	28.8		31.7	24.1		
4/4/2017	28.5	>2419.6	>2419.6							488.4	913.9
4/10/2017				7.4	8.4	5.2		9.7	5.1		
4/11/2017	4.1	18.7	15.8							20.1	19.9
4/17/2017				12.1	3.1	23.8		17.5	22.3		
4/18/2017	17.5	36.1	30.9							29.5	19.3
4/24/2017				3.1	7.4	16.9		11.0	14.6		
4/25/2017	10.8	53.3	123.4							46.5	307.6
5/1/2017				9.7	25.0	11.0		25.0	18.6		
5/2/2017	143.0	>2419.6	>2419.6							1413.6	>2419.6
5/8/2017				19.5	18.7	44.8		48.1	63.0		
5/9/2017	57.1	37.4	52.0							31.5	67.7
5/15/2017				235.9	108.1	91.0		285.1	199.1		
5/16/2017	248.9	239.0	191.8							53.8	98.8
5/22/2017				10.8	17.3	25.6		66.3	41.3		
5/23/2017	64.4	128.8	178.5							210.5	218.7
5/30/2017				18.5	30.1	43.2		64.5	47.5		
5/31/2017	36.8	127.7	135.4							141.4	127.4
6/5/2017				11.9	20.4	58.2		143.9	175.0		
6/6/2017	870.4	>2419.6	>2419.6							>2419.6	>2419.6
6/12/2017				18.7	21.1	51.2		54.8	56.2		
6/13/2017	116.2	125.1	161.6							186.0	387.3
6/19/2017				36.4	25.3	98.7		203.5	169.3		
6/20/2017	1046.2	>2419.6	>2419.6							>2419.6	>2419.6
6/26/2017				1119.9	172.5	106.7		129.6	80.7		
6/27/2017	113.7	474.1	410.6							313.0	686.7
7/3/2017				233.3	161.6	59.8		104.6	172.3		
7/5/2017	118.7	304.2	>2419.6							261.3	648.8
7/10/2017				160.7	151.5	52.0		344.8	176.0		
7/11/2017	1986.3	>2419.6	>2419.6							>2419.6	>2419.6
7/17/2017				74.9	57.1	45.7		74.3	115.7		
7/18/2017	108.1	434.5	214.2							579.4	>2419.6
7/24/2017				44.1	55.6	48.1		360.9	299.6		
7/25/2017	167.4	883.6	816.4							980.4	1299.7
7/31/2017				28.5	35.9	23.1		101.7	50.4		
8/1/2017	98.5	238.3	172.3							547.5	727.0
8/7/2017				21.3	41.4	21.6		69.7	77.7		
8/8/2017	>2419.6	249.3	206.4							344.8	579.4
8/15/2017				18.7	40.2	13.0		365.4	48.1		

NR = Not Reportable

Table 33: Moshassuck, Blackstone, Woonasquatucket, and West Rivers Enterococci Data

River Enterococci Results 2017

(MPN/100mL)

	Moshassuck River			Blackstone River		Woonasquatucket River				West River	
Date	M-1-Higginson Ave. Bridge	M-5-Footbridge Mill St.	M-6-Park Row Bridge	B-2-Whipple Bridge	B-3-Slater Mill Dam	S-9-Manton Ave.	S-7BA-Footbridge at Bath St.	S-7A-Kinsley St.	W7C-Eagle Street	S-10-Douglas Ave. Bridge	S-11-West River St. Bridge
8/16/2017	201.4	125.5	70.8							387.3	248.1
8/21/2017				13.0	21.1	35.9		67.0	72.0		
8/22/2017	148.3	83.9	275.5							1119.9	261.3
8/28/2017				23.3	9.7	16.9		48.1	88.0		
8/29/2017	1203.3	58.3	1299.7							135.4	82.0
9/5/2017				24.1	866.4	37.3		488.4	85.9		
9/6/2017	103.9	88.5	103.9							307.6	139.6
9/11/2017				18.1	22.8	28.8		387.3	77.0		
9/12/2017	59.8	128.4	142.1							285.1	344.8
9/18/2017				27.5	14.8	22.3		95.9	75.4		
9/19/2017	28.8	1481.7	2419.6							387.3	>2419.6
9/25/2017				18.5	29.2	83.9	152.9	118.7	35.7		
9/26/2017	108.1	263.5	185.0							517.2	206.4
10/2/2017				17.5	27.5	39.3		214.2	134.6		
10/3/2017	28.1	189.6	248.9							130.1	98.4
10/10/2017				35.9	93.3	31.1		>2419.6	177.4		
10/11/2017	128.1	128.9	248.9							1119.9	148.3
10/16/2017				18.5	28.8	21.1		387.3	50.3		
10/17/2017	68.3	78.4	129.6							146.7	88.6
10/23/2017				11.9	17.1	23.1		290.9	219.0		
10/24/2017	>2419.6	>2419.6	>2419.6							>2419.6	>2419.6
10/30/2017				>2419.6	2419.6	>2419.6		>2419.6	>2419.6		
10/31/2017	>2419.6	>2419.6	2419.6							686.7	
11/6/2017				34.1	20.1	15.6		117.8	47.9		
11/7/2017	41.0	62.6	58.3							39.3	86.0
11/13/2017				12.2	12.1	5.2		27.9	13.7		
11/14/2017	49.6	447.8	547.5							88.4	280.9
11/20/2017				90.9	57.3	66.3		78.9	70.9		
11/21/2017	45.7	56.8	75.9							61.3	41.4
11/27/2017				14.6	8.5	14.4		26.9	12.8		
11/28/2017	77.1	245.3	150.0							209.8	57.3
12/4/2017				8.4	17.3	2.0		11.9	12.3		
12/5/2017	65.7	35.0	34.1							36.9	17.1
12/11/2017				27.2	47.1	16.1		23.1	24.6		
12/12/2017	25.6	90.0	69.5							48.0	27.2
12/18/2017				4.1	10.9	10.9		29.2	9.6		
12/19/2017	76.3	31.6	34.5							26.9	19.7
12/26/2017				16.9	21.6	10.9		21.1	43.0		
12/27/2017	33.1	52.5	52.1							13.2	19.9

NR = Not Reportable

Table 33: Moshassuck, Blackstone, Woonasquatucket, and West Rivers Enterococci Data

Results are in MPN/100 mL or Most Probable Number/100 mL

	Station Name	1/11/2017	1/25/2017	2/8/2017	2/22/2017	3/8/2017	3/22/2017	4/5/2017	4/19/2017	5/3/2017	5/17/2017
Seekonk River	**Division St Dock**	230	75	43	4	23	9	230	9	230	93
	Bishop Pt	230	93	9	9	23	23	93	15	930	43
	Off BP Outfall	230	150	93	9	23	9	230	9	930	93
	Phillipsdale Landing	2300	430	93	11	93	15	390	23	430	93
	Phillipsdale Landing Duplicate	230	4300	230	43	43	9	230	15	930	230
	Narr Boating Center	930	150	75	7	43	9	230	9	430	230
	Crook Pt	230	930	75	23	93	9	93	43	930	43
Providence River	**Comm. Boating Center**	230	150	93	9	75	4	230	43	930	43
	Point St Bridge	230	430	230	43	93	93	390	93	430	230
	Collier Pt Park	43	150	43	43	93	93	430	23	230	230
	Off FP Outfall	93	230	43	93	<3	<3	1500	7	93	43
	South FP East	23	93	21	9	4	<3	930	4	93	23
	Save the Bay	15	93	9	23	9	<3	430	4	230	93
	Edgewood Yacht Club	23	43	23	23	<3	<3	230	23	150	230
	Pawt/Prov Junction	23	230	93	<3	4	4	430	43	230	43
	Gaspee Pt	4	230	93	<3	9	<3	390	4	230	23
	Bullock Neck	23	93	9	9	9	4	930	<3	93	4
	Bullocks Reach Buoy	23	43	9	14	21	9	430	<3	43	23
	Shawomet	4	43	39	<3	4	3	230	4	93	23
	North of Nayatt Point	23	43	15	<3	39	43	230	4	93	23
	Conimicut Pt	230	23	15	4	43	<3	230	<3	93	23
	Conimicut Pt Duplicate	23	23	93	<3	9	<3	430	<3	93	23
	Seekonk River Geometric Mean	390	309	64	11	41	11	191	15	611	97
	Providence River Geometric Mean	32	89	34	10	13	6	415	8	150	40
	Daily Max	2300	4300	230	93	93	93	1500	93	930	230
	Overall Geometric Mean	**71**	**132**	**42**	**10**	**19**	**8**	**324**	**10**	**234**	**53**
	Percent Greater than 400 MPN/100 mL	9%	18%	0%	0%	0%	0%	36%	0%	36%	0%
	Number of Samples (including duplicates)	22	22	22	22	22	22	22	22	22	22
	Bay Fecal Coliform Blank	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Rain Data*	Rain total - day of sampling (in time prior to sampling)	0.18	0.08	0	0	0.1	T	T	0.02	0	T
	Rain total - 1 day prior to sampling	0.16	1.37	0.18	0	0.02	0	1.51	0	0.76	0
	Rain total - 2 days prior to sampling	0	0.58	0	0	0	0	0	0	0	0.15
	Rain total - 3 days prior to sampling	0	T	0	0	0	T	0	0.02	T	1.01
	Rain total - 4 days prior to sampling	0.31	0	0	0	T	T	1.08	0.01	0	0.46
	Rain total - 5 days prior to sampling	0.08	0	0	0	T	0	0.85	0	0.02	T
	Total Rainfall	**0.73**	**2.03**	**0.18**	**0**	**0.12**	**0**	**3.44**	**0.05**	**0.78**	**1.62**
Tides**	High Tide	6:43	6:07	5:36	4:43	4:20	3:46	3:54	14:41	15:03	13:22
	Low Tide	12:47	11:50	11:54	10:40	10:59	10:09	10:51	7:55	9:24	6:12

T = Trace rainfall

*Rain data are from TF Green

**Tide data are from USHarbors.com

Table 34: Bay Fecal Coliform Data

Results are in MPN/100 mL or Most Probable Number/100 mL

	Station Name	6/1/2017	6/14/2017	6/28/2017	7/12/2017	7/26/2017	8/9/2017	8/23/2017	9/7/2017	10/4/2017	10/18/2017
Seekonk River	**Division St Dock**	43	230	230	NS	NR	93	230	21000	230	93
	Bishop Pt	23	93	230	NS	93	150	150	46000	93	93
	Off BP Outfall	43	120	93	15000	230	93	230	9300	43	150
	Phillipsdale Landing	93	230	93	2300	75	93	43	9300	230	43
	Phillipsdale Landing Duplicate	43	39	93	7500	150	9	93	3900	150	93
	Narr Boating Center	15	93	93	2300	23	43	43	9300	43	43
	Crook Pt	23	75	93	930	150	43	4	430	7	43
Providence River	**Comm. Boating Center**	93	93	23	4300	39	43	<3	4300	7	23
	Point St Bridge	430	430	230	9300	430	430	230	24000	430	150
	Collier Pt Park	43	43	230	2300	75	23	23	9300	43	93
	Off FP Outfall	23	93	23	4300	43	23	<3	93	4	9
	South FP East	9	23	9	230	430	23	<3	150	<3	23
	Save the Bay	23	43	43	2300	NR	23	4	1200	4	4
	Edgewood Yacht Club	23	23	4	430	230	23	15	75	7	<3
	Pawt/Prov Junction	23	43	9	390	230	43	<3	4300	43	75
	Gaspee Pt	9	23	93	230	210	4	<3	230	4	<3
	Bullock Neck	9	23	9	23	43	<3	<3	93	<3	9
	Bullocks Reach Buoy	9	<3	15	93	93	23	<3	23	<3	9
	Shawomet	9	43	15	4	93	3	<3	430	4	<3
	North of Nayatt Point	9	<3	4	23	43	NS	<3	<3	<3	<3
	Conimicut Pt	9	9	9	9	43	4	7	<3	<3	<3
	Conimicut Pt Duplicate	9	23	9	15	150	<3	4	430	<3	<3
	Seekonk River Geometric Mean	35	107	120	3537	97	57	66	7474	71	72
	Providence River Geometric Mean	19	28	20	227	107	16	6	277	7	10
	Daily Max	430	430	230	15000	430	430	230	46000	430	150
	Overall Geometric Mean	**23**	**43**	**35**	**451**	**104**	**24**	**12**	**790**	**15**	**19**
	Percent Greater than 400 MPN/100 mL	5%	5%	0%	55%	10%	5%	0%	64%	5%	0%
	Number of Samples (including duplicates)	22	22	22	20	20	21	22	22	22	22
	Bay Fecal Coliform Blank	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Rain Data*	Rain total - day of sampling (in time prior to sampling)	0.05	0	0	0	0	0	0.01	0.67	0	0
	Rain total - 1 day prior to sampling	0.07	0.01	0.01	0.75	0	0.06	0	0.56	0	0
	Rain total - 2 days prior to sampling	T	0	0	0.01	0.56	T	0	0	0	T
	Rain total - 3 days prior to sampling	0.21	0	0	0	0	0	0	0	0	T
	Rain total - 4 days prior to sampling	0	0	0.66	T	T	0.51	0	0.37	1.21	0.17
	Rain total - 5 days prior to sampling	0	0.01	T	1.02	0	T	0.3	0.01	0	0
	Total Rainfall	**0.33**	**0.02**	**0.67**	**1.78**	**0.56**	**0.57**	**0.31**	**1.61**	**1.21**	**0.17**
Tides**	High Tide	14:42	12:07	12:24	11:03	11:12	9:51	9:56	9:24	7:28	7:39
	Low Tide	8:43	5:05	5:36	4:17	4:00	3:10	2:46	14:56	13:02	12:43

T = Trace rainfall

*Rain data are from TF Green

**Tide data are from USHarbors.com

Table 34: Bay Fecal Coliform Data

Results are in MPN/100 mL or Most Probable Number/100 mL

	Station Name	11/1/2017	11/15/2017	11/29/2017	Annual Geomean	Annual Min	Annual Max
Seekonk River	**Division St Dock**	430	75	23	96	4	21000
	Bishop Pt	430	23	23	87	9	46000
	Off BP Outfall	2100	43	23	131	9	15000
	Phillipsdale Landing	930	150	23	154	9	9300
	Phillipsdale Landing Duplicate	2300	43	93			
	Narr Boating Center	2300	93	43	101	7	9300
	Crook Pt	930	39	43	79	4	930
Providence River	**Comm. Boating Center**	2300	23	43	77	<3	4300
	Point St Bridge	NS	43	23	282	23	24000
	Collier Pt Park	4300	93	43	124	23	9300
	Off FP Outfall	4300	43	23	47	<3	4300
	South FP East	930	43	4	27	<3	930
	Save the Bay	430	4	23	33	<3	2300
	Edgewood Yacht Club	930	15	9	30	<3	930
	Pawt/Prov Junction	3900	43	4	53	<3	4300
	Gaspee Pt	2300	23	3	26	<3	2300
	Bullock Neck	430	4	15	16	<3	930
	Bullocks Reach Buoy	430	15	4	18	<3	430
	Shawomet	430	7	9	15	<3	430
	North of Nayatt Point	430	9	<3	14	<3	430
	Conimicut Pt	930	23	4	16	<3	930
	Conimicut Pt Duplicate	430	<3	4			
	Seekonk River Geometric Mean	1086	56	34			
	Providence River Geometric Mean	1048	17	9			
	Daily Max	4300	150	93			
	Overall Geometric Mean	**1061**	**25**	**14**			
	Percent Greater than 400 MPN/100 mL	100%	0%	0%			
	Number of Samples (including duplicates)	21	22	22			
	Bay Fecal Coliform Blank	<3	<3	<3			
Rain Data*	Rain total - day of sampling (in time prior to sampling)	T	0	0			
	Rain total - 1 day prior to sampling	0	0.02	0			
	Rain total - 2 days prior to sampling	0.69	0.26	0			
	Rain total - 3 days prior to sampling	1.65	0	0			
	Rain total - 4 days prior to sampling	0	0	0			
	Rain total - 5 days prior to sampling	0	0.02	0			
	Total Rainfall	**2.34**	**0.3**	**0**			
Tides**	High Tide	6:06	2:24	3:34			
	Low Tide	11:51	7:32	9:32			

