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YEAR 2007-2008 REPORT

Beaufort County Storm Water Monitoring

Beaufort County, South Carolina

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EXECUTIVE SUMMARY

The Beaufort County Water Quality Monitoring Program was developed to achieve four primary goals in order to support the implementation of future BMPs as well as adjustments to the storm water management plan (SWMP) and the associated water quality model. GEL Engineering, LLC (GEL) was selected by Beaufort County to implement the Counties water quality monitoring program.

With regard to Year 1 sample results, several sampling stations were moved as a result of elevated salinity values, and due to moving these stations, limited inferences can be drawn from the resulting data set. Furthermore, bacterial source tracking (BST) took place beginning in July 2007, and continued through January 2008. Due to the inconclusive nature of the data derived during the 7 months of BST, it was determined that remaining funds that were to be utilized for the tracking potential bacterial sources were best spent determining existing water quality for future evaluation of BMPs.

While a data analysis tool has been developed, there are very few conclusions that can be drawn from the data. This is due to several adjustments that were made to the monitoring program, such as moving sample locations further upstream, as well as the limited data set generated from only 12 months of monitoring. As a result, limited conclusions with regard to the collected data and the associated goals may be drawn.

YEAR 2007-2008 REPORT

Beaufort County Storm Water Monitoring

Beaufort County, South Carolina

1.0 Introduction

Beaufort County has seen tremendous growth during the past twenty to thirty years. During that time, storm water management methods began to require the detention of storm water to reduce the peak flows from developments for purposes of flood control and stream bank erosion control. Most recently, the retention and detention of storm water has been designed to reduce storm water pollution loads as well as reducing flooding and erosion impacts. This importance of not only the quantity but the quality of storm water discharged into waterways has been realized.

Understanding the growing importance of storm water-related impacts associated with growth and development, and the associated "level of service" provided by the county to its residents, Beaufort County enacted a storm water utility in 2001. The storm water utility assesses a storm water fee to residential, commercial and industrial property owners, and the fees collected are dedicated to storm water-related management and control activities. These may include operation and maintenance of storm water systems, implementation of improvements to reduce storm water-related problems such as flooding and storm water runoff pollution, and related studies.

During 2005 and 2006, Beaufort County utilized a portion of these fees to generate a comprehensive SWMP. Beaufort County retained Thomas & Hutton Engineering Co. (Thomas & Hutton) and Camp Dresser McKee, Inc. (CDM) to generate this plan, and it was completed on February 20, 2006. The entire county was evaluated including all watersheds, sub-watershed's, municipalities, etc. (refer to Figure 1).

1.1 Storm Water Management Plan

In summary, the SWMP was designed to identify problem areas related to storm water and to recommend a plan to solve problems and better control the impacts of storm water on receiving waters in Beaufort County. One purpose of the plan was to evaluate the use, and future use, of administrative and structural Best Management Practices (BMPs) to mitigate and control the potential adverse environmental impacts resulting from land development. One of the primary tools used during the analysis was water quality modeling, and during the analysis, "best case" and "worst case" scenarios were evaluated. The "best case" scenario was conducted for existing land use with 100 percent treatment of urban runoff with wet detention pond BMPs, though this is not possible

because existing development limits the land available and suitable for BMPs. Regardless, the results show which water quality segments would benefit from BMP implementation, as opposed to segments that are affected primarily by natural waste loads and limited tidal mixing and/or natural degradation. The "worst case" scenario was conducted for future build-out land use with no BMPs effectiveness (i.e., all BMPs fail to provide any benefit). The results show which water quality segments will be most sensitive to the effectiveness of the existing BMPs and BMPs on future development. The results of the analysis were used to make recommendations for water quality controls and water quality monitoring.

1.2 Recommended Sampling Program from Master Plan Study

Table 1 is a copy of Table 16-8 from the Beaufort County SWMP. The table summarizes the initially proposed tributary sampling program. As shown in the table, the tributary sampling was designed to meet several purposes. These purposes include:

- Characterization of storm water runoff from urban land uses (for comparison to values used in the master plan water quality model) using automatic storm sampling.
- Grab sample monitoring to characterize existing water quality, which was generally suggested in areas with potential for the implementation of a regional BMP. Sampling data is used to compare results at several stations and help to prioritize the implementation of the regional BMPs (e.g., give higher priority to locations with water quality that is not as good as other sites).
- Grab sample monitoring to characterize trends in water quality. This was generally recommended in areas where the water quality model suggested that new development without appropriate BMP controls could produce water quality degradation in the tidal rivers. For the trend analysis, it is expected that the stations would be monitored indefinitely ("permanent stations").
- The proposed monitoring program also included recommended open water sampling, which will be conducted by the South Carolina Department of Health and Environmental Control (SCDHEC) at the request of Beaufort County. The objective of this monitoring is to validate the master plan water quality model in several tidal river segments which could not be validated due to lack of available monitoring data, and to assess trends in areas where the water quality model suggested that new development without appropriate BMP controls could produce water quality degradation in the tidal rivers. For the master plan, the water quality model of tidal rivers was calibrated to geometric mean concentrations that reflected measured data for periods ranging from 3 years to 10 years. For fecal coliform bacteria, SCDHEC assesses compliance

with the shellfish harvesting standards based on 36 consecutive monthly samples. Consequently, data collected to validate the tidal receiving model should be collected from at least 36 months sampling, and preferably longer. Ideally, the period would cover a range of meteorological conditions (e.g., include years of average, above-average, and below-average rainfall).

- The master plan report also recommended the performance of bacteria source tracking. The sampling sites correspond to tributary and open water locations where the master plan water quality model did not replicate the high measured bacteria concentrations, suggesting the potential for an unexplained bacteria source that could be human in nature.
- Finally, the monitoring plan included sampling of several BMP ponds to validate the pollutant removal efficiency values used in the master plan water quality model. It was anticipated that this sampling would be done with automatic samplers collecting data for the inflow to, and outflow from, the BMP ponds.

1.3 Prioritization of Monitoring Activities to Meet Program Goals

As discussed in the master plan report, the actual sampling program implemented by the County depended upon the available storm water utility funds, and the distribution of those funds to water quality monitoring and other plan elements (e.g., drainage improvements, BMP inspection and construction, public information). As noted in their March 24, 2008, Memorandum, CDM recommended that monitoring activities given the highest priority were those activities that (a) needed to be continued for the longest time to provide meaningful results, and/or (b) provided "new" information that cannot be gathered any other way. Furthermore, CDM suggested the following sampling priority:

1. Trend monitoring. For trend monitoring, data must be collected over a relatively long period (i.e., 10 years or more), so monitoring of these sites is a top priority. The master plan recommended six tributary sites and four open water sites for that purpose.
2. Existing water quality evaluation. Existing water quality at a station can be established based on one or more years of data. This may be a high priority if the existing water quality is a consideration in determining priority regional BMP sites and acquiring the land for the site.
3. Open water sampling for model validation. This entails monthly grab sampling at eight open water sites for a period of three to five years. As indicated, these sites were coordinated with and were performed by SCDHEC to make sure that sampling stations have not already been established at any of these locations.
4. Performance of existing BMPs. This was assigned a lower priority because the

overall efficiency of the BMPs in Beaufort County is not expected to be much different than the literature values that have been compiled. Monitoring of BMPs can be difficult, and the results from a single BMP may not be very representative of overall performance.

5. Runoff quality for various land use categories. This was also assigned a lower priority because the runoff concentrations for various land uses in Beaufort County are not expected to be significantly different than the literature values that have been compiled.
6. CDM's scope did not include BST as one of the activities to be prioritized. However, if considered, it should have been given a "medium" level of priority.

2.0 Initial Storm Water Monitoring

Beaufort County selected GEL to implement the County water quality monitoring program, with the initial contract year extending from June 2007 through May 2008. Elements of the initial sampling plan setup included the following:

- Grab sampling at 14 stations for existing quality or trend analysis purposes.
- Automatic sampling at four stations for characterization of storm water runoff from various urban land uses. As discussed later, two of the initial four automatic sampling sites were discontinued to allow use in the monitoring of a wet pond BMP.
- Bacterial source tracking (BST) was initiated and performed for different sources (e.g., human, cow, dog, horse) at randomly selected stations (5 stations each month). As discussed later, in January 2008, the BST was discontinued, and the funds for BST were reallocated to the purchase of additional auto samplers.

Table 2 summarizes the established stations, their purpose, and their relationship to the locations recommended in the storm water master plan. This table also includes new or relocated stations that were adjusted during Year 1 (as detailed later in this report).

2.1 Sample Locations and Purpose

The identification of appropriate sampling sites for grab sampling and automatic storm event sampling was based on the water quality sensitivity analysis, the current level of service for water quality segments, and the existing and future land use distribution. In all, four sites were selected for automatic sampling and 14 sites were selected for grab sampling. These sites, as well as future sites, are displayed on Figure 2.

For automatic sampling, four sites were selected which in general have the following characteristics: tributary to water quality segments that are not meeting water

quality standards; dominated by a single land use type (e.g., industrial, residential); essentially fully developed; and located in a water quality basin designated for exploration of BMP retrofit opportunities. Data collected from these stations are to be compared to the concentrations that were assigned in the watershed water quality model.

For grab sampling, 14 sites were selected, which in general have the following characteristics: tributary to water quality segments that are expected to drop in level of service if BMPs are not effective; and tributary area that will undergo extensive urban development in the future. The data from these stations provide a basis for evaluating whether the water quality in the tributary is degrading as a result of new development.

2.2 Qualifying Storm Events

GEL collected water quality samples and conducted field measurements at the fourteen (14) grab stations during twelve (12) monthly sampling events. Nine of the sampling events were conducted during the third week of each month and three events were conducted following a storm event that was greater than 0.1 inches in magnitude and that occurred at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

GEL also conducted twelve (12) wet weather sampling events at four (4) discrete auto sampler locations, provided that a storm event greater than 0.1 inches in magnitude and that occured at least 72 hours from a previously measurable (greater than 0.1 inch rainfall) storm event occured during each month. Samples were collected with an automatic sampler that was established and secured in each of the four locations. The automatic sampler collected an aliquot every two minutes for the first 30 minutes following a qualifying storm event and then collected a 15 minute aliquot for the next two and a half hours for a composite sample.

2.3 Sampling/Analytical/QA-QC Procedures

All sampling events were conducted following GEL's Standard Operating Procedures, United States Environmental Protection Agency (EPA) and SCDHEC approved sampling and analytical protocols, and appropriate safety measures. The table below identifies each parameter analyzed, the method allowable maximum holding time, sample preservative and the analytical method:

Parameter	Holding Time	Sample Preservative	Analytical Method
Fecal Coliform bacteria (FCB)*	24 Hours	Na2S2O3	EPA 200.8
Total suspended solids (TSS)	7 Days	4°C	EPA 160.2
Salinity	28 Days	4°C	EPA 120.1
Biochemical oxygen demand (BOD)	48 Hours	4°C	EPA 405.1
Ammonia nitrogen (NH3-N)	28 Days	4°C, H2SO4 (pH<2)	EPA 350.1
Nitrite and nitrate nitrogen (NO3 + NO2)	28 Days	4°C, H2SO4 (pH<2)	EPA 353.1
Total Kjeldahl nitrogen (TKN)	28 Days	4°C, H2SO4 (pH<2)	EPA 351.2
Total phosphorus (TP)	28 Days	4°C, H2SO4 (pH<2)	EPA 365.4
Chlorophyll-a (chl-a)	48 Hours	4°C	SM10200H
Total organic carbon (TOC) - quarterly	28 Days	4°C H2SO4 (pH<2), zero headspace	EPA 415.1
Metals (cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc) — quarterly)	6 Months	4°C, HNO3 (pH<2)	6010B

* Although the specific method of fecal coliform analysis is not specified in the Request For Proposal, GEL recommended that fecal coliform levels be analyzed using the five-tube dilution method (also known as MPN) since it provides more accurate results for samples containing turbidity and saltwater and is consistent with methods used during the previous monitoring events. Additionally, the standard holding time for fecal coliform is six hours; however, this method allows for a holding time of 24 hours if the sample data is not for potable water and will not be used for compliance purposes.

Analysis of pH, temperature, dissolved oxygen, turbidity and salinity was performed in the field using a calibrated Series 4a DataSonde, manufactured by Hydrolab. This allowed parameters with a short holding time to be analyzed in-situ at the time of sampling at each sample location, thus providing more accurate results. The results of the field analyses were stored in the Hydrolab and documented on Field Data Information Sheets. Ambient weather conditions noted during each monitoring event

included precipitation over the previous 24 hours. In addition, tide levels were noted during the time of sampling at each location. Each of these field parameters were recorded on a Field Data Information Sheets.

Grab samples were collected by lowering the sample container directly into the surface water and next transferred to the appropriate laboratory sample containers that have been pre-labeled and contains the appropriate sample preservative. Sampling personnel wore new laboratory-quality, PVC gloves during all sample collection activities, and changed gloves, at a minimum, between each monitoring location. Each sample container was identified with a laboratory label that was completed during collection, and each label included the following information:

- The address and telephone number of GEL;
- A specific client code for the County;
- The parameter to be analyzed from that container;
- The sample identification number/name, and;
- The date and time of sample collection.

A chain of custody (COC) was documented and maintained throughout sampling and transportation to the laboratory. Samples were transported to GEL Laboratories, LLC, or the identified subcontracted laboratory for analysis. A sufficient amount of freezer packs and/or ice was maintained in the cooler to ensure that the samples remain at the recommended temperature (4° C), and upon arrival at the laboratory, the sampling personnel relinquished the samples to laboratory personnel. The analytical results were submitted to the County no more than 30 days from the date of sample collection. The COC and analytical certificates were not submitted to the County and are not included within this report, but may be supplied upon request.

2.4 Bacterial Source Tracking

The EPA recommends E.coli as the best indicator of health risk from water contact in recreational waters. They also recommend enterococci as the best indicator of health risk in salt water and a useful indicator in fresh water. Some states have changed their water quality standards to E.coli and fecal streptococci, and South Carolina has both fecal coliform and enterococci standards, but based on South Carolina's historical data set, most monitoring is done utilizing the fecal coliform test.

One of the purposes for storm water quality monitoring was to evaluate sources of bacteria (human, bird, pets, wildlife, etc.) in locations where measured bacteria levels are substantially higher than expected based on the watershed and receiving water quality

modeling. The United States Food and Drug Administration has established the minimum requirements necessary to regulate the interstate commerce of molluscan shellfish, as well as a program to protect the public health of consumers by assuring the sale or distribution of shellfish from safe sources, and assuring shellfish have not been adulterated during cultivating, harvesting, processing, shipping, or handling. To that end, it was determined to be appropriate to make an effort to identify and manage sources of bacterial contamination in shellfish harvesting waters. As a result, bacterial source tracking (BST) was pursued to assist the County in taking appropriate actions to implement reliable management practices to reduce potential impairments.

It was further determined that the BST efforts would be tied to the existing grab sample locations and five or more samples would be analyzed from the fourteen grab sample locations. It was also determined that priority would be given to grab sample sites with highest fecal coliform readings.

Most BST studies have relied on matching "fingerprints" from bacterial strains isolated from a water sample to those isolated from various sources like humans, cows, dogs, horses and wildlife. The more recent BST approaches can be grouped into two methods. They are library dependent methods (LDM) and library independent methods (LIM). The LDMs require development of databases of fingerprints from suspected fecal sources. Samples are then compared to this library for classification. Generally, bacteria indicators of fecal contamination (i.e. E.coli and enterococci) are used in this method.

The non-library method (LIM) does not depend on the development of databases from suspected fecal sources. Detection is performed via the amplification of a genetic marker by a Polymerase Chain Reaction (PCR) step. EPA's BST guide states that no single method is clearly superior and the decision to use library dependent or library independent methods depend on the unique set of circumstances associated with the study area. Beaufort County chose to use the LIM method to provide the most accurate results in the most cost effective manner. GEL recommended that two trade-marked tests on human enterococcus and human bacteroidetes be performed at five (later decided to do seven) sampling locations each month.

Beaufort County had a limited budget for monitoring, and the Storm Water Master Plan had estimated $50,000 to establish a library for source tracking. The need to get immediate data was a significant factor in this decision. These tests were subcontracted to Source Molecular Corporation located in Miami, FL, at a cost of approximately $5,000 per month. The first test was the Human enterococcus ID test which uses PCR analytical technology to determine the presence of human fecal contamination by targeting the

Enterococcus faecium human gene biomarker. The second test was a Human Bacteroiodetes ID test which also uses PCR technology. The second test is excellent for determining recent forms of fecal pollution, because these organisms are strict anerobes (i.e., they do not survive long outside the host organism). It was felt that the use of these two tests, used together, would provide critical information for modeling and differentiating fecal coliform contamination in Beaufort County's waters.

3.0 Adjustments During Year 1 Monitoring

There were several adjustments made to the storm water monitoring program during the first year. These adjustments were developed from discussions held during the monthly program meetings, as well as recommended by CDM in the referenced CDM May 24, 2008, memo. These adjustments are noted below.

3.1 Establishment of Action Levels

Based on the results of meetings between GEL, Beaufort County, SCDHEC and others, it was determined that SCDHEC should be notified if any monitoring results exceed certain "action levels" determined by CDM. These action levels (or critical exceedance concentrations) were supplied to GEL, and as the data is received from the laboratory and entered into GEL's data summary/analysis tracking tool (a spreadsheet detailed later in this report), GEL will become aware if an action level has been exceeded. In turn, GEL will notify Beaufort County and Beaufort County will determine whether or not to notify SCDHEC of any values above the action levels. Therefore, if any of the concentrations were of concern to SCDHEC, they could follow up with further sampling and/or analysis to determine if there is an acute concern with regard to water quality and the associated potential impacts to public health.

3.2 Movement of Sample Locations for Year 2

Based on recommendations made by CDM in their May 24, 2008, memo, sampling stations BECY-4, BECY-5, BECY-6, BECY-7, BECY-8, BECY-9, and BECY-14 were relocated further upstream in order to better represent storm water runoff samples. Sample results from the initial locations suggested that the locations were within mixing zones subject to both the ebb and flood of the tide and consistently showed relatively high salinity concentrations. The relocation of these sampling points upstream allow for a representative sample of storm water runoff and provide information as to what is being introduced to the receiving water body. GEL field personnel visited the new sampling

locations prior to the first Year 2 sampling event and obtained access and identified potential safety concerns. Upon establishing the new sampling locations noted above, GEL updated the sample location map and made it available to Beaufort County (refer to Figure 2).

3.3 Bacterial Source Tracking

The bacterial source tracking efforts started in July 2007 and concluded in January 2008 (see Appendix 1, Tables A-1 and A-2). The source tracking efforts evolved over time as a result of monthly meetings between the County, SCDHEC, GEL and representatives of the County's Storm Water Management Utility Board. There were 14 grab sampling stations in the county, and initially it was determined that source tracking would be done on stations having the highest fecal coliform levels. This decision led to only 11 of the 14 grab sampling locations having bacteria source tracking. The first month's results were surprising in that none of the seven samples analyzed showed positive results for human sources even though these results were from some stations with high 1600+ fecal coliform results. It was then decided to move directly into source tracking for animals, which the county felt could be controlled by management practices. The results for the next two months sampled indicated negative results for dogs. No wildlife animals were source tracked.

Based on conversations within the storm water utility workgroup and CDM, the monitoring went back to tracking human sources in November, and the November results indicated the first detection for human sources at grab sample stations 8 and 13. These positive results were for Human Bacteroidetes ID, but were negative for Human Entercoccus ID. It is interesting to note that Station 13 had relatively low fecal coliform levels compared to the other stations, as well as the next to lowest value of entercocci of the seven samples analyzed for source tracking that month.

Based on the results of Station 13, it was decided to source track some of the stations with lower historical fecal coliform levels. The December 2007 data showed Stations 8 and 13 were negative for both tests, but one of the new stations had a positive for Human Enterococcus ID and was negative for Human Bacteroidetes ID. All other source tracking results were negative.

At the monthly monitoring meeting in January 2008, the county decided to cancel further source tracking to divert funds toward performing more automatic sampling, rather than grab sampling, at existing water quality stations. Since a higher priority goal of the monitoring program is determining existing water quality in areas to evaluate

BMPs, knowing the source of fecal coliform in these areas was not important in deciding where to add BMP controls.

3.4 Eagles Point BMP Efficiency

Another lower priority monitoring goal was to evaluate the efficiency of existing structural BMPs and compare the results to literature values used within the model and master plan development. The SWMP recommendation's included the evaluation of several wet detention pond BMPs, which are the dominant BMP type in Beaufort County. In particular, the efficiency of bacteria removal in wet ponds is critical in the evaluation of the protection that BMPs will provide to County receiving waters. Initially no specific locations were recommended; simply that the pond(s) should have only one inflow and only one outflow location for sampling.

As mentioned, automatic sample location BECY-2a and 3a were discontinued, and in the Spring of 2008, it was determined that the existing wet storm water pond at Eagles Point was a good location for evaluating the pollutant removal efficiency. Monitoring of this site was initiated in April 2008.

4.0 Year 1 Data Analysis

Though not considered a significant portion of GEL's scope of work associated with the storm water monitoring program, GEL has generated an Excel spreadsheet that can be used for analyzing all of the storm water monitoring data against its initial purpose or goal. More specifically, GEL will evaluate the information against these goals to determine if improvements can be made to the monitoring GEL is performing to better achieve those goals (e.g., moving sampling stations, adding/deleting monitored parameters, notable water quality trends, etc.). This includes comparing the station data between stations to prioritize future sampling efforts. It is GELs intent to update this spreadsheet monthly as data becomes available from the laboratories.

While a data analysis tool has been developed, there are very few conclusions that can be drawn from the data. This is due to several adjustments that were made to the monitoring program, such as moving sample locations further upstream, as well as the limited data set generated from only 12 months of monitoring. As a result, limited conclusions are included below with regard to the collected data and the associated goals.

4.1 Data Analysis Tool

As detailed in Section 1.4 of this report, GEL's monitoring is being performed to

achieve four primary goals to support the implementation of future BMPs as well as adjustments to the SWMP and the associated water quality model. Those are:

1. Evaluate baseline existing water quality (including exceedance of an action level)
2. Perform long-term trend analysis to track BMP effectiveness
3. Confirm model inputs for runoff quality from land use areas
4. Confirm model inputs for select structural BMPs

This excludes the monitoring goals associated with BST, since it has been discontinued, and in-stream monitoring, as it is being performed by SCDHEC.

4.1.1 Baseline Existing Water Quality

To assist in evaluating the data being collected and its value with regard to generating a baseline water quality data set, GEL is evaluating the data from these associated stations for: 1) Action level exceedance, 2) The number of results above the associated state water quality criteria (specifically, fecal coliform), 3) The salinity of the sample results, and 4) The variability of the resulting data set.