T = Trace rainfall

*Rain data are from TF Green

**Tide data are from USHarbors.com

Table 34: Bay Fecal Coliform Data

Results are in MPN/100 mL or Most Probable Number/100 mL

Station Name	1/11/2017	1/25/2017	2/8/2017	2/22/2017	3/8/2017	3/22/2017	4/5/2017	4/19/2017	5/3/2017	5/17/2017	6/1/2017	6/14/2017
Division St Dock												
Phillipsdale Landing	63.0	6488.0	31.0	<10	<10	<10	119.0	<10	31.0	10.0	<10	20.0
Phillipsdale Landing Duplicate	97.0	11199.0	31.0	<10	10.0	<10	160.0	<10	20.0	10.0	<10	<10
Point St Bridge	377.0	10462.0	181.0	10.0	52.0	31.0	31.0	20.0	74.0	41.0	20.0	86.0
South FP East	<10	14136.0	<10	<10	<10	<10	63.0	<10	20.0	10.0	<10	<10
Save the Bay												
Gaspee Pt	10.0	15531.0	20.0	<10	<10	10.0	97.0	<10	31.0	20.0	<10	<10
Conimicut Pt	<10	6488.0	<10	<10	<10	<10	148.0	<10	31.0	<10	<10	<10
Conimicut Pt Duplicate	<10	7270.0	20.0	<10	20.0	<10	75.0	<10	<10	<10	<10	<10
Seekonk River Geometric Mean	78	8524	31	10	10	10	138	10	25	10	10	14
Providence River Geometric Mean	21	10161	24	10	16	13	73	11	27	15	11	15
Daily Max	377	15531	181	10	52	31	160	20	74	41	20	86
Final Sample Day Geomean	**30**	**9664**	**25**	**10**	**14**	**12**	**88**	**11**	**26**	**14**	**11**	**15**

Results are in MPN/100 mL or Most Probable Number/100 mL

Station Name	6/28/2017	7/12/2017	7/26/2017	8/9/2017	8/23/2017	9/7/2017	10/4/2017	10/18/2017	11/1/2017	11/15/2017	11/29/2017	Annual Min
Division St Dock			97.0									97
Phillipsdale Landing	20.0	31.0	20.0	<10	20.0	1565.0	<10	30.0	328.0	<10	10.0	<10
Phillipsdale Landing Duplicate	30.0	10.0	20.0	<10	10.0	1658.0	41.0	41.0	428.0	20.0	<10	
Point St Bridge	97.0	226.0	52.0	20.0	20.0	>24196	85.0	52.0		52.0	10.0	10
South FP East	<10	20.0	<10	<10	10.0	341.0	<10	<10	1470.0	<10	<10	<10
Save the Bay			<10									<10
Gaspee Pt	20.0	10.0	<10	<10	<10	201.0	<10	<10	1010.0	10.0	<10	<10
Conimicut Pt	<10	<10	<10	<10	<10	<10	<10	<10	1274.0	<10	10.0	<10
Conimicut Pt Duplicate	<10	<10	<10	<10	20.0	<10	<10	<10	1430.0	<10	<10	
Seekonk River Geometric Mean	24	18	34	10	14	1611	20	35	375	14	10	
Providence River Geometric Mean	18	21	13	11	13	175	15	14	1282	14	10	
Daily Max	97	226	97	20	20	24196	85	52	1470	52	10	
Final Sample Day Geomean	**20**	**20**	**18**	**11**	**13**	**330**	**17**	**18**	**851**	**14**	**10**	

Table 35: Bay Enterococci Data

Results are in MPN/100 mL or Most Probable Number/100 mL

Station Name	Annual Max	Annual Geomean
Division St Dock	97	97
Phillipsdale Landing	11199	33
Phillipsdale Landing Duplicate		
Point St Bridge	>24196	81
South FP East	14136	23
Save the Bay	<10	<10
Gaspee Pt	15531	24
Conimicut Pt	7270	20
Conimicut Pt Duplicate		
Seekonk River Geometric Mean		
Providence River Geometric Mean		
Daily Max		
Final Sample Day Geomean		

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	8:15	1,1,1-Trichloroethane	<1	ppb
11/22/2017	8:15	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	8:15	1,1,2-Trichloroethane	<1	ppb
11/22/2017	8:15	1,1-Dichloroethane	<1	ppb
11/22/2017	8:15	1,1-Dichloroethene	<1	ppb
11/22/2017	8:15	1,2-dichlorobenzene	<1	ppb
11/22/2017	8:15	1,2-Dichlorobenzene	<25	ppb
11/22/2017	8:15	1,2-Dichloroethane	<1	ppb
11/22/2017	8:15	1,2-Dichloropropane	<1	ppb
11/22/2017	8:15	1,3-dichlorobenzene	<1	ppb
11/22/2017	8:15	1,3-Dichlorobenzene	<25	ppb
11/22/2017	8:15	1,4-Dichlorobenzene	<25	ppb
11/22/2017	8:15	1,4-dichlorobenzene	<1	ppb
11/22/2017	8:15	124-Trichlorobenzene	<25	ppb
11/22/2017	8:15	12-Diphenylhydrazine	<25	ppb
11/22/2017	8:15	2,4-Dichlorophenol	<25	ppb
11/22/2017	8:15	2,4-Dimethylphenol	<25	ppb
11/22/2017	8:15	2,4-Dinitrophenol	<25	ppb
11/22/2017	8:15	2,4-Dinitrotoluene	<25	ppb
11/22/2017	8:15	2,6-Dinitrotoluene	<25	ppb
11/22/2017	8:15	246-Trichlorophenol	<25	ppb
11/22/2017	8:15	2-Chloroethylvinylether	<2	ppb
11/22/2017	8:15	2-Chloronaphthalene	<25	ppb
11/22/2017	8:15	2-Chlorophenol	<25	ppb
11/22/2017	8:15	2Methyl46dinitrophen	<25	ppb
11/22/2017	8:15	2-Nitrophenol	<25	ppb
11/22/2017	8:15	33-Dichlorobenzidine	<25	ppb
11/22/2017	8:15	4Bromophenphenether	<25	ppb
11/22/2017	8:15	4Chloro3methylphenol	<25	ppb
11/22/2017	8:15	4Chlorophenphenether	<25	ppb
11/22/2017	8:15	4-Nitrophenol	<25	ppb
11/22/2017	8:15	Acenaphthene	<25	ppb
11/22/2017	8:15	Acenaphthylene	<25	ppb
11/22/2017	8:15	Aluminum	473.6	ug/L
11/22/2017	8:15	Anthracene	<25	ppb
11/22/2017	8:15	Benzene	<1	ppb
11/22/2017	8:15	Benzidine	<25	ppb
11/22/2017	8:15	Benzo(a)anthracene	<25	ppb
11/22/2017	8:15	Benzo(a)pyrene	<25	ppb
11/22/2017	8:15	Benzo(b)fluoranthene	<25	ppb
11/22/2017	8:15	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	8:15	Benzo(k)fluoranthene	<25	ppb
11/22/2017	8:15	bis2chloroethoxymeth	<25	ppb
11/22/2017	8:15	bis2chloroethylether	<25	ppb
11/22/2017	8:15	bis2chloroisoproethe	<25	ppb
11/22/2017	8:15	bis2ethylhexylphthal	<25	ppb
11/22/2017	8:15	BOD SM 5210B	87.84	ppm
11/22/2017	8:15	Bromodichloromethane	<1	ppb
11/22/2017	8:15	Bromoform	<1	ppb
11/22/2017	8:15	Bromomethane	<10	ppb
11/22/2017	8:15	Butylbenzylphthalate	<25	ppb
11/22/2017	8:15	Cadmium	<2.5	ug/L
11/22/2017	8:15	Carbon Tetrachloride	<1	ppb
11/22/2017	8:15	Chlorobenzene	<1	ppb
11/22/2017	8:15	Chloroethane	<10	ppb
11/22/2017	8:15	Chloroform	4.3	ppb
11/22/2017	8:15	Chloromethane	<10	ppb

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	8:15	Chromium	<10	ug/L
11/22/2017	8:15	Chrysene	<25	ppb
11/22/2017	8:15	cis-1,3-Dichloropropene	<1	ppb
11/22/2017	8:15	Copper	20.62	ug/L
11/22/2017	8:15	Cyanide	6	ppb
11/22/2017	8:15	Dibenzoahanthracene	<25	ppb
11/22/2017	8:15	Dibromochloromethane	<1	ppb
11/22/2017	8:15	Diethylphthalate	<25	ppb
11/22/2017	8:15	Dimethylphthalate	<25	ppb
11/22/2017	8:15	di-n-butylphthalate	<25	ppb
11/22/2017	8:15	Di-n-octylphthalate	<25	ppb
11/22/2017	8:15	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	8:15	Ethylbenzene	<1	ppb
11/22/2017	8:15	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	8:15	Fluoranthene	<25	ppb
11/22/2017	8:15	Fluorene	<25	ppb
11/22/2017	8:15	Fresh Water Total Nitrogen	11.209	ppm
11/22/2017	8:15	Hexachlorobenzene	<25	ppb
11/22/2017	8:15	Hexachlorobutadiene	<25	ppb
11/22/2017	8:15	Hexachloroethane	<25	ppb
11/22/2017	8:15	Hexaclcyclopentadien	<25	ppb
11/22/2017	8:15	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	8:15	Iron	845.4	ug/L
11/22/2017	8:15	Isophorone	<25	ppb
11/22/2017	8:15	Lead	18.28	ug/L
11/22/2017	8:15	Mercury EPA Method 245.7 - Mercury	18.8	ng/L
11/22/2017	8:15	Methylene Chloride	<5	ppb
11/22/2017	8:15	Naphthalene	<25	ppb
11/22/2017	8:15	NH3-N EPA 350.1 - Ammonia	4.94	ppm
11/22/2017	8:15	Nickel	<10	ug/L
11/22/2017	8:15	Nitrobenzene	<25	ppb
11/22/2017	8:15	Nnitrosodimethylamin	<25	ppb
11/22/2017	8:15	Nnitrosodinpropylami	<25	ppb
11/22/2017	8:15	Nnitrosodiphenylamin	<25	ppb
11/22/2017	8:15	NO2-N EPA 353.2 - Nitrite	0.0307	ppm-N
11/22/2017	8:15	NO3NO2 EPA Method 353.2	0.509	mg/L
11/22/2017	8:15	o- xylene	<1	ppb
11/22/2017	8:15	Oil and Grease EPA Method 1664 (SIU)	6.477	ppm
11/22/2017	8:15	p&m xylene	<1	ppb
11/22/2017	8:15	Pentachlorophenol	<25	ppb
11/22/2017	8:15	Phenanthrene	<25	ppb
11/22/2017	8:15	Phenol	<25	ppb
11/22/2017	8:15	Pyrene	<25	ppb
11/22/2017	8:15	Tetrachlorethene	<1	ppb
11/22/2017	8:15	TKN - Copper Sulfate Digestion - TKN	10.7	mg N/L
11/22/2017	8:15	Toluene	1.1	ppb
11/22/2017	8:15	Total_Phosphorus-P	1.55	mg/L
11/22/2017	8:15	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	8:15	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	8:15	Trichlorethene	<1	ppb
11/22/2017	8:15	Trichlorofluoromethane	<1	ppb
11/22/2017	8:15	TSS SM 5240D - TSS	110	ppm
11/22/2017	8:15	Vinyl Chloride	<1	ppb
11/22/2017	8:15	Zinc	77.24	ug/L
11/22/2017	9:30	1,1,1-Trichloroethane	<1	ppb
11/22/2017	9:30	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	9:30	1,1,2-Trichloroethane	<1	ppb

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	9:30	1,1-Dichloroethane	<1	ppb
11/22/2017	9:30	1,1-Dichloroethene	<1	ppb
11/22/2017	9:30	1,2-Dichlorobenzene	<25	ppb
11/22/2017	9:30	1,2-dichlorobenzene	<1	ppb
11/22/2017	9:30	1,2-Dichloroethane	<1	ppb
11/22/2017	9:30	1,2-Dichloropropane	<1	ppb
11/22/2017	9:30	1,3-dichlorobenzene	<1	ppb
11/22/2017	9:30	1,3-Dichlorobenzene	<25	ppb
11/22/2017	9:30	1,4-Dichlorobenzene	<25	ppb
11/22/2017	9:30	1,4-dichlorobenzene	<1	ppb
11/22/2017	9:30	124-Trichlorobenzene	<25	ppb
11/22/2017	9:30	12-Diphenylhydrazine	<25	ppb
11/22/2017	9:30	2,4-Dichlorophenol	<25	ppb
11/22/2017	9:30	2,4-Dimethylphenol	<25	ppb
11/22/2017	9:30	2,4-Dinitrophenol	<25	ppb
11/22/2017	9:30	2,4-Dinitrotoluene	<25	ppb
11/22/2017	9:30	2,6-Dinitrotoluene	<25	ppb
11/22/2017	9:30	246-Trichlorophenol	<25	ppb
11/22/2017	9:30	2-Chloroethylvinylether	<2	ppb
11/22/2017	9:30	2-Chloronaphthalene	<25	ppb
11/22/2017	9:30	2-Chlorophenol	<25	ppb
11/22/2017	9:30	2Methyl46dinitrophen	<25	ppb
11/22/2017	9:30	2-Nitrophenol	<25	ppb
11/22/2017	9:30	33-Dichlorobenzidine	<25	ppb
11/22/2017	9:30	4Bromophenphenether	<25	ppb
11/22/2017	9:30	4Chloro3methylphenol	<25	ppb
11/22/2017	9:30	4Chlorophenphenether	<25	ppb
11/22/2017	9:30	4-Nitrophenol	<25	ppb
11/22/2017	9:30	Acenaphthene	<25	ppb
11/22/2017	9:30	Acenaphthylene	<25	ppb
11/22/2017	9:30	Aluminum	1037	ug/L
11/22/2017	9:30	Anthracene	<25	ppb
11/22/2017	9:30	Benzene	<1	ppb
11/22/2017	9:30	Benzidine	<25	ppb
11/22/2017	9:30	Benzo(a)anthracene	<25	ppb
11/22/2017	9:30	Benzo(a)pyrene	<25	ppb
11/22/2017	9:30	Benzo(b)fluoranthene	<25	ppb
11/22/2017	9:30	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	9:30	Benzo(k)fluoranthene	<25	ppb
11/22/2017	9:30	bis2chloroethoxymeth	<25	ppb
11/22/2017	9:30	bis2chloroethylether	<25	ppb
11/22/2017	9:30	bis2chloroisoproethe	<25	ppb
11/22/2017	9:30	bis2ethylhexylphthal	<25	ppb
11/22/2017	9:30	BOD SM 5210B	37.71	ppm
11/22/2017	9:30	Bromodichloromethane	<1	ppb
11/22/2017	9:30	Bromoform	<1	ppb
11/22/2017	9:30	Bromomethane	<10	ppb
11/22/2017	9:30	Butylbenzylphthalate	<25	ppb
11/22/2017	9:30	Cadmium	<2.5	ug/L
11/22/2017	9:30	Carbon Tetrachloride	<1	ppb
11/22/2017	9:30	Chlorobenzene	<1	ppb
11/22/2017	9:30	Chloroethane	<10	ppb
11/22/2017	9:30	Chloroform	1.4	ppb
11/22/2017	9:30	Chloromethane	<10	ppb
11/22/2017	9:30	Chromium	<10	ug/L
11/22/2017	9:30	Chrysene	<25	ppb
11/22/2017	9:30	cis-1,3-Dichloropropene	<1	ppb

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	9:30	Copper	32.97	ug/L
11/22/2017	9:30	Cyanide	4.95	ppb
11/22/2017	9:30	Dibenzoahanthracene	<25	ppb
11/22/2017	9:30	Dibromochloromethane	<1	ppb
11/22/2017	9:30	Diethylphthalate	<25	ppb
11/22/2017	9:30	Dimethylphthalate	<25	ppb
11/22/2017	9:30	di-n-butylphthalate	<25	ppb
11/22/2017	9:30	Di-n-octylphthalate	<25	ppb
11/22/2017	9:30	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	9:30	Ethylbenzene	<1	ppb
11/22/2017	9:30	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	9:30	Fluoranthene	<25	ppb
11/22/2017	9:30	Fluorene	<25	ppb
11/22/2017	9:30	Fresh Water Total Nitrogen	8.514	ppm
11/22/2017	9:30	Hexachlorobenzene	<25	ppb
11/22/2017	9:30	Hexachlorobutadiene	<25	ppb
11/22/2017	9:30	Hexachloroethane	<25	ppb
11/22/2017	9:30	Hexaclcyclopentadien	<25	ppb
11/22/2017	9:30	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	9:30	Iron	1824	ug/L
11/22/2017	9:30	Isophorone	<25	ppb
11/22/2017	9:30	Lead	42.11	ug/L
11/22/2017	9:30	Mercury EPA Method 245.7 - Mercury	1	ng/L
11/22/2017	9:30	Methylene Chloride	<5	ppb
11/22/2017	9:30	Naphthalene	<25	ppb
11/22/2017	9:30	NH3-N EPA 350.1 - Ammonia	3.41	ppm
11/22/2017	9:30	Nickel	<10	ug/L
11/22/2017	9:30	Nitrobenzene	<25	ppb
11/22/2017	9:30	Nnitrosodimethylamin	<25	ppb
11/22/2017	9:30	Nnitrosodinpropylami	<25	ppb
11/22/2017	9:30	Nnitrosodiphenylamin	<25	ppb
11/22/2017	9:30	NO2-N EPA 353.2 - Nitrite	0.0282	ppm-N
11/22/2017	9:30	NO3NO2 EPA Method 353.2	0.584	mg/L
11/22/2017	9:30	o- xylene	<1	ppb
11/22/2017	9:30	Oil and Grease EPA Method 1664 (SIU)	7.25	ppm
11/22/2017	9:30	p&m xylene	<1	ppb
11/22/2017	9:30	Pentachlorophenol	<25	ppb
11/22/2017	9:30	Phenanthrene	<25	ppb
11/22/2017	9:30	Phenol	<25	ppb
11/22/2017	9:30	Pyrene	<25	ppb
11/22/2017	9:30	Tetrachlorethene	<1	ppb
11/22/2017	9:30	TKN - Copper Sulfate Digestion - TKN	7.93	mg N/L
11/22/2017	9:30	Toluene	<1	ppb
11/22/2017	9:30	Total_Phosphorus-P	1.14	mg/L
11/22/2017	9:30	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	9:30	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	9:30	Trichlorethene	<1	ppb
11/22/2017	9:30	Trichlorofluoromethane	<1	ppb
11/22/2017	9:30	TSS SM 5240D - TSS	78	ppm
11/22/2017	9:30	Vinyl Chloride	<1	ppb
11/22/2017	9:30	Zinc	133.3	ug/L
11/22/2017	11:00	1,1,1-Trichloroethane	<1	ppb
11/22/2017	11:00	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	11:00	1,1,2-Trichloroethane	<1	ppb
11/22/2017	11:00	1,1-Dichloroethane	<1	ppb
11/22/2017	11:00	1,1-Dichloroethene	<1	ppb
11/22/2017	11:00	1,2-dichlorobenzene	<1	ppb

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	11:00	1,2-Dichlorobenzene	<25	ppb
11/22/2017	11:00	1,2-Dichloroethane	<1	ppb
11/22/2017	11:00	1,2-Dichloropropane	<1	ppb
11/22/2017	11:00	1,3-dichlorobenzene	<1	ppb
11/22/2017	11:00	1,3-Dichlorobenzene	<25	ppb
11/22/2017	11:00	1,4-dichlorobenzene	<1	ppb
11/22/2017	11:00	1,4-Dichlorobenzene	<25	ppb
11/22/2017	11:00	124-Trichlorobenzene	<25	ppb
11/22/2017	11:00	12-Diphenylhydrazine	<25	ppb
11/22/2017	11:00	2,4-Dichlorophenol	<25	ppb
11/22/2017	11:00	2,4-Dimethylphenol	<25	ppb
11/22/2017	11:00	2,4-Dinitrophenol	<25	ppb
11/22/2017	11:00	2,4-Dinitrotoluene	<25	ppb
11/22/2017	11:00	2,6-Dinitrotoluene	<25	ppb
11/22/2017	11:00	246-Trichlorophenol	<25	ppb
11/22/2017	11:00	2-Chloroethylvinylether	<2	ppb
11/22/2017	11:00	2-Chloronaphthalene	<25	ppb
11/22/2017	11:00	2-Chlorophenol	<25	ppb
11/22/2017	11:00	2Methyl46dinitrophen	<25	ppb
11/22/2017	11:00	2-Nitrophenol	<25	ppb
11/22/2017	11:00	33-Dichlorobenzidine	<25	ppb
11/22/2017	11:00	4Bromophenphenether	<25	ppb
11/22/2017	11:00	4Chloro3methylphenol	<25	ppb
11/22/2017	11:00	4Chlorophenphenether	<25	ppb
11/22/2017	11:00	4-Nitrophenol	<25	ppb
11/22/2017	11:00	Acenaphthene	<25	ppb
11/22/2017	11:00	Acenaphthylene	<25	ppb
11/22/2017	11:00	Aluminum	841.1	ug/L
11/22/2017	11:00	Anthracene	<25	ppb
11/22/2017	11:00	Benzene	<1	ppb
11/22/2017	11:00	Benzidine	<25	ppb
11/22/2017	11:00	Benzo(a)anthracene	<25	ppb
11/22/2017	11:00	Benzo(a)pyrene	<25	ppb
11/22/2017	11:00	Benzo(b)fluoranthene	<25	ppb
11/22/2017	11:00	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	11:00	Benzo(k)fluoranthene	<25	ppb
11/22/2017	11:00	bis2chloroethoxymeth	<25	ppb
11/22/2017	11:00	bis2chloroethylether	<25	ppb
11/22/2017	11:00	bis2chloroisoproethe	<25	ppb
11/22/2017	11:00	bis2ethylhexylphthal	<25	ppb
11/22/2017	11:00	BOD SM 5210B	42.6	ppm
11/22/2017	11:00	Bromodichloromethane	<1	ppb
11/22/2017	11:00	Bromoform	<1	ppb
11/22/2017	11:00	Bromomethane	<10	ppb
11/22/2017	11:00	Butylbenzylphthalate	<25	ppb
11/22/2017	11:00	Cadmium	<2.5	ug/L
11/22/2017	11:00	Carbon Tetrachloride	<1	ppb
11/22/2017	11:00	Chlorobenzene	<1	ppb
11/22/2017	11:00	Chloroethane	<10	ppb
11/22/2017	11:00	Chloroform	<1	ppb
11/22/2017	11:00	Chloromethane	<10	ppb
11/22/2017	11:00	Chromium	<10	ug/L
11/22/2017	11:00	Chrysene	<25	ppb
11/22/2017	11:00	cis-1,3-Dichloropropene	<1	ppb
11/22/2017	11:00	Copper	24.92	ug/L
11/22/2017	11:00	Cyanide	<4.00	ppb
11/22/2017	11:00	Dibenzoahanthracene	<25	ppb

All samples are from CSO wet weather overflow at Bucklin Brook (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	11:00	Dibromochloromethane	<1	ppb
11/22/2017	11:00	Diethylphthalate	<25	ppb
11/22/2017	11:00	Dimethylphthalate	<25	ppb
11/22/2017	11:00	di-n-butylphthalate	<25	ppb
11/22/2017	11:00	Di-n-octylphthalate	<25	ppb
11/22/2017	11:00	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	11:00	Ethylbenzene	<1	ppb
11/22/2017	11:00	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	11:00	Fluoranthene	<25	ppb
11/22/2017	11:00	Fluorene	<25	ppb
11/22/2017	11:00	Fresh Water Total Nitrogen	5.716	ppm
11/22/2017	11:00	Hexachlorobenzene	<25	ppb
11/22/2017	11:00	Hexachlorobutadiene	<25	ppb
11/22/2017	11:00	Hexachloroethane	<25	ppb
11/22/2017	11:00	Hexaclcyclopentadien	<25	ppb
11/22/2017	11:00	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	11:00	Iron	1394	ug/L
11/22/2017	11:00	Isophorone	<25	ppb
11/22/2017	11:00	Lead	35.88	ug/L
11/22/2017	11:00	Mercury EPA Method 245.7 - Mercury	11.2	ng/L
11/22/2017	11:00	Methylene Chloride	<5	ppb
11/22/2017	11:00	Naphthalene	<25	ppb
11/22/2017	11:00	NH3-N EPA 350.1 - Ammonia	1.17	ppm
11/22/2017	11:00	Nickel	<10	ug/L
11/22/2017	11:00	Nitrobenzene	<25	ppb
11/22/2017	11:00	Nnitrosodimethylamin	<25	ppb
11/22/2017	11:00	Nnitrosodinpropylami	<25	ppb
11/22/2017	11:00	Nnitrosodiphenylamin	<25	ppb
11/22/2017	11:00	NO2-N EPA 353.2 - Nitrite	0.0155	ppm-N
11/22/2017	11:00	NO3NO2 EPA Method 353.2	0.236	mg/L
11/22/2017	11:00	o- xylene	<1	ppb
11/22/2017	11:00	Oil and Grease EPA Method 1664 (SIU)	6.092	ppm
11/22/2017	11:00	p&m xylene	<1	ppb
11/22/2017	11:00	Pentachlorophenol	<25	ppb
11/22/2017	11:00	Phenanthrene	<25	ppb
11/22/2017	11:00	Phenol	<25	ppb
11/22/2017	11:00	Pyrene	<25	ppb
11/22/2017	11:00	Tetrachlorethene	<1	ppb
11/22/2017	11:00	TKN - Copper Sulfate Digestion - TKN	5.48	mg N/L
11/22/2017	11:00	Toluene	<1	ppb
11/22/2017	11:00	Total_Phosphorus-P	0.979	mg/L
11/22/2017	11:00	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	11:00	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	11:00	Trichlorethene	<1	ppb
11/22/2017	11:00	Trichlorofluoromethane	<1	ppb
11/22/2017	11:00	TSS SM 5240D - TSS	116	ppm
11/22/2017	11:00	Vinyl Chloride	<1	ppb
11/22/2017	11:00	Zinc	98.16	ug/L

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	9:40	1,1,1-Trichloroethane	<1	ppb
11/22/2017	9:40	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	9:40	1,1,2-Trichloroethane	<1	ppb
11/22/2017	9:40	1,1-Dichloroethane	<1	ppb
11/22/2017	9:40	1,1-Dichloroethene	<1	ppb
11/22/2017	9:40	1,2-Dichlorobenzene	<25	ppb
11/22/2017	9:40	1,2-dichlorobenzene	<1	ppb
11/22/2017	9:40	1,2-Dichloroethane	<1	ppb
11/22/2017	9:40	1,2-Dichloropropane	<1	ppb
11/22/2017	9:40	1,3-dichlorobenzene	<1	ppb
11/22/2017	9:40	1,3-Dichlorobenzene	<25	ppb
11/22/2017	9:40	1,4-Dichlorobenzene	<25	ppb
11/22/2017	9:40	1,4-dichlorobenzene	<1	ppb
11/22/2017	9:40	124-Trichlorobenzene	<25	ppb
11/22/2017	9:40	12-Diphenylhydrazine	<25	ppb
11/22/2017	9:40	2,4-Dichlorophenol	<25	ppb
11/22/2017	9:40	2,4-Dimethylphenol	<25	ppb
11/22/2017	9:40	2,4-Dinitrophenol	<25	ppb
11/22/2017	9:40	2,4-Dinitrotoluene	<25	ppb
11/22/2017	9:40	2,6-Dinitrotoluene	<25	ppb
11/22/2017	9:40	246-Trichlorophenol	<25	ppb
11/22/2017	9:40	2-Chloroethylvinylether	<2	ppb
11/22/2017	9:40	2-Chloronaphthalene	<25	ppb
11/22/2017	9:40	2-Chlorophenol	<25	ppb
11/22/2017	9:40	2Methyl46dinitrophen	<25	ppb
11/22/2017	9:40	2-Nitrophenol	<25	ppb
11/22/2017	9:40	33-Dichlorobenzidine	<25	ppb
11/22/2017	9:40	4Bromophenphenether	<25	ppb
11/22/2017	9:40	4Chloro3methylphenol	<25	ppb
11/22/2017	9:40	4Chlorophenphenether	<25	ppb
11/22/2017	9:40	4-Nitrophenol	<25	ppb
11/22/2017	9:40	Acenaphthene	<25	ppb
11/22/2017	9:40	Acenaphthylene	<25	ppb
11/22/2017	9:40	Aluminum	520.6	ug/L
11/22/2017	9:40	Anthracene	<25	ppb
11/22/2017	9:40	Benzene	<1	ppb
11/22/2017	9:40	Benzidine	<25	ppb
11/22/2017	9:40	Benzo(a)anthracene	<25	ppb
11/22/2017	9:40	Benzo(a)pyrene	<25	ppb
11/22/2017	9:40	Benzo(b)fluoranthene	<25	ppb
11/22/2017	9:40	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	9:40	Benzo(k)fluoranthene	<25	ppb
11/22/2017	9:40	bis2chloroethoxymeth	<25	ppb
11/22/2017	9:40	bis2chloroethylether	<25	ppb
11/22/2017	9:40	bis2chloroisoproethe	<25	ppb
11/22/2017	9:40	bis2ethylhexylphthal	<25	ppb
11/22/2017	9:40	BOD SM 5210B	33.04	ppm
11/22/2017	9:40	Bromodichloromethane	<1	ppb
11/22/2017	9:40	Bromoform	<1	ppb
11/22/2017	9:40	Bromomethane	<10	ppb
11/22/2017	9:40	Butylbenzylphthalate	<25	ppb
11/22/2017	9:40	Cadmium	<2.5	ug/L
11/22/2017	9:40	Carbon Tetrachloride	<1	ppb
11/22/2017	9:40	Chlorobenzene	<1	ppb
11/22/2017	9:40	Chloroethane	<10	ppb
11/22/2017	9:40	Chloroform	1	ppb
11/22/2017	9:40	Chloromethane	<10	ppb
11/22/2017	9:40	Chromium	<10	ug/L