With regard to Year 1 sample results, as mentioned, several sampling stations were moved as a result of elevated salinity values, and due to moving these stations, limited inferences can be drawn from the resulting data set.

4.1.2 Track Long-term Trends for BMP Effectiveness

As mentioned, the goal of the trending stations is to generate a long-term (i.e., 10 years or more) data set to evaluate BMP effectiveness. Therefore, while the spreadsheet includes graphs for each parameter and station with associated trend lines, it will be statistically meaningless until Year 3 at a minimum. The spreadsheet also includes a mathematical calculation that summarizes the trends of the monitored parameters at each station so they may be compared relative to each other. Meaning, one station may have a significant increasing tread across all parameters whereas one may have a significant decreasing trend. This may direct Beaufort County towards evaluating the BMPs and land use within those sub-watersheds to note or address the reasons for these trends, allowing the BMPs from the improving water quality to be utilized where water quality is degrading.

4.1.3 Selective Model Input Comparison

In order to estimate the loading from a storm, the flow-weighted average

concentration is needed. Known as the Event Mean Concentration (EMC), the flow weighted concentration is derived as the average of total loading divided by total runoff for a series of storm events. In practice, the runoff quality is sampled periodically throughout the storm event. For each sampling interval, the concentration and the quantity of runoff are combined to get a loading for the interval. At the end of the storm, the results are summed to develop the EMC (total mass divided by total runoff) which describes the average concentration for the storm. These results are combined with the results from many storms (e.g., 20 or more) and statistically evaluated to arrive at a representative EMC for each land use.

CDM utilized the EMC values in the water quality model, and the spreadsheet compares the data resulting from those monitoring stations to the EMC's used for each land use category. These are high, medium, and low density residential runoff as well as industrial runoff. Though the automatic samplers initially used at BECY-2a and BECY-3a were moved during Year 1, BECY-1a (high density runoff) and BECY-4a (medium density runoff) were not. Therefore, an analysis of the resulting data indicates that the EMC's/model inputs may have generally been high; it appears by a factor of two. GEL recommends monitoring these stations for another year to evaluate this further. If the general overestimation is confirmed, these stations may be relocated to other high and medium density runoff areas (determined by CDM) for further analysis.

4.1.4 Selective BMP Efficiency Comparison

The spreadsheet calculates the percent removal for each monitored parameter across a standard structural BMP, such as a wet detention pond, with one input and one output. The actual measured and calculated percent removal across the BMP is compared to the standard BMP removal efficiencies included within the SWMP and associated water quality model. Since the Eagles Point monitoring began in April 2008, there is not enough data to draw comparisons between the monitored and literature values.

5.0 Conclusions

While a data analysis tool has been developed based on the first 12 months of water quality monitoring, there are very few conclusions that can be drawn from the data. This is due primarily to several adjustments that were made to the monitoring program, such as moving sample locations further upstream, as well as the relatively limited data set that was generated from only 12 months of monitoring. It was determined that Beaufort County will continue to collect stormwater generated samples, i.e., samples that are

collected as a result of a stormwater qualifying event, to better address the original intent of the monitoring program.

6.0 Year 2 Storm Water Monitoring and Data Analysis

GEL has been retained to continue the storm water monitoring program detailed above. During Year 2, GEL will:

- Continue monitoring in accordance with Table 2;
- Report sample values exceeding "action levels" for those parameters with deferred "critical exceedance concentrations," and;
- Routinely meet with Beaufort County to review the latest data, and;
- Make adjustments to sample locations, parameters measured, etc. based on the monitoring results.

7.0 References

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FIGURES

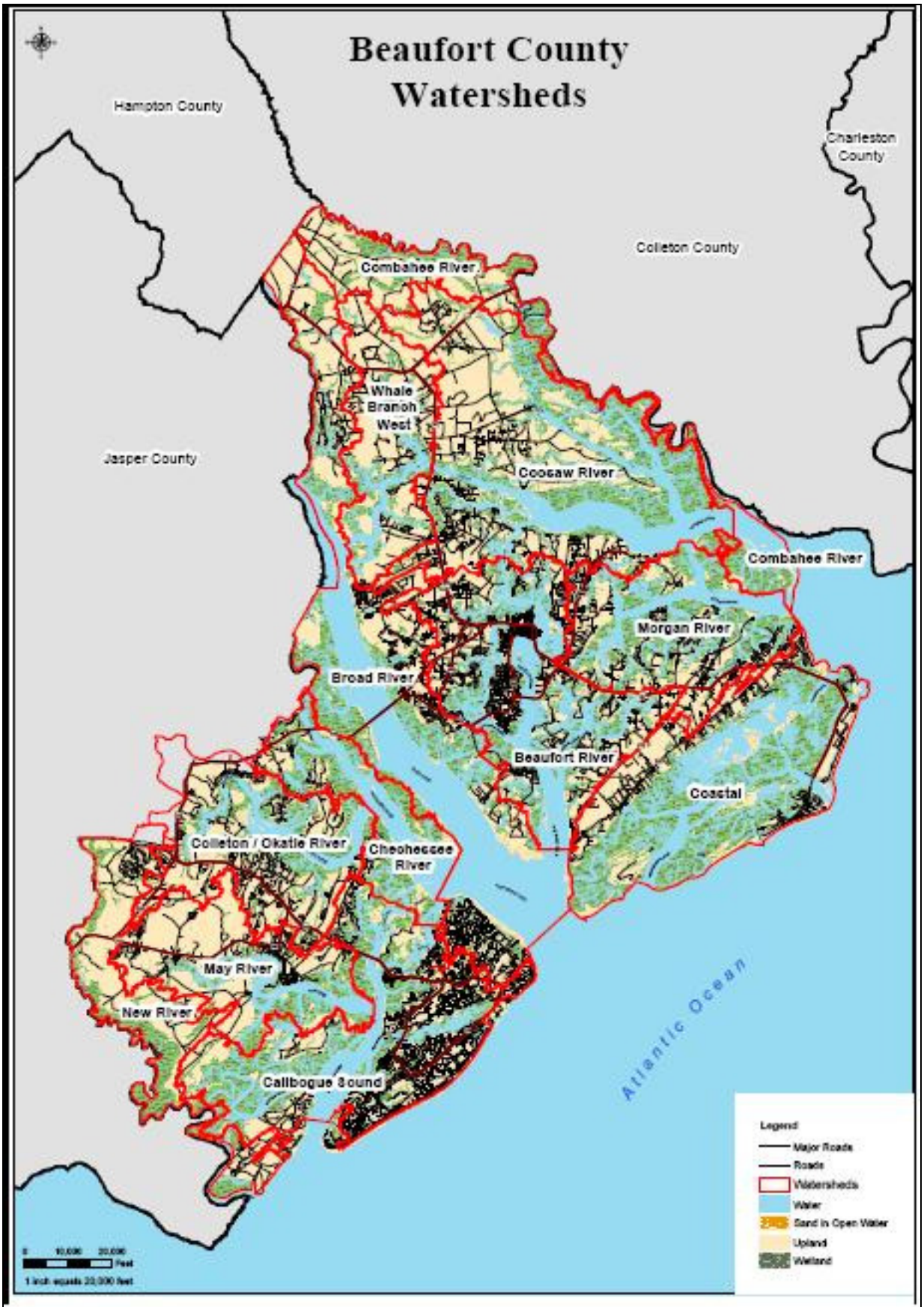

Figure 1: Beaufort County Watersheds

Station	Watershed	Hydrologic Basin	RWB	Classification	Sample Meth	Purpose
BECY-1a	Beaufort River	Southside	Battery Creek	SFH	Auto	High Density Res. Runoff
BECY-2a	Beaufort River	Albergotti Creek	Beaufort River	SA	Discontinued	Industrial Runoff
BECY-3a	Morgan River	Lucy Point	Lucy Creek	SFH	Discontinued	Low Density Res. Runoff
BECY-4a	Morgan River	Rock Springs Creek	Morgan River	SFH	Auto	Med. Density Res. Runoff
BECY-1	May River	Stoney Creek	May River	ORW	Grab	Trend Analysis
BECY-2	May River	Rose Dhu Creek	May River	ORW	Grab	Trend Analysis
BECY-3	Colleton River	Okatie West	Okatie River	ORW	Grab	Trend Analysis
BECY-4	Colleton River	Berkley Creek	Okatie River	ORW	Grab	Existing Water Quality
BECY-5	Colleton River	Camp St. Marys	Okatie River	ORW	Grab	Existing Water Quality
BECY-6	Beaufort River	Grober Hill	Battery Creek	SFH	Grab	Existing Water Quality
BECY-6r	Beaufort River	Grober Hill	Battery Creek	SFH	Grab	Existing Water Quality
BECY-7*	Morgan River	Burton Hill	Battery Creek	SFH	Grab	Existing Water Quality
BECY-7ra	Morgan River	Burton Hill	Battery Creek	SFH	Auto	Existing Water Quality
BECY-8	Beaufort River	Battery Creek North	Battery Creek	SFH	Grab	Trend Analysis
BECY-8r	Beaufort River	Battery Creek North	Battery Creek	SFH	Grab	Trend Analysis
BECY-9*	Beaufort River	Battery Creek West	Battery Creek	SFH	Grab	Trend Analysis
BECY-9ra	Beaufort River	Battery Creek West	Battery Creek	SFH	Auto	Trend Analysis
BECY-10	Broad River	Habersham Creek North	Broad River	SFH	Grab	Existing Water Quality
BECY-11	Beaufort River	Salt Creek South	Beaufort River	SA	Grab	Existing Water Quality
BECY-12	Beaufort River	Salt Creek	Beaufort River	SA	Grab	Existing Water Quality
BECY-13	Morgan River	Rock Springs Creek	Morgan River	SFH	Grab	Existing Water Quality
BECY-14	Morgan River	Village Creek	Morgan River	SFH	Grab	Trend Analysis

*No longer collected as grab

becy-1
becy-2
becy-3
becy-4
becy-5
becy-6
becy-6r
becy-7
becy-7ra
becy-8
becy-8r
becy-9
becy-9ra
becy-10
becy-11
becy-12
becy-13
becy-14
becy-1a
becy-2a
becy-3a
becy-4a
May River
Okatie River
Colleton River
Broad River
Battery Creek
Beaufort River
Port Royal Sound
Morgan River

Figure 2:
Stormwater Sample Locations
Beaufort County, South Carolina

Legend
Sample Sites
Roads

0 3,000 6,000 Feet
N

GEL Engineering LLC

TABLES

Table 1
Recommended Tributary Sample Locations

Watershed	Hydrologic Basin	% Urban - Future Land Use	% Impervious - Future Land Use	Future Increase in % Urban	Future Increase in % Impervious	Sampling Method	Purpose
Beaufort River	Southside	92%	51%	2%	1%	Automatic	High Density Residential Runoff
Beaufort River	Albergotti Creek	93%	67%	0%	0%	Automatic	Industrial Runoff
Colleton River	Camp St. Marys	48%	8%	16%	2%	Automatic	Low Density Residential Runoff
Morgan River	Rock Springs Creek	96%	22%	7%	2%	Automatic	Medium Density Residential Runoff
Beaufort River	Burton Hill	71%	43%	19%	13%	Grab	Existing Quality[1]
Beaufort River	Grober Hill	53%	25%	12%	3%	Grab	Existing Quality[1]
Beaufort River	Salt Creek	75%	27%	35%	13%	Grab	Existing Quality
Beaufort River	Salt Creek South	78%	30%	41%	11%	Grab	Existing Quality[1]
Beaufort River	Shanklin Road	81%	49%	31%	21%	Grab	Existing Quality[1]
Colleton River	Berkeley Creek	67%	18%	15%	5%	Grab	Existing Quality
Morgan River	Factory Creek	84%	25%	15%	5%	Grab	Existing Quality[1]
Morgan River	Lucy Point	95%	21%	6%	1%	Grab	Existing Quality
Beaufort River	Battery Creek North	90%	67%	55%	43%	Grab	Trend Analysis[1]
Beaufort River	Battery Creek West	82%	28%	50%	10%	Grab	Trend Analysis[1]
Colleton River	Okatie West	83%	25%	58%	19%	Grab	Trend Analysis
May River	Rose Dhu Creek	91%	22%	54%	13%	Grab	Trend Analysis
May River	Stoney Creek	72%	12%	51%	8%	Grab	Trend Analysis
Morgan River	Coffin Creek	87%	22%	59%	14%	Grab	Trend Analysis

[1] Sampling station is downstream of potential regional detention site, and therefore may provide data for prioritizing the construction of ponds and evaluating benefits (if pond is built)
[2] Location was inadvertently listed as "Coffin Creek" in the Beaufort County Stormwater Master Plan, Thomas & Hutton and CDM, 2006.