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	9:40	Chrysene	<25	ppb
11/22/2017	9:40	cis-1,3-Dichloropropene	<1	ppb
11/22/2017	9:40	Copper	25.54	ug/L
11/22/2017	9:40	Cyanide	4.31	ppb
11/22/2017	9:40	Dibenzoahanthracene	<25	ppb
11/22/2017	9:40	Dibromochloromethane	<1	ppb
11/22/2017	9:40	Diethylphthalate	<25	ppb
11/22/2017	9:40	Dimethylphthalate	<25	ppb
11/22/2017	9:40	di-n-butylphthalate	<25	ppb
11/22/2017	9:40	Di-n-octylphthalate	<25	ppb
11/22/2017	9:40	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	9:40	Ethylbenzene	<1	ppb
11/22/2017	9:40	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	9:40	Fluoranthene	<25	ppb
11/22/2017	9:40	Fluorene	<25	ppb
11/22/2017	9:40	Fresh Water Total Nitrogen	5.753	ppm
11/22/2017	9:40	Hexachlorobenzene	<25	ppb
11/22/2017	9:40	Hexachlorobutadiene	<25	ppb
11/22/2017	9:40	Hexachloroethane	<25	ppb
11/22/2017	9:40	Hexaclcyclopentadien	<25	ppb
11/22/2017	9:40	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	9:40	Iron	865	ug/L
11/22/2017	9:40	Isophorone	<25	ppb
11/22/2017	9:40	Lead	<10	ug/L
11/22/2017	9:40	Mercury EPA Method 245.7 - Mercury	12.3	ng/L
11/22/2017	9:40	Methylene Chloride	<5	ppb
11/22/2017	9:40	Naphthalene	<25	ppb
11/22/2017	9:40	NH3-N EPA 350.1 - Ammonia	1.13	ppm
11/22/2017	9:40	Nickel	<10	ug/L
11/22/2017	9:40	Nitrobenzene	<25	ppb
11/22/2017	9:40	Nnitrosodimethylamin	<25	ppb
11/22/2017	9:40	Nnitrosodinpropylami	<25	ppb
11/22/2017	9:40	Nnitrosodiphenylamin	<25	ppb
11/22/2017	9:40	NO2-N EPA 353.2 - Nitrite	0.0169	ppm-N
11/22/2017	9:40	NO3NO2 EPA Method 353.2	0.213	mg/L
11/22/2017	9:40	o- xylene	<1	ppb
11/22/2017	9:40	Oil and Grease EPA Method 1664 (SIU)	4.634	ppm
11/22/2017	9:40	p&m xylene	<1	ppb
11/22/2017	9:40	Pentachlorophenol	<25	ppb
11/22/2017	9:40	Phenanthrene	<25	ppb
11/22/2017	9:40	Phenol	<25	ppb
11/22/2017	9:40	Pyrene	<25	ppb
11/22/2017	9:40	Tetrachlorethene	<1	ppb
11/22/2017	9:40	TKN - Copper Sulfate Digestion - TKN	5.54	mg N/L
11/22/2017	9:40	Toluene	<1	ppb
11/22/2017	9:40	Total_Phosphorus-P	1.03	mg/L
11/22/2017	9:40	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	9:40	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	9:40	Trichlorethene	<1	ppb
11/22/2017	9:40	Trichlorofluoromethane	<1	ppb
11/22/2017	9:40	TSS SM 5240D - TSS	62	ppm
11/22/2017	9:40	Vinyl Chloride	<1	ppb
11/22/2017	9:40	Zinc	103.3	ug/L
11/22/2017	10:10	1,1,1-Trichloroethane	<1	ppb
11/22/2017	10:10	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	10:10	1,1,2-Trichloroethane	<1	ppb
11/22/2017	10:10	1,1-Dichloroethane	<1	ppb
11/22/2017	10:10	1,1-Dichloroethene	<1	ppb

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	10:10	1,2-dichlorobenzene	<1	ppb
11/22/2017	10:10	1,2-Dichlorobenzene	<25	ppb
11/22/2017	10:10	1,2-Dichloroethane	<1	ppb
11/22/2017	10:10	1,2-Dichloropropane	<1	ppb
11/22/2017	10:10	1,3-dichlorobenzene	<1	ppb
11/22/2017	10:10	1,3-Dichlorobenzene	<25	ppb
11/22/2017	10:10	1,4-Dichlorobenzene	<25	ppb
11/22/2017	10:10	1,4-dichlorobenzene	<1	ppb
11/22/2017	10:10	124-Trichlorobenzene	<25	ppb
11/22/2017	10:10	12-Diphenylhydrazine	<25	ppb
11/22/2017	10:10	2,4-Dichlorophenol	<25	ppb
11/22/2017	10:10	2,4-Dimethylphenol	<25	ppb
11/22/2017	10:10	2,4-Dinitrophenol	<25	ppb
11/22/2017	10:10	2,4-Dinitrotoluene	<25	ppb
11/22/2017	10:10	2,6-Dinitrotoluene	<25	ppb
11/22/2017	10:10	246-Trichlorophenol	<25	ppb
11/22/2017	10:10	2-Chloroethylvinylether	<2	ppb
11/22/2017	10:10	2-Chloronaphthalene	<25	ppb
11/22/2017	10:10	2-Chlorophenol	<25	ppb
11/22/2017	10:10	2Methyl46dinitrophen	<25	ppb
11/22/2017	10:10	2-Nitrophenol	<25	ppb
11/22/2017	10:10	33-Dichlorobenzidine	<25	ppb
11/22/2017	10:10	4Bromophenphenether	<25	ppb
11/22/2017	10:10	4Chloro3methylphenol	<25	ppb
11/22/2017	10:10	4Chlorophenphenether	<25	ppb
11/22/2017	10:10	4-Nitrophenol	<25	ppb
11/22/2017	10:10	Acenaphthene	<25	ppb
11/22/2017	10:10	Acenaphthylene	<25	ppb
11/22/2017	10:10	Aluminum	515.3	ug/L
11/22/2017	10:10	Anthracene	<25	ppb
11/22/2017	10:10	Benzene	<1	ppb
11/22/2017	10:10	Benzidine	<25	ppb
11/22/2017	10:10	Benzo(a)anthracene	<25	ppb
11/22/2017	10:10	Benzo(a)pyrene	<25	ppb
11/22/2017	10:10	Benzo(b)fluoranthene	<25	ppb
11/22/2017	10:10	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	10:10	Benzo(k)fluoranthene	<25	ppb
11/22/2017	10:10	bis2chloroethoxymeth	<25	ppb
11/22/2017	10:10	bis2chloroethylether	<25	ppb
11/22/2017	10:10	bis2chloroisoproethe	<25	ppb
11/22/2017	10:10	bis2ethylhexylphthal	<25	ppb
11/22/2017	10:10	BOD SM 5210B	40.48	ppm
11/22/2017	10:10	Bromodichloromethane	<1	ppb
11/22/2017	10:10	Bromoform	<1	ppb
11/22/2017	10:10	Bromomethane	<10	ppb
11/22/2017	10:10	Butylbenzylphthalate	<25	ppb
11/22/2017	10:10	Cadmium	<2.5	ug/L
11/22/2017	10:10	Carbon Tetrachloride	<1	ppb
11/22/2017	10:10	Chlorobenzene	<1	ppb
11/22/2017	10:10	Chloroethane	<10	ppb
11/22/2017	10:10	Chloroform	<1	ppb
11/22/2017	10:10	Chloromethane	<10	ppb
11/22/2017	10:10	Chromium	<10	ug/L
11/22/2017	10:10	Chrysene	<25	ppb
11/22/2017	10:10	cis-1,3-Dichloropropene	<1	ppb
11/22/2017	10:10	Copper	24.73	ug/L
11/22/2017	10:10	Cyanide	<4.00	ppb
11/22/2017	10:10	Dibenzoahanthracene	<25	ppb

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	10:10	Dibromochloromethane	<1	ppb
11/22/2017	10:10	Diethylphthalate	<25	ppb
11/22/2017	10:10	Dimethylphthalate	<25	ppb
11/22/2017	10:10	di-n-butylphthalate	<25	ppb
11/22/2017	10:10	Di-n-octylphthalate	<25	ppb
11/22/2017	10:10	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	10:10	Ethylbenzene	<1	ppb
11/22/2017	10:10	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	10:10	Fluoranthene	<25	ppb
11/22/2017	10:10	Fluorene	<25	ppb
11/22/2017	10:10	Fresh Water Total Nitrogen	4.754	ppm
11/22/2017	10:10	Hexachlorobenzene	<25	ppb
11/22/2017	10:10	Hexachlorobutadiene	<25	ppb
11/22/2017	10:10	Hexachloroethane	<25	ppb
11/22/2017	10:10	Hexaclcyclopentadien	<25	ppb
11/22/2017	10:10	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	10:10	Iron	840.5	ug/L
11/22/2017	10:10	Isophorone	<25	ppb
11/22/2017	10:10	Lead	<10	ug/L
11/22/2017	10:10	Mercury EPA Method 245.7 - Mercury	19.9	ng/L
11/22/2017	10:10	Methylene Chloride	<5	ppb
11/22/2017	10:10	Naphthalene	<25	ppb
11/22/2017	10:10	NH3-N EPA 350.1 - Ammonia	0.739	ppm
11/22/2017	10:10	Nickel	<10	ug/L
11/22/2017	10:10	Nitrobenzene	<25	ppb
11/22/2017	10:10	Nnitrosodimethylamin	<25	ppb
11/22/2017	10:10	Nnitrosodinpropylami	<25	ppb
11/22/2017	10:10	Nnitrosodiphenylamin	<25	ppb
11/22/2017	10:10	NO2-N EPA 353.2 - Nitrite	0.0151	ppm-N
11/22/2017	10:10	NO3NO2 EPA Method 353.2	0.174	mg/L
11/22/2017	10:10	o- xylene	<1	ppb
11/22/2017	10:10	Oil and Grease EPA Method 1664 (SIU)	7.865	ppm
11/22/2017	10:10	p&m xylene	<1	ppb
11/22/2017	10:10	Pentachlorophenol	<25	ppb
11/22/2017	10:10	Phenanthrene	<25	ppb
11/22/2017	10:10	Phenol	<25	ppb
11/22/2017	10:10	Pyrene	<25	ppb
11/22/2017	10:10	Tetrachlorethene	<1	ppb
11/22/2017	10:10	TKN - Copper Sulfate Digestion - TKN	4.58	mg N/L
11/22/2017	10:10	Toluene	1	ppb
11/22/2017	10:10	Total_Phosphorus-P	0.807	mg/L
11/22/2017	10:10	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	10:10	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	10:10	Trichlorethene	<1	ppb
11/22/2017	10:10	Trichlorofluoromethane	<1	ppb
11/22/2017	10:10	TSS SM 5240D - TSS	102	ppm
11/22/2017	10:10	Vinyl Chloride	<1	ppb
11/22/2017	10:10	Zinc	82.24	ug/L
11/22/2017	10:40	1,1,1-Trichloroethane	<1	ppb
11/22/2017	10:40	1,1,2,2-Tetrachlorethane	<1	ppb
11/22/2017	10:40	1,1,2-Trichloroethane	<1	ppb
11/22/2017	10:40	1,1-Dichloroethane	<1	ppb
11/22/2017	10:40	1,1-Dichloroethene	<1	ppb
11/22/2017	10:40	1,2-Dichlorobenzene	<25	ppb
11/22/2017	10:40	1,2-dichlorobenzene	<1	ppb
11/22/2017	10:40	1,2-Dichloroethane	<1	ppb
11/22/2017	10:40	1,2-Dichloropropane	<1	ppb
11/22/2017	10:40	1,3-Dichlorobenzene	<25	ppb

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	10:40	1,3-dichlorobenzene	<1	ppb
11/22/2017	10:40	1,4-Dichlorobenzene	<25	ppb
11/22/2017	10:40	1,4-dichlorobenzene	<1	ppb
11/22/2017	10:40	124-Trichlorobenzene	<25	ppb
11/22/2017	10:40	12-Diphenylhydrazine	<25	ppb
11/22/2017	10:40	2,4-Dichlorophenol	<25	ppb
11/22/2017	10:40	2,4-Dimethylphenol	<25	ppb
11/22/2017	10:40	2,4-Dinitrophenol	<25	ppb
11/22/2017	10:40	2,4-Dinitrotoluene	<25	ppb
11/22/2017	10:40	2,6-Dinitrotoluene	<25	ppb
11/22/2017	10:40	246-Trichlorophenol	<25	ppb
11/22/2017	10:40	2-Chloroethylvinylether	<2	ppb
11/22/2017	10:40	2-Chloronaphthalene	<25	ppb
11/22/2017	10:40	2-Chlorophenol	<25	ppb
11/22/2017	10:40	2Methyl46dinitrophen	<25	ppb
11/22/2017	10:40	2-Nitrophenol	<25	ppb
11/22/2017	10:40	33-Dichlorobenzidine	<25	ppb
11/22/2017	10:40	4Bromophenphenether	<25	ppb
11/22/2017	10:40	4Chloro3methylphenol	<25	ppb
11/22/2017	10:40	4Chlorophenphenether	<25	ppb
11/22/2017	10:40	4-Nitrophenol	<25	ppb
11/22/2017	10:40	Acenaphthene	<25	ppb
11/22/2017	10:40	Acenaphthylene	<25	ppb
11/22/2017	10:40	Aluminum	843.1	ug/L
11/22/2017	10:40	Anthracene	<25	ppb
11/22/2017	10:40	Benzene	<1	ppb
11/22/2017	10:40	Benzidine	<25	ppb
11/22/2017	10:40	Benzo(a)anthracene	<25	ppb
11/22/2017	10:40	Benzo(a)pyrene	<25	ppb
11/22/2017	10:40	Benzo(b)fluoranthene	<25	ppb
11/22/2017	10:40	Benzo(g,h,i)perylene	<25	ppb
11/22/2017	10:40	Benzo(k)fluoranthene	<25	ppb
11/22/2017	10:40	bis2chloroethoxymeth	<25	ppb
11/22/2017	10:40	bis2chloroethylether	<25	ppb
11/22/2017	10:40	bis2chloroisoproethe	<25	ppb
11/22/2017	10:40	bis2ethylhexylphthal	<25	ppb
11/22/2017	10:40	BOD SM 5210B	28.55	ppm
11/22/2017	10:40	Bromodichloromethane	<1	ppb
11/22/2017	10:40	Bromoform	<1	ppb
11/22/2017	10:40	Bromomethane	<10	ppb
11/22/2017	10:40	Butylbenzylphthalate	<25	ppb
11/22/2017	10:40	Cadmium	<2.5	ug/L
11/22/2017	10:40	Carbon Tetrachloride	<1	ppb
11/22/2017	10:40	Chlorobenzene	<1	ppb
11/22/2017	10:40	Chloroethane	<10	ppb
11/22/2017	10:40	Chloroform	<1	ppb
11/22/2017	10:40	Chloromethane	<10	ppb
11/22/2017	10:40	Chromium	10.25	ug/L
11/22/2017	10:40	Chrysene	<25	ppb
11/22/2017	10:40	cis-1,3-Dichloropropene	<1	ppb
11/22/2017	10:40	Copper	31.04	ug/L
11/22/2017	10:40	Cyanide	4.13	ppb
11/22/2017	10:40	Dibenzoahanthracene	<25	ppb
11/22/2017	10:40	Dibromochloromethane	<1	ppb
11/22/2017	10:40	Diethylphthalate	<25	ppb
11/22/2017	10:40	Dimethylphthalate	<25	ppb
11/22/2017	10:40	di-n-butylphthalate	<25	ppb
11/22/2017	10:40	Di-n-octylphthalate	<25	ppb

All samples are from CSO Wet Weather Overflow at Moshassuck Street (NBC CSO # 220)

Sample Date	Sample Time	Parameter	Result	Units
11/22/2017	10:40	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
11/22/2017	10:40	Ethylbenzene	<1	ppb
11/22/2017	10:40	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
11/22/2017	10:40	Fluoranthene	<25	ppb
11/22/2017	10:40	Fluorene	<25	ppb
11/22/2017	10:40	Fresh Water Total Nitrogen	4.412	ppm
11/22/2017	10:40	Hexachlorobenzene	<25	ppb
11/22/2017	10:40	Hexachlorobutadiene	<25	ppb
11/22/2017	10:40	Hexachloroethane	<25	ppb
11/22/2017	10:40	Hexaclcyclopentadien	<25	ppb
11/22/2017	10:40	Indeno(123-cd)pyrene	<25	ppb
11/22/2017	10:40	Iron	1463	ug/L
11/22/2017	10:40	Isophorone	<25	ppb
11/22/2017	10:40	Lead	16.08	ug/L
11/22/2017	10:40	Mercury EPA Method 245.7 - Mercury	19.6	ng/L
11/22/2017	10:40	Methylene Chloride	<5	ppb
11/22/2017	10:40	Naphthalene	<25	ppb
11/22/2017	10:40	NH3-N EPA 350.1 - Ammonia	0.698	ppm
11/22/2017	10:40	Nickel	<10	ug/L
11/22/2017	10:40	Nitrobenzene	<25	ppb
11/22/2017	10:40	Nnitrosodimethylamin	<25	ppb
11/22/2017	10:40	Nnitrosodinpropylami	<25	ppb
11/22/2017	10:40	Nnitrosodiphenylamin	<25	ppb
11/22/2017	10:40	NO2-N EPA 353.2 - Nitrite	0.0106	ppm-N
11/22/2017	10:40	NO3NO2 EPA Method 353.2	0.142	mg/L
11/22/2017	10:40	o- xylene	<1	ppb
11/22/2017	10:40	Oil and Grease EPA Method 1664 (SIU)	7.857	ppm
11/22/2017	10:40	p&m xylene	<1	ppb
11/22/2017	10:40	Pentachlorophenol	<25	ppb
11/22/2017	10:40	Phenanthrene	<25	ppb
11/22/2017	10:40	Phenol	<25	ppb
11/22/2017	10:40	Pyrene	<25	ppb
11/22/2017	10:40	Tetrachlorethene	<1	ppb
11/22/2017	10:40	TKN - Copper Sulfate Digestion - TKN	4.27	mg N/L
11/22/2017	10:40	Toluene	1	ppb
11/22/2017	10:40	Total_Phosphorus-P	0.761	mg/L
11/22/2017	10:40	Trans-1,2-Dichloroethene	<1	ppb
11/22/2017	10:40	Trans-1,3-Dichloropropene	<1	ppb
11/22/2017	10:40	Trichlorethene	<1	ppb
11/22/2017	10:40	Trichlorofluoromethane	<1	ppb
11/22/2017	10:40	TSS SM 5240D - TSS	103	ppm
11/22/2017	10:40	Vinyl Chloride	<1	ppb
11/22/2017	10:40	Zinc	112.1	ug/L

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	9:00	1,1,1-Trichloroethane	<1	ppb
4/4/2017	9:00	1,1,2,2-Tetrachlorethane	<1	ppb
4/4/2017	9:00	1,1,2-Trichloroethane	<1	ppb
4/4/2017	9:00	1,1-Dichloroethane	<1	ppb
4/4/2017	9:00	1,1-Dichloroethene	<1	ppb
4/4/2017	9:00	1,2-Dichlorobenzene	<25	ppb
4/4/2017	9:00	1,2-dichlorobenzene	<1	ppb
4/4/2017	9:00	1,2-Dichloroethane	<1	ppb
4/4/2017	9:00	1,2-Dichloropropane	<1	ppb
4/4/2017	9:00	1,3-dichlorobenzene	<1	ppb
4/4/2017	9:00	1,3-Dichlorobenzene	<25	ppb
4/4/2017	9:00	1,4-dichlorobenzene	<1	ppb
4/4/2017	9:00	1,4-Dichlorobenzene	<25	ppb
4/4/2017	9:00	124-Trichlorobenzene	<25	ppb
4/4/2017	9:00	12-Diphenylhydrazine	<25	ppb
4/4/2017	9:00	2,4-Dichlorophenol	<25	ppb
4/4/2017	9:00	2,4-Dimethylphenol	<25	ppb
4/4/2017	9:00	2,4-Dinitrophenol	<25	ppb
4/4/2017	9:00	2,4-Dinitrotoluene	<25	ppb
4/4/2017	9:00	2,6-Dinitrotoluene	<25	ppb
4/4/2017	9:00	246-Trichlorophenol	<25	ppb
4/4/2017	9:00	2-Chloroethylvinylether	<2	ppb
4/4/2017	9:00	2-Chloronaphthalene	<25	ppb
4/4/2017	9:00	2-Chlorophenol	<25	ppb
4/4/2017	9:00	2Methyl46dinitrophen	<25	ppb
4/4/2017	9:00	2-Nitrophenol	<25	ppb
4/4/2017	9:00	33-Dichlorobenzidine	<25	ppb
4/4/2017	9:00	4Bromophenphenether	<25	ppb
4/4/2017	9:00	4Chloro3methylphenol	<25	ppb
4/4/2017	9:00	4Chlorophenphenether	<25	ppb
4/4/2017	9:00	4-Nitrophenol	<25	ppb
4/4/2017	9:00	Acenaphthene	<25	ppb
4/4/2017	9:00	Acenaphthylene	<25	ppb
4/4/2017	9:00	Aluminum	25.272	ppb
4/4/2017	9:00	Aluminum	78	ug/L
4/4/2017	9:00	Anthracene	<25	ppb
4/4/2017	9:00	Benzene	<1	ppb
4/4/2017	9:00	Benzidine	<25	ppb
4/4/2017	9:00	Benzo(a)anthracene	<25	ppb
4/4/2017	9:00	Benzo(a)pyrene	<25	ppb
4/4/2017	9:00	Benzo(b)fluoranthene	<25	ppb
4/4/2017	9:00	Benzo(g,h,i)perylene	<25	ppb
4/4/2017	9:00	Benzo(k)fluoranthene	<25	ppb
4/4/2017	9:00	bis2chloroethoxymeth	<25	ppb
4/4/2017	9:00	bis2chloroethylether	<25	ppb
4/4/2017	9:00	bis2chloroisoproethe	<25	ppb
4/4/2017	9:00	bis2ethylhexylphthal	<25	ppb
4/4/2017	9:00	BOD SM 5210B	53.54	ppm
4/4/2017	9:00	Bromodichloromethane	<1	ppb
4/4/2017	9:00	Bromoform	<1	ppb
4/4/2017	9:00	Bromomethane	<10	ppb
4/4/2017	9:00	Butylbenzylphthalate	<25	ppb
4/4/2017	9:00	Cadmium	<2.5	ug/L
4/4/2017	9:00	Cadmium	0.042	ppb
4/4/2017	9:00	Carbon Tetrachloride	<1	ppb
4/4/2017	9:00	Chlorobenzene	<1	ppb
4/4/2017	9:00	Chloroethane	<10	ppb
4/4/2017	9:00	Chloroform	1.1	ppb

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	9:00	Chloromethane	<10	ppb
4/4/2017	9:00	Chromium	<10	ug/L
4/4/2017	9:00	Chromium	0.92	ppb
4/4/2017	9:00	Chrysene	<25	ppb
4/4/2017	9:00	cis-1,3-Dichloropropene	<1	ppb
4/4/2017	9:00	Copper	2.455	ppb
4/4/2017	9:00	Copper	<10	ug/L
4/4/2017	9:00	Cyanide	7.3	ppb
4/4/2017	9:00	Dibenzoahanthracene	<25	ppb
4/4/2017	9:00	Dibromochloromethane	<1	ppb
4/4/2017	9:00	Diethylphthalate	<25	ppb
4/4/2017	9:00	Dimethylphthalate	<25	ppb
4/4/2017	9:00	di-n-butylphthalate	<25	ppb
4/4/2017	9:00	Di-n-octylphthalate	<25	ppb
4/4/2017	9:00	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
4/4/2017	9:00	Ethylbenzene	<1	ppb
4/4/2017	9:00	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
4/4/2017	9:00	Fluoranthene	<25	ppb
4/4/2017	9:00	Fluorene	<25	ppb
4/4/2017	9:00	Fresh Water Total Nitrogen	6.633	ppm
4/4/2017	9:00	Hexachlorobenzene	<25	ppb
4/4/2017	9:00	Hexachlorobutadiene	<25	ppb
4/4/2017	9:00	Hexachloroethane	<25	ppb
4/4/2017	9:00	Hexaclcyclopentadien	<25	ppb
4/4/2017	9:00	Indeno(123-cd)pyrene	<25	ppb
4/4/2017	9:00	Iron	58.11	ppb
4/4/2017	9:00	Iron	135.6	ug/L
4/4/2017	9:00	Isophorone	<25	ppb
4/4/2017	9:00	Lead	<10	ug/L
4/4/2017	9:00	Lead	0.722	ppb
4/4/2017	9:00	Mercury EPA Method 245.7 - Mercury	7.02	ng/L
4/4/2017	9:00	Methylene Chloride	<5	ppb
4/4/2017	9:00	Naphthalene	<25	ppb
4/4/2017	9:00	NH3-N EPA 350.1 - Ammonia	0.312	ppm
4/4/2017	9:00	Nickel	<10	ug/L
4/4/2017	9:00	Nickel	0.82	ppb
4/4/2017	9:00	Nitrobenzene	<25	ppb
4/4/2017	9:00	Nnitrosodimethylamin	<25	ppb
4/4/2017	9:00	Nnitrosodinpropylami	<25	ppb
4/4/2017	9:00	Nnitrosodiphenylamin	<25	ppb
4/4/2017	9:00	NO2-N EPA 353.2 - Nitrite	<0.050	mg/L
4/4/2017	9:00	NO3NO2 EPA Method 353.2	0.913	mg/L
4/4/2017	9:00	o- xylene	<1	ppb
4/4/2017	9:00	Oil and Grease EPA Method 1664 (SIU)	22.41	ppm
4/4/2017	9:00	p&m xylene	<1	ppb
4/4/2017	9:00	Pentachlorophenol	<25	ppb
4/4/2017	9:00	Phenanthrene	<25	ppb
4/4/2017	9:00	Phenol	<25	ppb
4/4/2017	9:00	Pyrene	<25	ppb
4/4/2017	9:00	Silver	<0.020	ppb
4/4/2017	9:00	Tetrachlorethene	<1	ppb
4/4/2017	9:00	TKN - Copper Sulfate Digestion - TKN	5.72	mg N/L
4/4/2017	9:00	Toluene	1.2	ppb
4/4/2017	9:00	Total_Phosphorus-P	0.886	mg/L
4/4/2017	9:00	Trans-1,2-Dichloroethene	<1	ppb
4/4/2017	9:00	Trans-1,3-Dichloropropene	<1	ppb
4/4/2017	9:00	Trichlorethene	<1	ppb
4/4/2017	9:00	Trichlorofluoromethane	<1	ppb