Table 2
Revised Tributary Sample Locations

Station	Watershed	Hydrologic Basin	RWB	Classification	Sample Meth	Purpose
BECY-1a	Beaufort River	Southside	Battery Creek	SFH	Auto	High Density Res. Runoff
BECY-4a	Morgan River	Rock Springs Creek	Morgan River	SFH	Auto	Med. Density Res. Runoff
BECY-1	May River	Stoney Creek	May River	ORW	Grab	Trend Analysis
BECY-2	May River	Tose Dhu Creek	May River	ORW	Grab	Trend Analysis
BECY-3	Colleton River	Okatie West	Okatie River	ORW	Grab	Trend Analysis
BECY-4	Colleton River	Berkley Creek	Okatie River	ORW	Grab	Existing Water Quality
BECY-5	Colleton River	Camp St. Marys	Okatie River	ORW	Grab	Existing Water Quality
BECY-6	Beaufort River	Grober Hill	Battery Creek	SFH	Grab	Existing Water Quality
BECY-6r	Beaufort River	Grober Hill	Battery Creek	SFH	Grab	Existing Water Quality
BECY-7ra	Morgan River	Burton Hill	Battery Creek	SFH	Auto	Existing Water Quality
BECY-8	Beaufort River	Battery Creek North	Battery Creek	SFH	Grab	Trend Analysis
BECY-8r	Beaufort River	Battery Creek North	Battery Creek	SFH	Grab	Trend Analysis
BECY-9ra	Beaufort River	Battery Creek West	Battery Creek	SFH	Auto	Trend Analysis
BECY-10	Broad River	Habersham Creek North	Broad River	SFH	Grab	Existing Water Quality
BECY-11	Beaufort River	Salt Creek South	Beaufort River	SA	Grab	Existing Water Quality
BECY-12	Beaufort River	Salt Creek	Beaufort River	SA	Grab	Existing Water Quality
BECY-13	Morgan River	Rock Springs Creek	Morgan River	SFH	Grab	Existing Water Quality
BECY-14	Morgan River	Village Creek	Morgan River	SFH	Grab	Trend Analysis
BMPep - IN	NA	NA	NA	NA	Auto	BMP Efficiency
BMPep - OUT	NA	NA	NA	NA	Auto	BMP Efficiency

Table 3
Year 1 Data Summary - Ammonia-Nitrogen* (NH3)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	0.20	0.12	0.06	0.03	0.03	0.26	.	0.06	0.03	0.07	0.05	0.06	0.09	11
BECY-1a Grab	0.23	0.12	0.06	0.03	0.04	0.25	.	0.04	0.03	0.03	0.04	0.08	0.09	11
BECY-2a Comp	0.05	0.64	0.04	.	.	.	.	.	.	.	.	.	0.24	3
BECY-2a Grab	0.06	0.49	0.05	.	.	.	.	.	.	.	.	.	0.20	3
BECY-3a Comp	0.12	.	.	.	.	.	.	.	.	.	.	.	0.12	1
BECY-3a Grab	0.08	.	.	.	.	.	.	.	.	.	.	.	0.08	1
BECY-4a Comp	0.36	0.18	0.31	0.03	0.12	0.05	0.08	0.09	0.07	0.08	0.05	0.38	0.15	12
BECY-4a Grab	0.35	0.18	0.53	0.05	0.08	0.06	0.09	0.04	0.06	0.03	0.07	0.55	0.17	12
BECY-5A Comp	.	.	.	.	.	.	0.10	0.16	.	.	.	.	0.13	2
BECY-5A Grab	.	.	.	.	.	.	0.32	1.00	.	.	.	.	0.66	2
BECY-6A Comp	.	.	.	.	.	.	.	0.04	.	.	.	.	0.04	1
BECY-6A Grab	.	.	.	.	.	.	.	0.06	.	.	.	.	0.06	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	0.66	1.53	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	0.65	1.44	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	0.12	0.09	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	0.15	0.15	.	2
BECY-1	0.35	0.35	0.10	0.05	0.32	0.04	0.20	0.03	0.05	0.07	0.03	0.05	0.14	12
BECY-2	0.09	0.24	0.12	0.15	0.05	0.04	0.14	0.05	0.07	0.12	0.03	0.04	0.09	12
BECY-3	0.21	0.30	0.22	0.04	0.07	0.06	0.05	0.04	0.10	0.13	0.03	0.04	0.11	12
BECY-4	0.12	0.13	0.10	0.04	0.15	0.04	0.09	0.03	0.05	0.14	0.03	.	0.08	11
BECY-5	.	0.14	0.10	0.19	0.04	0.03	0.12	0.03	0.03	0.16	0.04	0.06	0.09	11
BECY-6	0.87	1.85	3.41	1.04	0.05	1.43	1.16	1.72	0.41	0.38	1.56	0.83	1.23	12
BECY-7	0.08	1.03	1.18	0.10	0.09	0.38	0.07	0.06	0.07	0.06	0.05	0.10	0.27	12
BECY-8	0.29	0.32	0.56	0.49	0.29	0.47	0.09	0.15	0.11	0.08	0.18	0.06	0.26	12
BECY-9	0.45	0.33	0.41	0.19	0.10	0.19	0.06	0.08	0.09	0.09	0.06	0.08	0.18	12
BECY-10	0.12	0.19	0.12	0.27	0.07	0.07	0.07	0.03	0.07	0.06	0.10	0.05	0.10	12
BECY-11	0.12	0.27	0.12	0.76	0.07	0.09	0.13	0.03	0.06	0.24	0.17	0.03	0.17	12
BECY-12	0.20	0.32	0.59	0.22	0.26	0.56	0.28	0.11	0.36	0.25	0.12	0.25	0.29	12
BECY-13	0.26	0.13	0.09	0.15	0.13	0.14	0.10	0.15	0.18	0.76	0.20	0.12	0.20	12
BECY-14	0.19	0.25	0.31	0.08	0.03	0.10	0.09	0.06	0.08	0.29	0.07	0.09	0.14	12

* Total Nitrogen is internally tracked for Critical Exceedance Concentration information

Table 4
Year 1 Data Summary - Biochemical Oxygen Demand* (BOD5)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	4	4	2	3	2	5	.	6	5	9	6	5	5	11
BECY-1a Grab	3	5	3	2	2	3	.	5	8	7	5	4	4	11
BECY-2a Comp	4	4	2	.		.	.	.	.	.	.	.	3	3
BECY-2a Grab	4	4	2	.	.	.	.	.	.	.	.	.	3	3
BECY-3a Comp	5	.	.	.	.	.	.	.	.	.	.	.	5	1
BECY-3a Grab	5	.	.	.	.	.	.	.	.	.	.	.	5	1
BECY-4a Comp	8	4	10	5	5	3	11	3	1	1	7	15	6	12
BECY-4a Grab	10	3	11	6	2	4	10	3	1	1	2	15	6	12
BECY-5A Comp	.	.	.	.	.	.	2	3	.	.	.	.	2	2
BECY-5A Grab	.	.	.	.	.	.	3	3	.	.	.	.	3	2
BECY-6A Comp	.	.	.	.	.	.		4	.	.	.	.	4	1
BECY-6A Grab	.	.	.	.	.	.		4	.	.	.	.	4	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	1	2	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	2	10	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	1	5	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	2	4	.	2
BECY-1	1	6	2	2	2	2	2	1	3	2	3	4	3	12
BECY-2	3	4	3	2	3	2	3	2	4	3	5	5	3	12
BECY-3	3	4	3	2	2	2	3	2	2	3	2	3	3	12
BECY-4	4	6	2	2	2	3	2	1	1	1	2	.	2	11
BECY-5	.	5	2	2	2	2	3	1	1	2	2	2	2	11
BECY-6	3	6	5	2	2	4	3	2	5	2	3	5	4	12
BECY-7	1	5	6	2	2	6	5	1	2	3	2	4	3	12
BECY-8	1	16	3	2	3	3	3	1	3	2	3	2	3	12
BECY-9	1	5	3	2	3	5	5	1	1	3	20	4	4	12
BECY-10	2	5	3	2	3	2	3	2	2	3	2	3	2	12
BECY-11	2	6	2	2	2	5	15	1	2	3	2	2	4	12
BECY-12	4	9	4	2	4	5	3	1	3	4	5	4	4	12
BECY-13	1	5	3	2	1	3	4	1	1	3	2	2	2	12
BECY-14	1	5	3	2	5	5	4	3	4	4	3	3	4	12

* BOD is internally tracked for Critical Exceedance Concentration information

Table 5
Year 1 Data Summary - Cadmium (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	1.00	.	.	1	.	.		2.24	.	.	.	.	1.41	3
BECY-1a Grab	1.56	.	.	1.32	.	.		4.41	.	.	.	.	2.43	3
BECY-2a Comp	3.99	.	.	.	.	.		.	.	.	.	.	3.99	1
BECY-2a Grab	3.74	.	.	.	.	.		.	.	.	.	.	3.74	1
BECY-3a Comp	2.51	.	.	.	.	.		.	.	.	.	.	2.51	1
BECY-3a Grab	1.99	.	.	.	.	.		.	.	.	.	.	1.99	1
BECY-4a Comp	11.30	.	.	1.4	.	.	1.88	.	.	.	.	.	4.86	3
BECY-4a Grab	7.58	.	.	1	.	.	3.92	.	.	.	.	.	4.17	3
BECY-5A Comp	.	.	.	.	.	.	1	.	.	.	.	.	1.00	1
BECY-5A Grab	.	.	.	.	.	.	1	.	.	.	.	.	1.00	1
BECY-6A Comp	.	.	.	.	.	.	.	1.28	.	.	.	.	1.28	1
BECY-6A Grab	.	.	.	.	.	.	.	1.92	.	.	.	.	1.92	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-2	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-3	1.00	.	.	5	.	.	1	.	.	1	.	.	2.00	4
BECY-4	1.00	.	.	5	.	.	1.72	.	.	1.65	.	.	2.34	4
BECY-5	1.00	.	.	5	.	.	1.33	.	.	1.68	.	.	2.25	4
BECY-6	1.00	.	.	1.13	.	.	1	.	.	1.52	.	.	1.16	4
BECY-7	1.00	.	.	5	.	.	1.18	.	.	1.75	.	.	2.23	4
BECY-8	1.00	.	.	1.25	.	.	1	.	.	1.48	.	.	1.18	4
BECY-9	1.00	.	.	1.17	.	.	1.74	.	.	1.34	.	.	1.31	4
BECY-10	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-11	1.00	.	.	1	.	.	1.03	.	.	1	.	.	1.01	4
BECY-12	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-13	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-14	1.00	.	.	20	.	.	1.4	.	.	1.74	.	.	6.04	4