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	9:00	TSS SM 5240D - TSS	4.72	ppm
4/4/2017	9:00	Vinyl Chloride	<1	ppb
4/4/2017	9:00	Zinc	39.254	ppb
4/4/2017	9:00	Zinc	15.15	ug/L
4/4/2017	9:30	1,1,1-Trichloroethane	<1	ppb
4/4/2017	9:30	1,1,2,2-Tetrachlorethane	<1	ppb
4/4/2017	9:30	1,1,2-Trichloroethane	<1	ppb
4/4/2017	9:30	1,1-Dichloroethane	<1	ppb
4/4/2017	9:30	1,1-Dichloroethene	<1	ppb
4/4/2017	9:30	1,2-Dichlorobenzene	<5.2	ppb
4/4/2017	9:30	1,2-dichlorobenzene	<1	ppb
4/4/2017	9:30	1,2-Dichloroethane	<1	ppb
4/4/2017	9:30	1,2-Dichloropropane	<1	ppb
4/4/2017	9:30	1,3-dichlorobenzene	<1	ppb
4/4/2017	9:30	1,3-Dichlorobenzene	<5.2	ppb
4/4/2017	9:30	1,4-dichlorobenzene	<1	ppb
4/4/2017	9:30	1,4-Dichlorobenzene	<5.2	ppb
4/4/2017	9:30	124-Trichlorobenzene	<5.2	ppb
4/4/2017	9:30	12-Diphenylhydrazine	<5.2	ppb
4/4/2017	9:30	2,4-Dichlorophenol	<5.2	ppb
4/4/2017	9:30	2,4-Dimethylphenol	<5.2	ppb
4/4/2017	9:30	2,4-Dinitrophenol	<5.2	ppb
4/4/2017	9:30	2,4-Dinitrotoluene	<5.2	ppb
4/4/2017	9:30	2,6-Dinitrotoluene	<5.2	ppb
4/4/2017	9:30	246-Trichlorophenol	<5.2	ppb
4/4/2017	9:30	2-Chloroethylvinylether	<2	ppb
4/4/2017	9:30	2-Chloronaphthalene	<5.2	ppb
4/4/2017	9:30	2-Chlorophenol	<5.2	ppb
4/4/2017	9:30	2Methyl46dinitrophen	<5.2	ppb
4/4/2017	9:30	2-Nitrophenol	<5.2	ppb
4/4/2017	9:30	33-Dichlorobenzidine	<5.2	ppb
4/4/2017	9:30	4Bromophenphenether	<5.2	ppb
4/4/2017	9:30	4Chloro3methylphenol	<5.2	ppb
4/4/2017	9:30	4Chlorophenphenether	<5.2	ppb
4/4/2017	9:30	4-Nitrophenol	<5.2	ppb
4/4/2017	9:30	Acenaphthene	<5.2	ppb
4/4/2017	9:30	Acenaphthylene	<5.2	ppb
4/4/2017	9:30	Aluminum	270	ug/L
4/4/2017	9:30	Aluminum	38.532	ppb
4/4/2017	9:30	Anthracene	<5.2	ppb
4/4/2017	9:30	Benzene	<1	ppb
4/4/2017	9:30	Benzidine	<5.2	ppb
4/4/2017	9:30	Benzo(a)anthracene	<5.2	ppb
4/4/2017	9:30	Benzo(a)pyrene	<5.2	ppb
4/4/2017	9:30	Benzo(b)fluoranthene	<5.2	ppb
4/4/2017	9:30	Benzo(g,h,i)perylene	<5.2	ppb
4/4/2017	9:30	Benzo(k)fluoranthene	<5.2	ppb
4/4/2017	9:30	bis2chloroethoxymeth	<5.2	ppb
4/4/2017	9:30	bis2chloroethylether	<5.2	ppb
4/4/2017	9:30	bis2chloroisoproethe	<5.2	ppb
4/4/2017	9:30	bis2ethylhexylphthal	<5.2	ppb
4/4/2017	9:30	Bromodichloromethane	<1	ppb
4/4/2017	9:30	Bromoform	<1	ppb
4/4/2017	9:30	Bromomethane	<10	ppb
4/4/2017	9:30	Butylbenzylphthalate	<5.2	ppb
4/4/2017	9:30	Cadmium	0.026	ppb
4/4/2017	9:30	Cadmium	<2.5	ug/L
4/4/2017	9:30	Carbon Tetrachloride	<1	ppb

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	9:30	Chlorobenzene	<1	ppb
4/4/2017	9:30	Chloroethane	<10	ppb
4/4/2017	9:30	Chloroform	<1	ppb
4/4/2017	9:30	Chloromethane	<10	ppb
4/4/2017	9:30	Chromium	0.301	ppb
4/4/2017	9:30	Chromium	<10	ug/L
4/4/2017	9:30	Chrysene	<5.2	ppb
4/4/2017	9:30	cis-1,3-Dichloropropene	<1	ppb
4/4/2017	9:30	Copper	10.95	ug/L
4/4/2017	9:30	Copper	1.741	ppb
4/4/2017	9:30	Cyanide	5.69	ppb
4/4/2017	9:30	Dibenzoahanthracene	<5.2	ppb
4/4/2017	9:30	Dibromochloromethane	<1	ppb
4/4/2017	9:30	Diethylphthalate	<5.2	ppb
4/4/2017	9:30	Dimethylphthalate	<5.2	ppb
4/4/2017	9:30	di-n-butylphthalate	<5.2	ppb
4/4/2017	9:30	Di-n-octylphthalate	<5.2	ppb
4/4/2017	9:30	Enterococci - IDEXX Method 1600	34.5	MPN/100 ml
4/4/2017	9:30	Ethylbenzene	<1	ppb
4/4/2017	9:30	Fecal Coliform (3 tube) SM 9221E - Fecal	390	MPN/100 ml
4/4/2017	9:30	Fluoranthene	<5.2	ppb
4/4/2017	9:30	Fluorene	<5.2	ppb
4/4/2017	9:30	Fresh Water Total Nitrogen	1.87	ppm
4/4/2017	9:30	Hexachlorobenzene	<5.2	ppb
4/4/2017	9:30	Hexachlorobutadiene	<5.2	ppb
4/4/2017	9:30	Hexachloroethane	<5.2	ppb
4/4/2017	9:30	Hexaclcyclopentadien	<5.2	ppb
4/4/2017	9:30	Indeno(123-cd)pyrene	<5.2	ppb
4/4/2017	9:30	Iron	750.3	ug/L
4/4/2017	9:30	Iron	62.907	ppb
4/4/2017	9:30	Isophorone	<5.2	ppb
4/4/2017	9:30	Lead	<0.300	ppb
4/4/2017	9:30	Lead	<10	ug/L
4/4/2017	9:30	Mercury EPA Method 245.7 - Mercury	7.46	ng/L
4/4/2017	9:30	Methylene Chloride	<5	ppb
4/4/2017	9:30	Naphthalene	<5.2	ppb
4/4/2017	9:30	NH3-N EPA 350.1 - Ammonia	<0.1	ppm
4/4/2017	9:30	Nickel	0.511	ppb
4/4/2017	9:30	Nickel	<10	ug/L
4/4/2017	9:30	Nitrobenzene	<5.2	ppb
4/4/2017	9:30	Nnitrosodimethylamin	<5.2	ppb
4/4/2017	9:30	Nnitrosodinpropylami	<5.2	ppb
4/4/2017	9:30	Nnitrosodiphenylamin	<5.2	ppb
4/4/2017	9:30	NO2-N EPA 353.2 - Nitrite	<0.050	mg/L
4/4/2017	9:30	NO3NO2 EPA Method 353.2	1.87	mg/L
4/4/2017	9:30	o- xylene	<1	ppb
4/4/2017	9:30	Oil and Grease EPA Method 1664 (SIU)	<4.0	ppm
4/4/2017	9:30	p&m xylene	<1	ppb
4/4/2017	9:30	Pentachlorophenol	<5.2	ppb
4/4/2017	9:30	Phenanthrene	<5.2	ppb
4/4/2017	9:30	Phenol	<5.2	ppb
4/4/2017	9:30	Pyrene	<5.2	ppb
4/4/2017	9:30	Silver	<0.020	ppb
4/4/2017	9:30	Tetrachlorethene	<1	ppb
4/4/2017	9:30	TKN - Copper Sulfate Digestion - TKN	<0.500	mg N/L
4/4/2017	9:30	Toluene	<1	ppb
4/4/2017	9:30	Total_Phosphorus-P	<0.20	mg/L
4/4/2017	9:30	Trans-1,2-Dichloroethene	<1	ppb

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	9:30	Trans-1,3-Dichloropropene	<1	ppb
4/4/2017	9:30	Trichlorethene	<1	ppb
4/4/2017	9:30	Trichlorofluoromethane	<1	ppb
4/4/2017	9:30	TSS SM 5240D - TSS	85.5	ppm
4/4/2017	9:30	Vinyl Chloride	<1	ppb
4/4/2017	9:30	Zinc	23.524	ppb
4/4/2017	9:30	Zinc	30.85	ug/L
4/4/2017	10:25	1,1,1-Trichloroethane	<1	ppb
4/4/2017	10:25	1,1,2,2-Tetrachlorethane	<1	ppb
4/4/2017	10:25	1,1,2-Trichloroethane	<1	ppb
4/4/2017	10:25	1,1-Dichloroethane	<1	ppb
4/4/2017	10:25	1,1-Dichloroethene	<1	ppb
4/4/2017	10:25	1,2-Dichlorobenzene	<25	ppb
4/4/2017	10:25	1,2-dichlorobenzene	<1	ppb
4/4/2017	10:25	1,2-Dichloroethane	<1	ppb
4/4/2017	10:25	1,2-Dichloropropane	<1	ppb
4/4/2017	10:25	1,3-dichlorobenzene	<1	ppb
4/4/2017	10:25	1,3-Dichlorobenzene	<25	ppb
4/4/2017	10:25	1,4-dichlorobenzene	<1	ppb
4/4/2017	10:25	1,4-Dichlorobenzene	<25	ppb
4/4/2017	10:25	124-Trichlorobenzene	<25	ppb
4/4/2017	10:25	12-Diphenylhydrazine	<25	ppb
4/4/2017	10:25	2,4-Dichlorophenol	<25	ppb
4/4/2017	10:25	2,4-Dimethylphenol	<25	ppb
4/4/2017	10:25	2,4-Dinitrophenol	<25	ppb
4/4/2017	10:25	2,4-Dinitrotoluene	<25	ppb
4/4/2017	10:25	2,6-Dinitrotoluene	<25	ppb
4/4/2017	10:25	246-Trichlorophenol	<25	ppb
4/4/2017	10:25	2-Chloroethylvinylether	<2	ppb
4/4/2017	10:25	2-Chloronaphthalene	<25	ppb
4/4/2017	10:25	2-Chlorophenol	<25	ppb
4/4/2017	10:25	2Methyl46dinitrophen	<25	ppb
4/4/2017	10:25	2-Nitrophenol	<25	ppb
4/4/2017	10:25	33-Dichlorobenzidine	<25	ppb
4/4/2017	10:25	4Bromophenphenether	<25	ppb
4/4/2017	10:25	4Chloro3methylphenol	<25	ppb
4/4/2017	10:25	4Chlorophenphenether	<25	ppb
4/4/2017	10:25	4-Nitrophenol	<25	ppb
4/4/2017	10:25	Acenaphthene	<25	ppb
4/4/2017	10:25	Acenaphthylene	<25	ppb
4/4/2017	10:25	Aluminum	23.382	ppb
4/4/2017	10:25	Aluminum	867	ug/L
4/4/2017	10:25	Anthracene	<25	ppb
4/4/2017	10:25	Benzene	<1	ppb
4/4/2017	10:25	Benzidine	<25	ppb
4/4/2017	10:25	Benzo(a)anthracene	<25	ppb
4/4/2017	10:25	Benzo(a)pyrene	<25	ppb
4/4/2017	10:25	Benzo(b)fluoranthene	<25	ppb
4/4/2017	10:25	Benzo(g,h,i)perylene	<25	ppb
4/4/2017	10:25	Benzo(k)fluoranthene	<25	ppb
4/4/2017	10:25	bis2chloroethoxymeth	<25	ppb
4/4/2017	10:25	bis2chloroethylether	<25	ppb
4/4/2017	10:25	bis2chloroisoproethe	<25	ppb
4/4/2017	10:25	bis2ethylhexylphthal	<25	ppb
4/4/2017	10:25	BOD SM 5210B	<37.58	ppm
4/4/2017	10:25	Bromodichloromethane	<1	ppb
4/4/2017	10:25	Bromoform	<1	ppb
4/4/2017	10:25	Bromomethane	<10	ppb

Table 38: CSO Wet Weather Overflow North Diversion Structure NBC CSO 002A

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	10:25	Butylbenzylphthalate	<25	ppb
4/4/2017	10:25	Cadmium	<0.020	ppb
4/4/2017	10:25	Cadmium	<2.5	ug/L
4/4/2017	10:25	Carbon Tetrachloride	<1	ppb
4/4/2017	10:25	Chlorobenzene	<1	ppb
4/4/2017	10:25	Chloroethane	<10	ppb
4/4/2017	10:25	Chloroform	<1	ppb
4/4/2017	10:25	Chloromethane	<10	ppb
4/4/2017	10:25	Chromium	3.057	ppb
4/4/2017	10:25	Chromium	37.92	ug/L
4/4/2017	10:25	Chrysene	<25	ppb
4/4/2017	10:25	cis-1,3-Dichloropropene	<1	ppb
4/4/2017	10:25	Copper	41.39	ug/L
4/4/2017	10:25	Copper	3.707	ppb
4/4/2017	10:25	Cyanide	6.65	ppb
4/4/2017	10:25	Dibenzoahanthracene	<25	ppb
4/4/2017	10:25	Dibromochloromethane	<1	ppb
4/4/2017	10:25	Diethylphthalate	<25	ppb
4/4/2017	10:25	Dimethylphthalate	<25	ppb
4/4/2017	10:25	di-n-butylphthalate	<25	ppb
4/4/2017	10:25	Di-n-octylphthalate	<25	ppb
4/4/2017	10:25	Enterococci - IDEXX Method 1600	>2419.6	MPN/100 ml
4/4/2017	10:25	Ethylbenzene	<1	ppb
4/4/2017	10:25	Fecal Coliform (3 tube) SM 9221E - Fecal	>240000	MPN/100 ml
4/4/2017	10:25	Fluoranthene	<25	ppb
4/4/2017	10:25	Fluorene	<25	ppb
4/4/2017	10:25	Fresh Water Total Nitrogen	6.634	ppm
4/4/2017	10:25	Hexachlorobenzene	<25	ppb
4/4/2017	10:25	Hexachlorobutadiene	<25	ppb
4/4/2017	10:25	Hexachloroethane	<25	ppb
4/4/2017	10:25	Hexaclcyclopentadien	<25	ppb
4/4/2017	10:25	Indeno(123-cd)pyrene	<25	ppb
4/4/2017	10:25	Iron	1394	ug/L
4/4/2017	10:25	Iron	85.451	ppb
4/4/2017	10:25	Isophorone	<25	ppb
4/4/2017	10:25	Lead	23	ug/L
4/4/2017	10:25	Lead	0.835	ppb
4/4/2017	10:25	Mercury EPA Method 245.7 - Mercury	16.8	ng/L
4/4/2017	10:25	Methylene Chloride	<5	ppb
4/4/2017	10:25	Naphthalene	<25	ppb
4/4/2017	10:25	NH3-N EPA 350.1 - Ammonia	1.63	ppm
4/4/2017	10:25	Nickel	2.192	ppb
4/4/2017	10:25	Nickel	35.67	ug/L
4/4/2017	10:25	Nitrobenzene	<25	ppb
4/4/2017	10:25	Nnitrosodimethylamin	<25	ppb
4/4/2017	10:25	Nnitrosodinpropylami	<25	ppb
4/4/2017	10:25	Nnitrosodiphenylamin	<25	ppb
4/4/2017	10:25	NO2-N EPA 353.2 - Nitrite	<0.050	mg/L
4/4/2017	10:25	NO3NO2 EPA Method 353.2	0.384	mg/L
4/4/2017	10:25	o- xylene	<1	ppb
4/4/2017	10:25	Oil and Grease EPA Method 1664 (SIU)	5.93	ppm
4/4/2017	10:25	p&m xylene	<1	ppb
4/4/2017	10:25	Pentachlorophenol	<25	ppb
4/4/2017	10:25	Phenanthrene	<25	ppb
4/4/2017	10:25	Phenol	<25	ppb
4/4/2017	10:25	Pyrene	<25	ppb
4/4/2017	10:25	Silver	<0.020	ppb
4/4/2017	10:25	Tetrachlorethene	<1	ppb

All samples are from CSO Wet Weather Overflow at North Diversion Structure (NBC CSO #002A)