Table 6
Year 1 Data Summary - Chlorophyll-a

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	10.10	6.40	8.5	15.8	5.2	22.1	.	.	40.6	52	29.4	.	21.1	9
BECY-1a Grab	10.70	6.10	11.1	17.4	7.8	27.5	.	.	28.5	45.2	13.9	.	18.7	9
BECY-2a Comp	13.70	19.10	0.2	.	.	.	.	.	.	.	.	.	11.0	3
BECY-2a Grab	10.60	20.00	0.6	.	.	.	.	.	.	.	.	.	10.4	3
BECY-3a Comp	5.50	.	.	.	.	.	.	.	.	.	.	.	5.5	1
BECY-3a Grab	5.50	.	.	.	.	.	.	.	.	.	.	.	5.5	1
BECY-4a Comp	0.60	0.50	0.3	3.8	6.4	1.2	0.3	.	7.7	0.1	2.7	.	2.4	10
BECY-4a Grab	0.70	0.50	0.2	0.3	4.9	0.8	0.3	.	3.1	0.7	0.8	.	1.2	10
BECY-5A Comp	.	.	.	.	.	.	0.7	.	.	.	.	.	0.7	1
BECY-5A Grab	.	.	.	.	.	.	0.3	.	.	.	.	.	0.3	1
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	0.7	.	.	1
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	0.3	.	.	1
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	3.3	.	.	1
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	3.1	.	.	1
BECY-1	0.82	13.50	9.4	14.4	12.6	3.7	1.7	.	1.1	1	.	.	6.5	9
BECY-2	1.07	13.40	5.1	36	16.6	4.3	2	.	8.4	4.5	.	.	10.2	9
BECY-3	1.06	111.20	9.2	32.2	9.4	5.5	5	.	8.1	2.4	.	.	20.5	9
BECY-4	1.86	17.60	.	14.5	11.5	1.9	3.1	.	0.8	1.6	.	.	6.6	8
BECY-5	.	10.20	9.1	9.5	5.2	4.1	1.4	.	1.4	2.9	.	.	5.5	8
BECY-6	1.94	4.40	3.6	3.9	2.5	3.3	2.3	.	2.9	3.3	.	.	3.1	9
BECY-7	0.52	26.60	14.7	5.8	4.4	4.2	1.2	.	1.8	2.2	.	.	6.8	9
BECY-8	0.46	5.30	2.2	5.1	3.2	0.8	3.8	.	2.8	0.8	.	.	2.7	9
BECY-9	0.67	4.80	3.5	4.2	3.9	15.6	9.6	.	0.2	0.7	.	.	4.8	9
BECY-10	0.33	9.70	5.2	3.9	7.9	1.5	1.1	.	0.2	1.1	.	.	3.4	9
BECY-11	0.69	5.80	1.3	3.8	1	27.8	14.2	.	0.2	0.8	.	.	6.2	9
BECY-12	1.43	10.20	23.2	13.9	15.8	12.3	2.3	.	0.7	2.9	.	.	9.2	9
BECY-13	0.28	0.50	0.3	0.2	0.2	0.6	7.9	.	0.2	0.2	.	.	1.2	9
BECY-14	0.84	55.00	21.8	20	35	13.8	11.7	.	2.9	9	.	.	18.9	9

Table 7
Year 1 Data Summary - Chromium (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	2.82	.	.	1.9	.	.		2	.	.	.	.	2.24	3
BECY-1a Grab	3.14	.	.	2.35	.	.		2	.	.	.	.	2.50	3
BECY-2a Comp	5.79	.	.	.	.	.		.	.	.	.	.	5.79	1
BECY-2a Grab	8.48	.	.	.	.	.		.	.	.	.	.	8.48	1
BECY-3a Comp	1.00	.	.	.	.	.		.	.	.	.	.	1.00	1
BECY-3a Grab	1.00	.	.	.	.	.		.	.	.	.	.	1.00	1
BECY-4a Comp	2.03	.	.	1.91	.	.	3.37	.	.	.	.	.	2.44	3
BECY-4a Grab	1.45	.	.	1.94	.	.	3.53	.	.	.	.	.	2.31	3
BECY-5A Comp	.	.	.	.	.	.	2.12	.	.	.	.	.	2.12	1
BECY-5A Grab	.	.	.	.	.	.	2	.	.	.	.	.	2.00	1
BECY-6A Comp	.	.	.	.	.	.	.	2	.	.	.	.	2.00	1
BECY-6A Grab	.	.	.	.	.	.	.	2	.	.	.	.	2.00	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	1.86	.	.	1.02	.	.	2	.	.	2	.	.	1.72	4
BECY-2	3.83	.	.	1	.	.	2.63	.	.	2	.	.	2.37	4
BECY-3	1.14	.	.	5	.	.	3.71	.	.	2	.	.	2.96	4
BECY-4	26.10	.	.	5	.	.	2.18	.	.	2	.	.	8.82	4
BECY-5	.	.	.	5	.	.	2.48	.	.	2	.	.	3.16	3
BECY-6	2.91	.	.	1	.	.	2	.	.	2	.	.	1.98	4
BECY-7	2.38	.	.	5	.	.	2	.	.	2	.	.	2.85	4
BECY-8	2.30	.	.	1	.	.	2.71	.	.	2	.	.	2.00	4
BECY-9	2.18	.	.	1	.	.	2	.	.	2	.	.	1.80	4
BECY-10	1.00	.	.	1	.	.	2	.	.	2	.	.	1.50	4
BECY-11	1.00	.	.	1	.	.	2	.	.	2	.	.	1.50	4
BECY-12	3.60	.	.	1	.	.	2.28	.	.	2	.	.	2.22	4
BECY-13	1.00	.	.	1	.	.	2	.	.	2	.	.	1.50	4
BECY-14	3.72	.	.	20	.	.	2.76	.	.	2	.	.	7.12	4

Table 8
Year 1 Data Summary - Conductivity

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1a Grab	426.4	364.7	362.6	364.2	136.2	.	.	.	.	.	.	.	330.8	5
BECY-2a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Grab	30637	32342	32369	.	.	.	.	.	.	.	.	.	31782.7	3
BECY-3a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Grab	.	.	.	98.7	98.7	.	.	.	.	.	.	.	98.7	2
BECY-5A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1	3430	3863	405	2126	880	2193	13640	1377	970	390	37668	21937	7407	12
BECY-2	640.5	33375	1981	7728	1358	46864	20127	24740	23327	1354	45510	44923	20994	12
BECY-3	1374	9866	2618	34071	23870	49410	37930	33917	25456	1420	49256	52529	26810	12
BECY-4	82400	42203	33593	38821	35297	52337	54440	43062	41541	37562	49645	.	46446	11
BECY-5	.	45607	37806	39353	39044	54220	51961	45902	43925	37960	50566	52128	45316	11
BECY-6	20677	19194	8047	33651	41413	34073	46328	15052	1125	26730	21965	43121	25948	12
BECY-7	48599	46054	21012	40845	41322	54731	57517	8325	2146	31017	14124	56375	35172	12
BECY-8	46045	11080	7553	37997	38988	34982	56200	7811	366	36648	23798	736	25184	12
BECY-9	47399	3504	8058	26644	34255	39139	54658	4427	631	16267	7586	51633	24517	12
BECY-10	9296	274.1	92	151	168	287	304	200	184	224	198	270	971	12
BECY-11	203.8	202.8	329	431	381	1218	1141	372	153	256	301	456	454	12
BECY-12	37723	5539	6146	6483	6472	27166	26909	1534	546	593	2483	43959	13796	12
BECY-13	158.9	140.7	170	892	1144	1014	1376	529	147	564	204	171	543	12
BECY-14	46715	42731	31154	36937	36959	52505	54147	42847	39506	37134	47160	49998	43149	12

Table 9
Year 1 Data Summary - Copper (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	3.00	.	.	3.00	.	.	.	4.2	.	.	.	.	3.40	3
BECY-1a Grab	3.42	.	.	3.00	.	.	.	4.22	.	.	.	.	3.55	3
BECY-2a Comp	4.56	.	.	.	.	.	.		.	.	.	.	4.56	1
BECY-2a Grab	3.00	.	.	.	.	.	.		.	.	.	.	3.00	1
BECY-3a Comp	3.05	.	.	.	.	.	.		.	.	.	.	3.05	1
BECY-3a Grab	11.40	.	.	.	.	.	.		.	.	.	.	11.40	1
BECY-4a Comp	10.70	.	.	3.00	.	.	12.4		.	.	.	.	8.70	3
BECY-4a Grab	3.00	.	.	3.00	.	.	12.3		.	.	.	.	6.10	3
BECY-5A Comp	.	.	.	.	.	.	3		.	.	.	.	3.00	1
BECY-5A Grab	.	.	.	.	.	.	3		.	.	.	.	3.00	1
BECY-6A Comp	.	.	.	.	.	.	.	5.8	.	.	.	.	5.80	1
BECY-6A Grab	.	.	.	.	.	.	.	9.56	.	.	.	.	9.56	1
BMPep - IN COMP	.	.	.	.	.	.	.		.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.		.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.		.	.	.	.	.	.
BMPep - OUT GRAB		.	.	.	.	.	.		.	.	.	.	.	.
BECY-1	3.00	.	.	3	.	.	3		.	3	.	.	3.00	4
BECY-2	3.00	.	.	4.78	.	.	3.43		.	6.01	.	.	4.31	4
BECY-3	3.43	.	.	15	.	.	5.22		.	3.78	.	.	6.86	4
BECY-4	4.27	.	.	15	.	.	4.06		.	7.06	.	.	7.60	4
BECY-5	.	.	.	15	.	.	3.48		.	7.72	.	.	8.73	3
BECY-6	3.00	.	.	5.88	.	.	4.48		.	5.02	.	.	4.60	4
BECY-7	3.00	.	.	15	.	.	4.52		.	5.4	.	.	6.98	4
BECY-8	3.00	.	.	6.48	.	.	4.56		.	6.71	.	.	5.19	4
BECY-9	3.00	.	.	5.49	.	.	4.81		.	4.46	.	.	4.44	4
BECY-10	3.00	.	.	3	.	.	3		.	3	.	.	3.00	4
BECY-11	3.00	.	.	3	.	.	3		.	3	.	.	3.00	4
BECY-12	3.00	.	.	3	.	.	3.06		.	3	.	.	3.02	4
BECY-13	3.00	.	.	3	.	.	3		.	3	.	.	3.00	4
BECY-14	3.00	.	.	60	.	.	4.32		.	7.11	.	.	18.61	4