Sample Date	Sample Time	Parameter	Result	Units
4/4/2017	10:25	TKN - Copper Sulfate Digestion - TKN	6.25	mg N/L
4/4/2017	10:25	Toluene	<1	ppb
4/4/2017	10:25	Total_Phosphorus-P	0.739	mg/L
4/4/2017	10:25	Trans-1,2-Dichloroethene	<1	ppb
4/4/2017	10:25	Trans-1,3-Dichloropropene	<1	ppb
4/4/2017	10:25	Trichlorethene	<1	ppb
4/4/2017	10:25	Trichlorofluoromethane	<1	ppb
4/4/2017	10:25	TSS SM 5240D - TSS	112.5	ppm
4/4/2017	10:25	Vinyl Chloride	<1	ppb
4/4/2017	10:25	Zinc	75.96	ug/L
4/4/2017	10:25	Zinc	22.931	ppb

Secchi Depth 2017

				1st Reading			*2nd Reading*			*3rd Reading*			
Date	Site	Time	Meters or Feet	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	**Comments**
1/4/17	Edgewood Shoals	8:30 AM	M	3.0	2.8	2.9	3.0	2.8	2.9	3.0	2.8	2.9	
1/4/17	Pomham Rocks	8:45 AM	M	3.0	2.8	2.9	3.2	2.8	3.0	3.2	2.8	3.0	
1/4/17	Pawtuxet Cove	9:10 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
1/4/17	Conimicut Point	9:30 AM	M	3.2	2.8	3.0	3.2	2.8	3.0	3.2	2.8	3.0	
1/4/17	Bullock Reach	9:45 AM	M	3.0	2.8	2.9	3.0	2.8	2.9	3.0	2.8	2.9	
1/4/17	Edgewood Yacht Club	1:10 PM	M	3.0	2.8	2.9	3.0	2.8	2.9	3.0	2.8	2.9	
1/4/17	India Point Park	1:30 PM	M	2.6	2.4	2.5	2.8	2.6	2.7	2.6	2.4	2.5	
1/4/17	Phillipsdale Landing	2:00 PM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	
1/18/17	Pawtuxet Cove	9:05 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
1/18/17	Conimicut Point	9:15 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.0	1.8	1.9	
1/18/17	Bullock Reach	9:45 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
1/18/17	India Point Park	12:55 PM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.2	2.0	2.1	
1/18/17	Pomham Rocks	1:20 PM	M	2.4	2.2	2.3	2.2	2.0	2.1	2.4	2.0	2.2	
1/18/17	Edgewood Yacht Club	1:45 PM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
2/1/17	Edgewood Yacht Club	10:00 AM	M	3.2	3.0	3.1	3.1	2.8	3.0	3.2	3.0	3.1	
2/1/17	Conimicut Point	10:20 AM	M	3.2	3.0	3.1	2.8	2.6	2.7	3.2	3.0	3.1	
2/1/17	Bullock Reach	10:40 AM	M	2.8	2.6	2.7	3.0	2.8	2.9	2.8	2.6	2.7	
2/1/17	Phillipsdale Landing	1:35 PM	M	2.8	2.6	2.7	2.6	2.4	2.5	2.8	2.4	2.6	
2/1/17	India Point Park	2:00 PM	M	2.2	2.0	2.1	2.4	2.2	2.3	2.0	1.8	1.9	
2/1/17	Pomham Rocks	2:30 PM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
2/1/17	Edgewood Shoals	3:00 PM	M	2.4	2.2	2.3	2.2	2.0	2.1	2.4	2.4	2.4	
2/22/17	Edgewood Yacht Club	8:00 AM	M	2.4	2.2	2.3	2.2	2.0	2.1	2.2	2.0	2.1	
2/22/17	Bullock Reach	8:17 AM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
2/22/17	Conimicut Point	8:25 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
2/22/17	Pomham Rocks	8:52 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
2/22/17	Point St. Bridge	9:12 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
2/22/17	India Point Park	9:20 AM	M										Current too strong
2/22/17	Phillipsdale Landing	9:40 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
2/22/17	Pawtuxet Cove	2:15 PM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
3/1/17	Pawtuxet Cove	9:05 AM	SN	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
3/1/17	Conimicut Point	9:30 AM	SN	2.4	2.2	2.3	2.2	2.0	2.1	2.2	2.0	2.1	
3/1/17	Bullock Reach	9:50 AM	SN	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
3/1/17	Edgewood Yacht Club	2:05 PM	SN	2.2	2.0	2.1	2.4	2.2	2.3	2.0	2.2	2.1	
3/1/17	Pomham Rocks	2:10 PM	SN	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
3/1/17	India Point Park	2:40 PM	SN	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	Fog
3/29/17	Pawtuxet Cove	8:55 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
3/29/17	Conimicut Point	9:35 AM	M	2.4	2.2	2.3	2.6	2.4	2.5	2.4	2.2	2.3	
3/29/17	Bullock Reach	10:00 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
3/29/17	Edgewood Yacht Club	12:50 PM	M	2.4	2.2	2.3	2.2	2.0	2.1	2.4	2.2	2.3	
3/29/17	Pomham Rocks	1:15 PM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.4	2.2	2.3	
3/29/17	India Point Park	1:55 PM	M										Current too strong
4/5/17	Edgewood Yacht Club	8:10 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
4/5/17	Conimicut Point	8:51 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
4/5/17	Bullock Reach	9:08 AM	M	1.8	1.2	1.5	1.8	1.2	1.5	1.8	1.2	1.5	
4/5/17	Pomham Rocks	9:17 AM	M	1.8	1.2	1.5	1.8	1.2	1.5	1.8	1.2	1.5	
4/5/17	Point St. Bridge	9:39 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.8	1.6	1.7	
4/5/17	India Point Park	9:45 AM	M	1.6	1.4	1.5	1.8.	1.6	1.6	1.4	1.6	1.5	
4/5/17	Phillipsdale Landing	10:04 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.4	1.2	1.3	
4/12/17	Edgewood Shoals	8:30 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	No IPP - Current too strong
4/12/17	Pawtuxet Cove	9:00 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
4/12/17	Conimicut Point	9:15 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
4/12/17	Bullock Reach	9:45 AM	M	1.4	1.2	1.3	1.4	1.0	1.2	1.4	1.2	1.3	
4/12/17	Phillipsdale Landing	1:40 PM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.6	1.4	1.5	
4/12/17	Pomham Rocks	2:20 PM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.6	1.4	1.5	
4/12/17	Edgewood Yacht Club	2:40 PM	M	1.4	1.2	1.3	1.2	0.8	1.0	1.4	1.2	1.3	
4/19/17	Edgewood Yacht Club	7:55 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
4/19/17	Conimicut Point	8:22 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
4/19/17	Bullock Reach	8:41 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
4/19/17	Point St. Bridge	9:07 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
4/19/17	India Point Park	9:13 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
4/19/17	Phillipsdale Landing	9:33 AM	M	2.2	2.0	2.1	2.1	1.9	2.0	2.0	1.8	1.9	
4/26/17	Edgewood Yacht Club	8:50 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
4/26/17	Conimicut Point	9:25 AM	M	1.4	1.2	1.3	1.0	0.8	0.9	1.4	1.2	1.3	
4/26/17	Bullock Reach	9:50 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.8	1.6	1.7	
4/26/17	Pawtuxet Cove	12:50 PM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.0	0.8	0.9	
4/26/17	India Point Park	2:00 PM	M										Current too strong
4/26/17	Pomham Rocks	2:25 PM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.2	1.0	1.1	
5/3/17	Bullock Reach	8:15 AM	M	2.2	1.8	2.0	2.0	1.8	1.9	1.6	1.4	1.5	
5/3/17	Conimicut Point	8:30 AM	M	2.0	1.8	1.9	2.2	1.8	2.0	1.8	1.6	1.7	
5/3/17	Point St. Bridge	9:20 AM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.4	1.2	1.3	
5/3/17	India Point Park	9:30 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.8	1.6	1.7	
5/3/17	Edgewood Shoals	9:57 AM	M	1.4	1.2	1.3	1.8	1.6	1.7	1.2	1.0	1.1	
5/3/17	Edgewood Yacht Club	1:00 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.8	1.4	1.6	
5/3/17	Pomham Rocks	1:15 PM	M	1.4	1.2	1.3	1.6	1.4	1.5	1.8	1.6	1.7	
5/10/17	Edgewood Shoals	8:50 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
5/10/17	Pomham Rocks	9:10 AM	M	2.4	2.2	2.3	2.6	2.4	2.5	2.4	2.2	2.3	
5/10/17	Pawtuxet Cove	9:25 AM	M	1.8	1.4	1.6	2.0	1.8	1.9	1.8	1.4	1.6	
5/10/17	Conimicut Point	9:45 AM	M	2.4	2.0	2.2	2.2	1.8	2.0	2.4	2.2	2.3	
5/10/17	Bullock Reach	10:00 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
5/10/17	Phillipsdale Landing	1:15 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
5/10/17	India Point Park	1:30 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
5/10/17	Edgewood Yacht Club	2:00 PM	M	2.2	2.0	2.1	2.4	2.2	2.3	2.0	1.8	1.9	
5/17/17	Edgewood Yacht Club	8:34 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
5/17/17	Bullock Reach	8:40 AM	M	1.8	1.6	1.7	2.4	2.2	2.3	2.4	2.2	2.3	
5/17/17	Conimicut Point	8:47 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.2	2.0	2.1	
5/17/17	Point St. Bridge	9:37 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
5/17/17	India Point Park	9:42 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
5/17/17	Phillipsdale Landing	10:05 AM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	
5/17/17	Edgewood Yacht Club	1:01 PM	M	2.8	2.6	2.7	2.8	2.6	2.7	2.6	2.4	2.5	
5/17/17	Pomham Rocks	1:12 PM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
5/17/17	Pawtuxet Cove	1:28 PM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
5/24/17	Edgewood Yacht Club	8:25 AM	M	2.4	2.2	2.3	2.6	2.4	2.5	2.4	2.2	2.3	
5/24/17	Pawtuxet Cove	8:55 AM	M	2.2	2.0	2.1	2.4	2.2	2.3	2.2	2.0	2.1	
5/24/17	Conimicut Point	9:00 AM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
5/24/17	Bullock Reach	9:30 AM	M	2.4	2.0	2.2	2.0	1.8	1.9	2.2	2.0	2.1	
5/24/17	Phillipsdale Landing	1:05 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	2.0	1.8	1.9	
5/24/17	India Point Park	1:30 PM	M	2.2	2.0	2.1	2.4	2.0	2.2	2.0	1.8	1.9	
5/24/17	Pomham Rocks	2:00 PM	M	2.2	2.0	2.1	2.4	2.2	2.3	2.2	2.0	2.1	
6/1/17	Bullock Reach	8:00 AM	M	2.2	1.8	2.0	2.4	2.2	2.3	2.2	2.0	2.1	
6/1/17	Conimicut Point	8:25 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.2	2.0	2.1	
6/1/17	Point St. Bridge	9:00 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
6/1/17	India Point Park	9:15 AM	M	1.8	1.6	1.7	2.0	1.8	1.9	1.8	1.6	1.7	
6/1/17	Phillipsdale Landing	9:44 AM	M	1.8	1.4	1.6	1.4	1.2	1.3	1.6	1.4	1.5	
6/1/17	Pawtuxet Cove	1:40 PM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.6	1.4	1.5	
6/1/17	Edgewood Yacht Club	2:00 PM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.2	1.0	1.1	
6/1/17	Pomham Rocks	1:50 PM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.2	1.0	1.1	
6/7/17	Conimicut Point	8:55 AM	M	2.8	2.6	2.7	2.6	2.4	2.5	2.6	2.4	2.5	
6/7/17	Bullock Reach	9:15 AM	M	2.6	2.4	2.5	2.6	2.4	2.5	2.8	2.6	2.7	
6/7/17	Pawtuxet Cove	9:40 AM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.6	1.4	1.5	
6/7/17	Edgewood Shoals	10:05 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
6/7/17	Edgewood Yacht Club	10:25 AM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
6/7/17	Phillipsdale Landing	1:55 PM	M	2.4	2.2	2.3	1.8	1.6	1.7	1.8	1.6	1.7	
6/7/17	India Point Park	2:20 PM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
6/14/17	Edgewood Yacht Club	7:50 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	