Table 10
Year 1 Data Summary - Dissolved Oxygen* (DO)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp		.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1a Grab	4.98	4.36	5.41	4.79	3.69	.	.	.	.	.	.	.	4.65	5
BECY-2a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Grab	4.64	5.37	4.79	.	.	.	.	.	.	.	.	.	4.93	3
BECY-3a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Grab	.	.	.	4.89	4.16	.	.	.	.	.	.	.	4.53	2
BECY-5A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1	7.3	4.03	6.86	7.42	9.44	6.96	4.58	13.29	7.31	6.42	4.02	5.09	6.89	12
BECY-2	6.74	4.86	7.81	7.31	9.57	5.71	5.32	12.05	6.94	7.82	6.31	5.19	7.14	12
BECY-3	6.04	6.33	6.55	6.86	6.78	5.52	5.5	11.96	6.71	9.18	6.22	4.61	6.86	12
BECY-4	6.79	4.64	5.72	6.81	6.59	5.81	5.26	12.42	7.56	7.57	5.21	.	6.76	11
BECY-5	.	4.03	5.31	5.95	7.37	5.44	5.03	12.21	7.5	8.21	5.72	5.69	6.59	11
BECY-6	2.56	3.47	4.32	3.88	5.13	3.51	3.61	8.89	5.83	5.92	3.01	1.96	4.34	12
BECY-7	3.64	0.82	2.97	4.04	5.49	3.25	4.47	12.68	7.95	6.24	7.28	1.89	5.06	12
BECY-8	2.23	0.99	3.07	3.6	4.45	2.31	4.53	9.54	7.52	4.73	1.81	5.69	4.21	12
BECY-9	2.42	4.57	4.61	4.59	5.6	2.32	4.19	11.87	7.59	5.96	2.62	2.46	4.90	12
BECY-10	2.64	0.98	5.88	6.72	9.84	6.91	4.84	10.68	8.42	2.72	3.56	5.89	5.76	12
BECY-11	3.1	3.44	6.9	4.14	6.33	4.72	2.29	6.11	4.82	2.87	2.71	2.69	4.18	12
BECY-12	2.34	5.67	4.21	6.41	7.11	2.49	4.27	11.92	6.58	3.16	3.31	1.98	4.95	12
BECY-13	5.88	6.53	9.74	9.86	10.82	6.53	6.75	9.62	7.76	7.12	9.01	7.81	8.12	12
BECY-14	4.17	5.72	5.49	4.82	6.72	5.31	4.79	10.12	6.41	6.42	4.93	4.2	5.76	12

* DO is internally tracked for Critical Exceedance Concentration information

Table 11
Year 1 Data Summary - Fecal Coliform*

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	.	70	300	500	50	23	.	17	8	.	300	16000	1919	9
BECY-1a Grab	.	80	30	300	300	30	.	13	13	.	50	16000	1868	9
BECY-2a Comp	110	4	2	.	.	.	.	.	.	.	.	.	39	3
BECY-2a Grab	30	11	2	.	.	.	.	.	.	.	.	.	14	3
BECY-3a Comp	1600	.	.	.	.	.	.	.	.	.	.	.	1600	1
BECY-3a Grab	900	.	.	.	.	.	.	.	.	.	.	.	900	1
BECY-4a Comp	1600	1600	1600	1600	1700	2400	.	1300	230	.	800	16000	2883	10
BECY-4a Grab	1600	1600	1600	1600	1100	9000	.	300	40	.	1300	16000	3414	10
BECY-5A Comp	.	.	.	.	.	.	.	1600	.	.	.	.	1600	1
BECY-5A Grab	.	.	.	.	.	.	.	1600	.	.	.	.	1600	1
BECY-6A Comp	.	.	.	.	.	.	.	500	.	.	.	.	500	1
BECY-6A Grab	.	.	.	.	.	.	.	300	.	.	.	.	300	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	8	500	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	6	900	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	4	2	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	2	2	.	2
BECY-1	1600	500	900	.	500	280	1600	300	300	300	900	1600	798	11
BECY-2	1600	50	130	.	170	50	900	240	300	170	50	500	378	11
BECY-3	500	500	900	.	220	50	900	80	900	900	17	300	479	11
BECY-4	110	4	11	.	230	4	2	13	23	130	8	.	54	10
BECY-5	.	34	4	.	240	4	300	2	8	900	30	900	242	10
BECY-6	220	220	280	.	900	130	900	140	1600	1600	50	1600	695	11
BECY-7	80	1600	1600	.	300	3000	70	300	2400	40	300	140	894	11
BECY-8	170	1600	500	.	700	5000	300	900	1100	1300	1100	800	1225	11
BECY-9	110	500	1600	.	800	110	500	3000	1300	110	700	800	866	11
BECY-10	300	50	130	.	240	300	11	240	500	110	900	1600	398	11
BECY-11	70	900	80	.	23	220	900	2	220	130	300	23	261	11
BECY-12	130	1600	500	.	3000	2400	1300	1700	16000	220	800	80	2521	11
BECY-13	70	60	1600	.	40	500	380	40	40	20	80	300	285	11
BECY-14	80	23	130	.	240	50	50	23	30	50	80	17	70	11

* Fecal Coliform is internally tracked for Critical Exceedance Concentration information

Table 12
Year 1 Data Summary - Iron (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	435	.	.	296	.	.	.	453	.	.	.	.	395	3
BECY-1a Grab	707	.	.	541	.	.	.	473	.	.	.	.	574	3
BECY-2a Comp	2200	.	.	.	.	.	.	.	.	.	.	.	2200	1
BECY-2a Grab	3580	.	.	.	.	.	.	.	.	.	.	.	3580	1
BECY-3a Comp	652	.	.	.	.	.	.	.	.	.	.	.	652	1
BECY-3a Grab	618	.	.	.	.	.	.	.	.	.	.	.	618	1
BECY-4a Comp	446	.	.	337	.	.	627	.	.	.	.	.	470	3
BECY-4a Grab	332	.	.	196	.	.	331	.	.	.	.	.	286	3
BECY-5A Comp	.	.	.	.	.	.	2810	.	.	.	.	.	2810	1
BECY-5A Grab	.	.	.	.	.	.	2710	.	.	.	.	.	2710	1
BECY-6A Comp	.	.	.	.	.	.	.	849	.	.	.	.	849	1
BECY-6A Grab	.	.	.	.	.	.	.	898	.	.	.	.	898	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	1740	.	.	1780	.	.	1360	.	.	2700	.	.	1895	4
BECY-2	2940	.	.	2780	.	.	2040	.	.	1740	.	.	2375	4
BECY-3	1640	.	.	2140	.	.	1060	.	.	2120	.	.	1740	4
BECY-4	11700	.	.	1570	.	.	270	.	.	557	.	.	3524	4
BECY-5	.	.	.	2690	.	.	389	.	.	1500	.	.	1526	3
BECY-6	1540	.	.	791	.	.	477	.	.	880	.	.	922	4
BECY-7	365	.	.	556	.	.	267	.	.	383	.	.	393	4
BECY-8	403	.	.	716	.	.	729	.	.	388	.	.	559	4
BECY-9	339	.	.	685	.	.	172	.	.	1380	.	.	644	4
BECY-10	2630	.	.	1510	.	.	857	.	.	1980	.	.	1744	4
BECY-11	2790	.	.	5290	.	.	29000	.	.	2540	.	.	9905	4
BECY-12	1630	.	.	2170	.	.	989	.	.	1150	.	.	1485	4
BECY-13	1120	.	.	207	.	.	6560	.	.	541	.	.	2107	4
BECY-14	1000	.	.	1060	.	.	534	.	.	788	.	.	846	4

Table 13
Year 1 Data Summary - Lead (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	9.42	.	.	2.5	.	.	.	2.5	.	.	.	.	4.81	3
BECY-1a Grab	12.30	.	.	2.5	.	.	.	2.5	.	.	.	.	5.77	3
BECY-2a Comp	10.70	.	.	.	.	.	.	.	.	.	.	.	10.70	1
BECY-2a Grab	13.10	.	.	.	.	.	.	.	.	.	.	.	13.10	1
BECY-3a Comp	2.50	.	.	.	.	.	.	.	.	.	.	.	2.50	1
BECY-3a Grab	2.50	.	.	.	.	.	.	.	.	.	.	.	2.50	1
BECY-4a Comp	6.56	.	.	4.14	.	.	7.4	.	.	.	.	.	6.03	3
BECY-4a Grab	8.86	.	.	5.09	.	.	5.94	.	.	.	.	.	6.63	3
BECY-5A Comp	.	.	.	.	.	.	2.5	.	.	.	.	.	2.50	1
BECY-5A Grab	.	.	.	.	.	.	2.5	.	.	.	.	.	2.50	1
BECY-6A Comp	.	.	.	.	.	.	.	2.5	.	.	.	.	2.50	1
BECY-6A Grab	.	.	.	.	.	.	.	2.5	.	.	.	.	2.50	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-2	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-3	2.50	.	.	12.5	.	.	2.5	.	.	2.5	.	.	5.00	4
BECY-4	4.92	.	.	12.5	.	.	12.5	.	.	2.5	.	.	8.11	4
BECY-5	.	.	.	12.5	.	.	12.5	.	.	2.5	.	.	9.17	3
BECY-6	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-7	2.50	.	.	12.5	.	.	12.5	.	.	2.5	.	.	7.50	4
BECY-8	2.50	.	.	2.5	.	.	12.5	.	.	2.5	.	.	5.00	4
BECY-9	2.50	.	.	2.5	.	.	12.5	.	.	2.5	.	.	5.00	4
BECY-10	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-11	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-12	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-13	2.50	.	.	2.5	.	.	2.5	.	.	2.5	.	.	2.50	4
BECY-14	2.50	.	.	50	.	.	12.5	.	.	2.5	.	.	16.88	4

Table 14
Year 1 Data Summary - Manganese (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	106	.	.	24	.	.	.	63	.		.	.	64	3
BECY-1a Grab	108	.	.	25	.	.	.	61	.		.	.	65	3
BECY-2a Comp	26	.	.	.	.	.	.	.	.		.	.	26	1
BECY-2a Grab	28	.	.	.	.	.	.	.	.		.	.	28	1
BECY-3a Comp	50	.	.	.	.	.	.	.	.		.	.	50	1
BECY-3a Grab	45	.	.	.	.	.	.	.	.		.	.	45	1
BECY-4a Comp	14	.	.	9	.	.	27	.	.		.	.	16	3
BECY-4a Grab	13	.	.	6	.	.	17	.	.		.	.	12	3
BECY-5A Comp	.	.	.	.	.	.	173	.	.		.	.	173	1
BECY-5A Grab	.	.	.	.	.	.	212	.	.		.	.	212	1
BECY-6A Comp	.	.	.	.	.	.	.	95	.		.	.	95	1
BECY-6A Grab	.	.	.	.	.	.	.	97	.		.	.	97	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.		.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.		.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.		.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.		.	.	.	.
BECY-1	226	.	.	270	.	.	351	.	.	103	.	.	238	4
BECY-2	71	.	.	130	.	.	188	.	.	66	.	.	114	4
BECY-3	99	.	.	157	.	.	187	.	.	59	.	.	125	4
BECY-4	458	.	.	64	.	.	17	.	.	62	.	.	150	4
BECY-5	.	.	.	58	.	.	16	.	.	63	.	.	46	3
BECY-6	196	.	.	400	.	.	145	.	.	101	.	.	211	4
BECY-7	247	.	.	132	.	.	101	.	.	108	.	.	147	4
BECY-8	111	.	.	308	.	.	68	.	.	125	.	.	153	4
BECY-9	152	.	.	128	.	.	79	.	.	98	.	.	114	4
BECY-10	64	.	.	30	.	.	14	.	.	62	.	.	42	4
BECY-11	309	.	.	561	.	.	905	.	.	172	.	.	487	4
BECY-12	445	.	.	252	.	.	360	.	.	130	.	.	297	4
BECY-13	26	.	.	17	.	.	105	.	.	23	.	.	43	4
BECY-14	220	.	.	198	.	.	93	.	.	135	.	.	161	4

Table 15
Year 1 Data Summary - Mercury (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	0.60	.	.	0.03	.	.	.	0.03	.	.	.	.	0.22	3
BECY-1a Grab	0.60	.	.	0.03	.	.	.	0.04	.	.	.	.	0.22	3
BECY-2a Comp	0.60	.	.	.	.	.	.	.	.	.	.	.	0.60	1
BECY-2a Grab	0.60	.	.	.	.	.	.	.	.	.	.	.	0.60	1
BECY-3a Comp	0.06	.	.	.	.	.	.	.	.	.	.	.	0.06	1
BECY-3a Grab	0.06	.	.	.	.	.	.	.	.	.	.	.	0.06	1
BECY-4a Comp	0.60	.	.	0.03	.	.	0.03	.	.	.	.	.	0.22	3
BECY-4a Grab	0.60	.	.	0.03	.	.	0.03	.	.	.	.	.	0.22	3
BECY-5A Comp	.	.	.	.	.	.	0.03	.	.	.	.	.	0.03	1
BECY-5A Grab	.	.	.	.	.	.	0.03	.	.	.	.	.	0.03	1
BECY-6A Comp	.	.	.	.	.	.	.	0.0411	.	.	.	.	0.04	1
BECY-6A Grab	.	.	.	.	.	.	.	0.0505	.	.	.	.	0.05	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-2	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-3	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-4	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-5	.	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.03	3
BECY-6	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-7	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-8	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-9	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-10	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-11	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-12	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-13	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4
BECY-14	0.06	.	.	0.03	.	.	0.03	.	.	0.03	.	.	0.04	4

Table 16
Year 1 Data Summary - Nickel (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	1.00	.	.	1.00	.	.	.	2.18	.	.	.	.	1.39	3
BECY-1a Grab	1.00	.	.	1.00	.	.	.	1.92	.	.	.	.	1.31	3
BECY-2a Comp	1.00	.	.	.	.	.	.	.	.	.	.	.	1.00	1
BECY-2a Grab	1.00	.	.	.	.	.	.	.	.	.	.	.	1.00	1
BECY-3a Comp	1.00	.	.	.	.	.	.	.	.	.	.	.	1.00	1
BECY-3a Grab	1.00	.	.	.	.	.	.	.	.	.	.	.	1.00	1
BECY-4a Comp	1.64	.	.	1.00	.	.	2.15	.	.	.	.	.	1.60	3
BECY-4a Grab	1.38	.	.	1.00	.	.	2.35	.	.	.	.	.	1.58	3
BECY-5A Comp	.	.	.	.	.	.	1	.	.	.	.	.	1.00	1
BECY-5A Grab	.	.	.	.	.	.	1	.	.	.	.	.	1.00	1
BECY-6A Comp	.	.	.	.	.	.	.	2.21	.	.	.	.	2.21	1
BECY-6A Grab	.	.	.	.	.	.	.	3.79	.	.	.	.	3.79	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	1.00	.	.	4.01	.	.	1	.	.	1	.	.	1.75	4
BECY-2	1.00	.	.	1.31	.	.	1	.	.	1.09	.	.	1.10	4
BECY-3	1.00	.	.	5	.	.	1	.	.	1.5	.	.	2.13	4
BECY-4	1.00	.	.	5	.	.	1	.	.	2.35	.	.	2.34	4
BECY-5	.	.	.	5.2	.	.	1	.	.	2.64	.	.	2.95	3
BECY-6	1.00	.	.	2.27	.	.	1	.	.	2.51	.	.	1.70	4
BECY-7	1.00	.	.	5.04	.	.	1	.	.	1.8	.	.	2.21	4
BECY-8	1.00	.	.	2.23	.	.	1.29	.	.	2.04	.	.	1.64	4
BECY-9	1.00	.	.	2.35	.	.	1	.	.	1.68	.	.	1.51	4
BECY-10	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-11	1.00	.	.	1.29	.	.	1	.	.	1.35	.	.	1.16	4
BECY-12	1.00	.	.	1.93	.	.	1	.	.	1.24	.	.	1.29	4
BECY-13	1.00	.	.	1	.	.	1	.	.	1	.	.	1.00	4
BECY-14	20.00	.	.	20	.	.	1	.	.	3.49	.	.	11.12	4

Table 17
Year 1 Data Summary - Nitrate-Nitrite (NOX)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	0.14	0.01	0.05	0.05	0.01	0.06	.	0.10	0.07	0.05	0.09	0.11	0.07	11
BECY-1a Grab	0.15	0.05	0.05	0.05	0.02	0.05	.	0.05	0.05	0.05	0.07	0.14	0.07	11
BECY-2a Comp	0.10	1.16	1.03	.	.	.	.	.	.	.	.	.	0.76	3
BECY-2a Grab	0.05	0.93	1.02	.	.	.	.	.	.	.	.	.	0.67	3
BECY-3a Comp	0.07	.	.	.	.	.	.	.	.	.	.	.	0.07	1
BECY-3a Grab	0.05	.	.	.	.	.	.	.	.	.	.	.	0.05	1
BECY-4a Comp	0.03	0.16	1.11	0.02	0.36	0.14	0.67	0.20	0.72	0.12	0.05	0.59	0.35	12
BECY-4a Grab	0.01	0.40	1.28	0.01	0.17	0.18	0.56	0.06	0.08	0.20	0.05	1.11	0.34	12
BECY-5A Comp	.	.	.	.	.	.	0.14	0.01	.	.	.	.	0.08	2
BECY-5A Grab	.	.	.	.	.	.	0.18	0.01	.	.	.	.	0.10	2
BECY-6A Comp	.	.	.	.	.	.	.	0.16	.	.	.	.	0.16	1
BECY-6A Grab	.	.	.	.	.	.	.	0.17	.	.	.	.	0.17	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	0.05	0.14	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	0.05	0.11	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	0.09	0.17	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	0.08	0.18	.	2
BECY-1	0.05	0.01	0.05	0.05	0.01	0.05	0.17	0.01	0.10	0.11	0.05	0.17	0.07	12
BECY-2	0.05	0.06	0.05	0.05	0.01	0.10	0.05	0.10	0.13	0.13	0.05	0.07	0.07	12
BECY-3	0.05	0.01	0.12	0.10	0.05	0.10	0.17	0.20	0.13	0.12	0.09	0.09	0.10	12
BECY-4	0.05	0.12	0.05	0.10	0.06	0.10	0.05	0.20	0.10	0.07	0.05	.	0.09	11
BECY-5	.	0.18	0.11	0.10	0.10	0.10	0.29	0.41	0.28	0.05	0.05	0.11	0.16	11
BECY-6	0.05	0.05	0.09	0.10	0.09	1.27	0.57	0.66	0.39	0.51	0.50	0.30	0.38	12
BECY-7	0.10	0.05	0.05	0.10	0.10	0.10	0.05	0.01	0.26	0.06	0.05	0.10	0.09	12
BECY-8	0.10	0.05	0.05	0.10	0.16	0.05	0.05	0.07	0.13	0.07	0.08	0.23	0.09	12
BECY-9	0.13	0.01	0.05	0.10	0.07	0.10	0.26	0.03	0.11	0.09	0.05	0.09	0.09	12
BECY-10	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.04	0.12	0.10	0.05	0.10	0.06	12
BECY-11	0.05	0.09	0.05	0.05	0.18	0.20	0.05	0.01	0.05	0.15	0.05	0.08	0.08	12
BECY-12	0.05	0.01	0.05	0.05	0.03	0.05	0.05	0.10	0.10	0.13	0.05	0.11	0.06	12
BECY-13	0.82	1.15	1.14	0.29	1.40	1.87	2.74	1.26	1.59	1.90	1.74	1.77	1.47	12
BECY-14	0.19	0.10	0.09	0.10	0.07	0.16	0.05	0.10	0.10	0.05	0.05	0.10	0.10	12

Table 18
Year 1 Data Summary - pH*

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1a Grab	6.79	7.1	6.87	7.09	7.02	.	.	.	.	.	.	.	6.97	5
BECY-2a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Grab	6.91	6.97	.	.	.	.	.	.	.	.	.	.	6.94	2
BECY-3a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Grab	.	.	.	6.79	6.92	.	.	.	.	.	.	.	6.86	2
BECY-5A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	6.71	6.87	7.21	7.47	7.62	7.9	7.49	8.49	8.71	7.42	7.25	7.85	7.58	12
BECY-2	7.26	7.12	7.07	7.35	7.03	7.26	7.37	7.39	7.45	7.32	7.2	7.39	7.27	12
BECY-3	7.38	7.23	7.47	7.47	7.49	7.59	7.48	7.72	7.52	7.4	7.43	7.38	7.46	12
BECY-4	7.14	7.22	7.29	7.55	7.46	7.65	7.54	7.59	7.57	7.07	7.41	.	7.41	11
BECY-5	.	7.27	7.44	7.51	7.6	7.57	7.55	7.51	7.23	7.03	7.17	7.12	7.36	11
BECY-6	7.06	6.84	7.37	7.35	7.49	7.42	7.49	7.19	7.29	6.94	7.01	7.29	7.23	12
BECY-7	7.04	6.67	7.14	7.34	7.5	7.21	7.57	7.11	7.23	6.86	7.11	7.06	7.15	12
BECY-8	6.8	6.62	6.86	7.05	7.27	6.91	6.98	6.72	7.38	6.63	6.66	7.57	6.95	12
BECY-9	7.02	6.96	7.02	7.33	7.46	7.04	7.45	7.13	7.39	9.82	7.41	6.39	7.37	12
BECY-10	6.42	6.95	7.22	7.08	7.31	7.41	7.13	7.12	7.39	6.72	6.92	8.07	7.15	12
BECY-11	7.23	6.78	7.1	6.84	7.18	7.49	7.16	7.21	7.61	6.75	7.17	8.95	7.29	12
BECY-12	6.56	6.84	7.2	6.67	7.4	7.08	7.11	7.47	7.8	6.81	6.68	7	7.05	12
BECY-13	8.07	7.38	7.73	7.37	7.58	7.51	7.93	7.86	7.5	7.35	8.19	8.68	7.76	12
BECY-14	7.06	7.23	7.13	7.04	7.18	6.94	7.13	6.57	6.63	6.91	6.77	6.74	6.94	12