Secchi Depth 2017

				1st Reading			*2nd Reading*			*3rd Reading*			
Date	Site	Time	Meters or Feet	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	**Comments**
6/14/17	Bullock Reach	8:10 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.6	1.4	1.5	
6/14/17	Conimicut Point	8:34 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
6/14/17	Phillipsdale Landing	8:55 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.6	1.4	1.5	
6/14/17	Point St. Bridge	9:20 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
6/14/17	India Point Park	9:24 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
6/14/17	Pomham Rocks	9:43 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.6	1.4	1.5	
6/21/17	Edgewood Yacht Club	8:30 AM	M	1.0	0.8	0.9	0.8	0.6	0.7	1.0	0.8	0.9	
6/21/17	Pawtuxet Cove	8:55 AM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.2	1.0	1.1	
6/21/17	Conimicut Point	9:20 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.4	1.2	1.3	
6/21/17	Bullock Reach	9:45 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
6/21/17	India Point Park	1:15 PM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
6/21/17	Pomham Rocks	2:00 PM	M	0.8	0.6	0.7	1.0	0.8	0.9	0.8	0.6	0.7	
6/28/17	Bullock Reach	8:20 AM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	
6/28/17	Conimicut Point	8:40 AM	M	1.4	1.2	1.3	1.6	1.4	1.5	1.4	1.2	1.3	
6/28/17	Point St. Bridge	9:26 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.4	1.2	1.3	
6/28/17	India Point Park	9:36 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
6/28/17	Phillipsdale Landing	10:02 AM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.6	1.4	1.5	
6/28/17	Pomham Rocks	1:15 PM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
6/28/17	Edgewood Yacht Club	1:30 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	
6/28/17	Pawtuxet Cove	1:49 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	Choppy conditions
7/6/17	Edgewood Shoals	8:45 AM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.0	0.8	0.9	
7/6/17	Pawtuxet Cove	9:08 AM	M	1.9	0.8	1.3	1.2	1.0	1.1	1.2	1.1	1.2	
7/6/17	Conimicut Point	9:33 AM	M	1.1	0.9	1.0	1.2	1.1	1.2	1.2	1.1	1.2	
7/6/17	Bullock Reach	9:51 AM	M	1.3	1.0	1.2	1.3	1.1	1.2	1.2	1.1	1.2	
7/6/17	Pomham Rocks	10:18 AM	M	0.9	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	
7/6/17	Edgewood Yacht Club	1:20 PM	M	0.9	0.7	0.8	1.0	0.8	0.9	1.1	0.9	1.0	
7/6/17	India Point Park	1:44 PM	M	1.5	1.3	1.4	1.4	1.2	1.3	1.3	1.2	1.3	
7/6/17	Phillipsdale Landing	2:15 PM	M	1.3	1.2	1.3	1.2	0.9	1.1	1.2	1.1	1.2	
7/12/17	Bullock Reach	9:06 AM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.2	1.0	1.1	
7/12/17	Conimicut Point	9:20 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
7/12/17	Point St. Bridge	10:00 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.2	1.4	
7/12/17	Phillipsdale Landing	10:35 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
7/12/17	Pomham Rocks	2:00 PM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
7/12/17	Edgewood Yacht Club	2:10 PM	M	0.8	0.4	0.6	1.0	0.8	0.9	0.8	0.6	0.7	
7/19/17	Bullock Reach	9:35 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
7/19/17	Conimicut Point	10:19 AM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	
7/19/17	India Point Park	12:45 PM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
7/19/17	Pomham Rocks	1:25 PM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	
7/19/17	Pawtuxet Cove	1:55 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	
7/19/17	Edgewood Yacht Club	2:20 PM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	
7/26/17	Bullock Reach	8:30 AM	M	2.6	2.4	2.5	2.6	2.4	2.5	2.6	2.4	2.5	
7/26/17	Conimicut Point	8:45 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
7/26/17	Point St. Bridge	9:25 AM	M	3.3	3.2	3.3	3.3	3.2	3.3	3.3	3.2	3.3	
7/26/17	India Point Park	9:35 AM	M	3.4	3.2	3.3	3.4	3.2	3.3	3.4	3.2	3.3	
7/26/17	Phillipsdale Landing	10:01 AM	M	2.2	2.0	2.1	2.2	2.0	2.1	2.2	2.0	2.1	
7/26/17	Pawtuxet Cove	1:01 PM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
7/26/17	Pomham Rocks	1:11 PM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.0	2.6	2.8	
7/26/17	Edgewood Yacht Club	1:22 PM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.2	3.0	3.1	
8/2/17	Edgewood Shoals	8:40 AM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.2	1.0	1.1	
8/2/17	Pawtuxet Cove	8:55 AM	M	1.6	1.4	1.5	1.8	1.6	1.7	1.6	1.4	1.5	
8/2/17	Pomham Rocks	9:05 AM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.2	1.0	1.1	
8/2/17	Conimicut Point	9:25 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
8/2/17	Bullock Reach	9:45 AM	M	1.4	1.2	1.3	1.6	1.4	1.5	1.4	1.2	1.3	
8/2/17	Phillipsdale Landing	1:25 PM	M	0.6	0.4	0.5	0.8	0.6	0.7	0.6	0.4	0.5	
8/2/17	India Point Park	1:45 PM	M	0.8	0.6	0.7	0.6	0.4	0.5	0.8	0.6	0.7	
8/9/17	Bullock Reach	8:09 AM	M	1.0	0.8	0.9	1.0	0.8	0.9	1.0	0.8	0.9	
8/9/17	Conimicut Point	8:20 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
8/9/17	Point St. Bridge	8:56 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
8/9/17	India Point Park	9:05 AM	M	2.8	2.6	2.7	2.4	2.2	2.3	2.6	2.4	2.5	
8/9/17	Phillipsdale Landing	9:27 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
8/9/17	Pawtuxet Cove	2:30 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
8/9/17	Pomham Rocks	2:17 PM	M	1.0	0.8	0.9	1.2	1.0	1.1	1.0	0.8	0.9	
8/9/17	Edgewood Yacht Club	2:20 PM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.0	0.8	0.9	
8/17/17	Pomham Rocks	8:50 AM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.8	2.6	2.7	
8/17/17	Pawtuxet Cove	9:25 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
8/17/17	Conimicut Point	9:55 AM	M	2.0	1.8	1.9	1.8	1.6	1.7	1.8	1.6	1.7	
8/17/17	Bullock Reach	10:20 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	2.0	1.8	1.9	
8/17/17	India Point Park	1:10 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
8/17/17	Edgewood Yacht Club	2:00 PM	M	1.0	0.8	0.9	1.2	1.0	1.1	1.4	1.2	1.3	
8/23/17	Bullock Reach	8:25 AM	M	1.0	0.8	0.9	1.0	0.8	0.9	1.0	0.8	0.9	
8/23/17	Conimicut Point	8:35 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
8/23/17	Point St. Bridge	9:20 AM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
8/23/17	India Point Park	9:30 AM	M	1.0	0.8	0.9	1.0	0.8	0.9	1.2	1.0	1.1	
8/23/17	Phillipsdale Landing	9:55 AM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.0	0.8	0.9	
8/23/17	Pomham Rocks	1:15 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.2	1.0	1.1	
8/23/17	Pawtuxet Cove	1:35 PM	M	1.4	1.2	1.3	1.6	1.4	1.5	1.4	1.2	1.3	
8/23/17	Edgewood Yacht Club	1:51 PM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	
8/30/17	Bullock Reach	9:20 AM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.2	1.8	2.0	
8/30/17	Conimicut Point	9:55 AM	M	2.0	1.8	1.9	1.8	1.6	1.7	2.0	1.8	1.9	
8/30/17	Pawtuxet Cove	10:16 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
8/30/17	Phillipsdale Landing	12:50 PM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.2	2.0	2.1	
8/30/17	India Point Park	1:15 PM	M	2.4	2.2	2.3	2.2	2.0	2.1	2.4	2.2	2.3	
8/30/17	Pomham Rocks	1:40 PM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.2	2.0	2.1	
8/30/17	Edgewood Shoals	2:11 PM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
8/30/17	Edgewood Yacht Club	2:33 PM	M										No data recorded on field sheet
9/7/17	Bullock Reach	8:15 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
9/7/17	Conimicut Point	8:30 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
9/7/17	Point St. Bridge	9:15 AM	M	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.3	
9/7/17	India Point Park	9:30 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
9/7/17	Phillipsdale Landing	9:45 AM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
9/7/17	Pomham Rocks	10:30 AM	M	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	
9/7/17	Pawtuxet Cove	3:30 PM	M	0.8	0.6	0.7	0.8	0.7	0.7	0.7	0.6	0.7	
9/7/17	Edgewood Yacht Club	2:10 PM	M	1.9	1.8	1.9	1.8	1.7	1.8	1.8	1.7	1.8	
9/13/17	Conimicut Point	10:10 AM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.4	1.2	1.3	
9/13/17	Bullock Reach	10:30 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	1.8	1.6	1.7	
9/13/17	Pawtuxet Cove	11:00 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
9/13/17	India Point Park	1:30 PM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.0	1.8	1.9	
9/13/17	Pomham Rocks	2:00 PM	M	1.6	1.4	1.5	1.4	1.2	1.3	1.6	1.4	1.5	
9/13/17	Edgewood Yacht Club	2:15 PM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.4	1.2	1.3	
9/27/17	Conimicut Point	8:55 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
9/27/17	Bullock Reach	9:15 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.2	2.0	2.1	
9/27/17	Edgewood Yacht Club	10:35 AM	M	1.6	1.4	1.5	1.6	1.4	1.5	1.6	1.4	1.5	
9/27/17	Phillipsdale Landing	12:45 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.6	1.4	1.5	
9/27/17	India Point Park	1:05 PM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
9/27/17	Pomham Rocks	1:25 PM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.2	1.0	1.1	
9/27/17	Pawtuxet Cove	1:45 PM	M	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.2	1.3	
9/27/17	Edgewood Shoals	2:05 PM	M	1.4	1.2	1.3	1.2	1.2	1.2	1.4	1.2	1.3	
10/4/17	Bullock Reach	9:00 AM	M	2.6	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	
10/4/17	Conimicut Point	9:08 AM	M	2.8	2.6	2.7	2.8	2.6	2.7	2.4	2.2	2.3	
10/4/17	Point St. Bridge	9:47 AM	M	2.6	2.4	2.5	2.6	2.4	2.5	2.6	2.4	2.5	
10/4/17	Phillipsdale Landing	10:08 AM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
10/4/17	India Point Park	10:39 AM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.0	1.8	1.9	
10/4/17	Pawtuxet Cove	1:45 PM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
10/4/17	Pomham Rocks	1:55 PM	M	2.0	1.8	1.9	1.8	1.6	1.7	1.8	1.6	1.7	

Secchi Depth 2017

				1st Reading			*2nd Reading*			*3rd Reading*			
Date	Site	Time	Meters or Feet	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	Depth-disk no longer visible (nearest tenth of a meter)	Depth-just visible (nearest tenth of a meter)	Average	**Comments**
10/4/17	Edgewood Yacht Club	2:00 PM	M	2.0	1.8	1.9	1.8	1.6	1.7	2.0	1.8	1.9	
10/11/17	Pomham Rocks	8:25 AM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.0	2.8	2.9	
10/11/17	Pawtuxet Cove	8:45 AM	M	2.8	2.6	2.7	2.6	2.4	2.5	2.6	2.4	2.5	
10/11/17	Conimicut Point	9:00 AM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.0	2.8	2.9	
10/11/17	Bullock Reach	9:45 AM	M	2.8	2.6	2.7	3.0	2.8	2.9	2.8	2.6	2.7	
10/11/17	Edgewood Yacht Club	12:40 PM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.0	2.8	2.9	
10/11/17	India Point Park	1:05 PM	M	3.0	2.8	2.9	2.8	2.6	2.7	3.0	2.8	2.9	
10/18/17	Bullock Reach	8:35 AM	M	3.2	3.0	3.1	3.2	3.0	3.1	3.2	3.0	3.1	
10/18/17	Conimicut Point	8:53 AM	M	4.2	4.1	4.2	4.2	4.1	4.2	4.2	4.1	4.2	
10/18/17	Point St. Bridge	9:30 AM	M	3.2	3.0	3.1	3.2	3.0	3.1	3.2	3.0	3.1	
10/18/17	India Point Park	9:44 AM	M	3.4	3.2	3.3	3.4	3.2	3.3	3.4	3.2	3.3	
10/18/17	Phillipsdale Landing	10:09 AM	M	3.2	3.0	3.1	2.8	2.6	2.7	2.8	2.6	2.7	
10/18/17	Pomham Rocks	12:52 PM	M	3.2	3.0	3.1	3.2	3.0	3.1	3.2	3.0	3.1	
10/18/17	Pawtuxet Cove	1:16 PM	M	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
10/18/17	Edgewood Yacht Club	6:36 PM	M	2.4	2.2	2.3	2.4	2.2	2.3	2.4	2.2	2.3	
10/25/17	Conimicut Point	10:00 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
10/25/17	Bullock Reach	10:20 AM	M	2.0	1.8	1.9	2.0	1.8	1.9	2.0	1.8	1.9	
11/1/17	Bullock Reach	8:00 AM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.0	0.9	1.0	
11/1/17	Conimicut Point	8:17 AM	M	1.2	1.0	1.1	1.2	1.0	1.1	1.2	1.0	1.1	Very calm
11/1/17	Pomham Rocks	8:47 AM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.2	1.0	1.1	
11/1/17	Phillipsdale Landing	9:50 AM	M	0.8	0.6	0.7	0.9	0.6	0.8	0.8	0.6	0.7	
11/1/17	Pawtuxet Cove	1:42 PM	M	1.0	0.8	0.9	0.8	0.6	0.7	1.0	0.8	0.9	
11/1/17	Edgewood Yacht Club	1:55 PM	M	1.2	1.0	1.1	1.0	0.8	0.9	1.2	1.0	1.1	
11/8/17	Pawtuxet Cove	8:45 AM	M	1.4	1.0	1.2	1.4	1.2	1.3	1.4	1.2	1.3	Windy, choppy, cold
11/8/17	Conimicut Point	9:10 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.6	1.4	1.5	Windy, choppy, cold
11/8/17	Bullock Reach	9:30 AM	M	1.6	1.0	1.3	1.4	1.2	1.3	1.6	1.2	1.4	Windy, choppy, cold
11/8/17	India Point Park	1:10 PM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.8	1.6	1.7	
11/8/17	Pomham Rocks	1:30 PM	M	1.8	1.6	1.7	1.6	1.4	1.5	1.8	1.6	1.7	
11/8/17	Edgewood Yacht Club	1:50 PM	M	2.0	1.8	1.9	2.0	1.8	1.9	1.8	1.6	1.7	
11/15/17	Edgewood Yacht Club	8:10 AM	M	3.2	3.1	3.2	2.8	2.0	2.4	3.2	3.0	3.1	
11/15/17	Bullock Reach	8:20 AM	M	3.0	2.8	2.9	3.2	3.0	3.1	2.8	2.6	2.7	
11/15/17	Conimicut Point	8:30 AM	M	3.6	3.4	3.5	3.4	3.2	3.3	3.4	3.2	3.3	
11/15/17	Point St. Bridge	9:10 AM	M	3.0	2.8	2.9	3.2	3.0	3.1	3.2	3.0	3.1	
11/15/17	India Point Park	9:15 AM	M	2.2	2.0	2.1	1.8	1.6	1.7	1.8	1.6	1.7	
11/15/17	Phillipsdale Landing	9:40 AM	M	2.8	2.6	2.7	2.6	2.6	2.6	2.8	2.6	2.7	
11/29/17	Bullock Reach	8:10 AM	M	4.0	3.8	3.9	3.8	3.6	3.7	4.0	3.8	3.9	
11/29/17	Point St. Bridge	9:02 AM	M	2.8	2.0	2.4	2.0	1.8	1.9	3.0	2.8	2.9	
11/29/17	Conimicut Point	9:10 AM	M	2.8	2.6	2.7	2.6	2.4	2.5	2.8	2.6	2.7	
11/29/17	Pomham Rocks	9:26 AM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.2	2.0	2.1	
12/6/17	Pomham Rocks	8:50 AM	M	2.2	2.0	2.1	2.4	2.2	2.3	2.2	2.0	2.1	
12/6/17	Pawtuxet Cove	9:10 AM	M	1.2	1.0	1.1	1.4	1.2	1.3	1.6	1.4	1.5	
12/6/17	Conimicut Point	9:40 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
12/6/17	Bullock Reach	10:00 AM	M	1.8	1.6	1.7	1.8	1.6	1.7	1.6	1.4	1.5	
12/6/17	Edgewood Yacht Club	1:30 PM	M	1.4	1.2	1.3	1.2	1.0	1.1	1.2	1.0	1.1	
12/20/17	Bullock Reach	9:25 AM	M										Too choppy
12/20/17	Conimicut Point	10:00 AM	M										Too choppy
12/20/17	Pawtuxet Cove	10:20 AM	M	2.0	1.8	1.9	2.2	2.0	2.1	2.0	1.8	1.9	
12/20/17	Edgewood Shoals	12:50 PM	M	2.4	2.2	2.3	2.6	2.4	2.5	2.8	2.6	2.7	
12/20/17	Pomham Rocks	1:10 PM	M	2.2	2.0	2.1	2.0	1.8	1.9	2.2	2.0	2.1	
12/20/17	India Point Park	1:30 PM	M	2.6	2.4	2.5	2.8	2.6	2.7	2.6	2.4	2.5	
12/20/17	Phillipsdale Landing	1:55 PM	M	2.2	2.0	2.1	2.4	2.2	2.3	3.0	2.8	2.9	
12/20/17	Edgewood Yacht Club	2:30 PM	M	3.2	3.0	3.1	3.6	3.4	3.5	3.4	3.2	3.3	

Table 39: Bay Secchi Depth