* pH is internally tracked for Critical Exceedance Concentration information

Table 19
Year 1 Data Summary - Phosphorus* (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	0.28	0.51	0.13	0.26	0.58	0.28	.	0.33	0.56	0.40	0.26	0.35	0.36	11
BECY-1a Grab	0.17	0.30	0.13	0.35	0.61	0.37	.	0.27	0.46	0.44	0.24	0.45	0.34	11
BECY-2a Comp	0.86	0.59	0.41	.	.	.	.	.	.	.	.	.	0.62	3
BECY-2a Grab	0.48	0.52	0.57	.	.	.	.	.	.	.	.	.	0.52	3
BECY-3a Comp	0.11	.	.	.	.	.	.	.	.	.	.	.	0.11	1
BECY-3a Grab	0.11	.	.	.	.	.	.	.	.	.	.	.	0.11	1
BECY-4a Comp	0.20	0.21	0.15	0.09	0.20	0.25	0.23	0.07	0.49	0.07	0.04	0.14	0.18	12
BECY-4a Grab	0.20	0.22	0.18	0.13	0.24	0.16	0.26	0.04	0.09	0.05	0.04	0.39	0.17	12
BECY-5A Comp		.	.	.	.	.	0.54	0.14	.	.	.	.	0.34	2
BECY-5A Grab		.	.	.	.	.	0.54	0.11	.	.	.	.	0.33	2
BECY-6A Comp		.	.	.	.	.	.	0.16	.	.	.	.	0.16	1
BECY-6A Grab		.	.	.	.	.	.	0.18	.	.	.	.	0.18	1
BMPep - IN COMP		.	.	.	.	.	.	.	.	.	0.14	0.29	.	2
BMPep - IN GRAB		.	.	.	.	.	.	.	.	.	0.12	0.28	.	2
BMPep - OUT COMP		.	.	.	.	.	.	.	.	.	0.21	0.10	.	2
BMPep - OUT GRAB		.	.	.	.	.	.	.	.	.	0.26	0.11	.	2
BECY-1	0.26	0.41	0.14	0.29	0.09	0.19	0.48	0.13	0.27	0.20	1.03	0.38	0.32	12
BECY-2	0.26	0.16	0.22	0.39	0.16	0.13	0.32	0.16	0.62	0.05	1.09	0.36	0.33	12
BECY-3	0.24	0.23	0.26	0.11	0.05	0.17	0.31	0.18	0.62	0.15	1.04	0.29	0.30	12
BECY-4	0.51	0.08	0.17	0.10	0.03	0.11	0.43	0.17	0.72	0.27	1.08	.	0.33	11
BECY-5	.	0.14	0.10	0.15	0.06	0.11	0.58	0.18	0.89	0.29	0.94	0.29	0.34	11
BECY-6	1.22	1.17	3.16	0.34	0.08	0.53	0.53	0.34	0.45	0.26	0.58	0.53	0.77	12
BECY-7	0.12	1.24	1.43	0.11	0.06	0.33	0.41	0.11	0.20	0.17	0.46	0.30	0.41	12
BECY-8	0.16	0.29	0.33	0.17	0.11	0.27	0.28	0.15	0.19	0.27	0.13	0.06	0.20	12
BECY-9	0.21	0.37	0.53	0.14	0.09	0.64	0.39	0.14	0.19	0.25	1.06	0.41	0.37	12
BECY-10	0.19	0.75	0.26	0.12	0.06	0.05	0.09	0.06	0.19	0.12	0.07	0.12	0.17	12
BECY-11	0.09	0.06	0.03	0.09	0.04	0.03	0.29	0.02	0.11	0.11	0.16	0.03	0.09	12
BECY-12	0.35	0.42	0.60	0.35	0.46	0.71	0.52	0.09	0.16	0.09	0.92	0.45	0.43	12
BECY-13	0.09	0.08	0.05	0.04	0.02	0.94	0.16	0.03	0.04	0.04	0.30	0.02	0.15	12
BECY-14	0.20	0.17	0.29	0.11	0.06	0.97	0.45	0.23	0.86	0.28	0.85	0.30	0.40	12

* Total Phosphorus is internally tracked for Critical Exceedance Concentration information

Table 20
Year 1 Data Summary - Salinity

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	21.6	7.7	6.4	3.7	2.8	11.0	.	14.5	11.4	10.8	6.4	8.9	9.6	11
BECY-1a Grab	23.8	7.7	6.4	3.7	2.9	10.2	.	14.5	11.2	10.7	5.4	8.6	9.6	11
BECY-2a Comp	20.1	24.4	13.8	.	.	.	.	.	.	.	.	.	19.4	3
BECY-2a Grab	20.4	24.0	.	.	.	.	.	.	.	.	.	.	22.2	2
BECY-3a Comp	1.0	.	.	.	.	.	.	.	.	.	.	.	1.0	1
BECY-3a Grab	1.0	.	.	.	.	.	.	.	.	.	.	.	1.0	1
BECY-4a Comp	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
BECY-4a Grab	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
BECY-5A Comp	.	.	.	.	.	.	1.0	1.0	.	.	.	.	1.0	2
BECY-5A Grab	.	.	.	.	.	.	1.0	1.0	.	.	.	.	1.0	2
BECY-6A Comp	.	.	.	.	.	.	.	19.1	.	.	.	.	19.1	1
BECY-6A Grab	.	.	.	.	.	.	.	20.2	.	.	.	.	20.2	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	1.0	1.0	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	1.0	1.0	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	1.0	1.0	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	1.0	1.0	.	2
BECY-1	1.8	2.2	1.0	1.0	1.0	1.0	7.2	1.0	1.0	1.0	22.5	12.2	4.4	12
BECY-2	1.0	17.8	1.2	5.2	1.0	28.3	11.2	16.4	16.9	1.0	31.6	26.7	13.2	12
BECY-3	1.0	5.6	1.5	26.2	17.5	30.2	21.9	23.5	15.0	1.0	30.2	32.2	17.2	12
BECY-4	21.7	27.5	25.6	30.1	27.2	32.5	33.4	29.5	30.2	23.9	30.5	.	28.4	11
BECY-5	.	30.8	29.5	30.6	29.8	33.3	32.1	31.8	31.6	24.3	31.2	32.6	30.7	11
BECY-6	11.9	7.3	6.0	24.3	32.7	19.6	27.7	11.3	1.0	14.2	11.7	24.6	16.0	12
BECY-7	31.7	21.2	15.3	31.7	33.1	34.4	35.6	5.5	1.2	19.0	7.5	34.3	22.5	12
BECY-8	30.1	2.5	4.9	30.5	30.8	21.2	35.2	4.1	1.0	24.2	5.8	1.0	15.9	12
BECY-9	31.0	2.0	5.5	25.9	26.2	19.9	33.5	2.5	1.0	9.6	4.0	28.4	15.8	12
BECY-10	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
BECY-11	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
BECY-12	24.2	3.0	4.1	4.4	4.3	16.1	15.5	1.0	1.0	1.0	1.2	26.7	8.5	12
BECY-13	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
BECY-14	31.2	28.1	23.9	28.8	29.6	33.2	33.6	30.1	28.7	24.0	29.0	30.8	29.3	12

Table 21
Year 1 Data Summary - Temperature

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1a Grab	23.7	32.9	29.9	19.7	19.2	.	.	.	.	.	.	.	25.1	5
BECY-2a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Grab	23.6	33.6	31.0	.	.	.	.	.	.	.	.	.	29.4	3
BECY-3a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Grab	.	.	.	18.9	18.7	.	.	.	.	.	.	.	18.8	2
BECY-5A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	23.6	32.5	32.8	29.1	23.4	18.6	18.1	8.5	16.0	17.2	19.5	25.7	22.1	12
BECY-2	26.6	32.4	34.1	30.4	25.4	18.3	18.3	9.5	16.8	19.7	22.2	25.7	23.3	12
BECY-3	23.9	34.3	34.1	30.2	24.3	28.0	18.9	9.5	17.1	16.8	21.4	25.7	23.7	12
BECY-4	21.6	32.1	36.1	31.6	27.1	19.6	19.4	10.6	17.2	18.7	21.8	.	23.3	11
BECY-5	.	32.3	33.6	31.0	26.6	18.5	21.0	11.0	17.2	18.2	21.3	26.5	23.4	11
BECY-6	22.3	28.5	30.3	27.0	22.6	16.8	17.1	8.0	15.5	15.1	17.7	22.7	20.3	12
BECY-7	24.9	28.6	32.4	27.7	22.8	17.3	18.4	6.6	16.5	15.1	16.5	21.9	20.7	12
BECY-8	24.4	28.8	29.3	27.1	20.9	14.5	15.4	7.2	15.9	15.0	18.5	22.8	20.0	12
BECY-9	24.8	28.7	29.0	26.9	21.9	15.1	15.8	7.4	15.6	14.5	16.3	22.5	19.9	12
BECY-10	23.7	27.1	27.9	25.3	20.1	14.0	14.2	7.4	14.3	14.5	16.3	21.9	18.9	12
BECY-11	22.6	25.3	27.0	24.3	18.4	13.9	13.8	6.3	15.7	13.7	15.0	20.8	18.1	12
BECY-12	23.6	27.4	29.0	25.4	18.1	14.0	13.3	5.8	15.1	13.6	15.6	21.6	18.5	12
BECY-13	26.0	23.2	29.2	25.9	23.1	22.0	19.8	12.3	17.2	17.2	17.6	20.0	21.1	12
BECY-14	27.1	34.0	24.2	29.9	24.5	17.5	19.2	9.5	16.3	17.2	20.5	24.9	22.1	12

Table 22
Year 1 Data Summary - Total Kjeldahl Nitrogen (TKN)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	0.85	1.79	0.80	0.87	1.88	0.88	.	1.20	1.33	1.15	1.59	0.21	1.14	11
BECY-1a Grab	0.97	1.22	0.84	1.16	2.04	1.16	.	0.50	0.89	1.14	1.38	0.28	1.05	11
BECY-2a Comp	0.95	2.04	1.02	.	.	.	.	.	.	.	.	.	1.34	3
BECY-2a Grab	0.44	2.24	1.38	.	.	.	.	.	.	.	.	.	1.35	3
BECY-3a Comp	1.09	.	.	.	.	.	.	.	.	.	.	.	1.09	1
BECY-3a Grab	0.97	.	.	.	.	.	.	.	.	.	.	.	0.97	1
BECY-4a Comp	1.30	0.73	1.31	0.46	0.98	0.88	1.14	0.55	1.78	0.23	0.29	0.91	0.88	12
BECY-4a Grab	1.37	0.76	1.49	0.47	1.25	0.70	1.32	0.48	0.31	0.30	0.28	3.05	0.98	12
BECY-5A Comp	.	.	.	.	.	.	0.52	0.87	.	.	.	.	0.70	2
BECY-5A Grab	.	.	.	.	.	.	0.46	0.72	.	.	.	.	0.59	2
BECY-6A Comp	.	.	.	.	.	.	.	0.15	.	.	.	.	0.15	1
BECY-6A Grab	.	.	.	.	.	.	.	0.15	.	.	.	.	0.15	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	1.16	1.95	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	1.06	2.41	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	0.90	0.93	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	0.91	1.34	.	2
BECY-1	0.82	1.11	0.86	0.45	0.91	0.42	0.61	0.68	0.81	0.81	0.15	0.05	0.64	12
BECY-2	1.07	0.75	0.87	0.57	1.00	0.46	0.37	0.18	0.29	0.67	0.50	0.21	0.58	12
BECY-3	1.06	1.80	1.34	0.20	0.52	0.29	0.53	0.21	0.29	0.99	0.15	0.31	0.64	12
BECY-4	1.86	1.05	0.63	0.22	0.29	0.41	0.12	0.17	0.15	0.96	0.15	.	0.54	11
BECY-5	.	1.09	0.30	0.31	0.14	0.29	0.26	0.17	0.15	0.10	0.15	0.33	0.30	11
BECY-6	1.94	2.59	5.89	0.90	0.51	1.79	1.06	2.44	1.34	0.35	0.69	0.28	1.65	12
BECY-7	0.52	4.52	4.87	0.32	0.19	0.79	0.28	0.48	0.55	0.33	0.09	0.38	1.11	12
BECY-8	0.46	0.88	1.04	0.51	0.42	0.82	0.36	0.61	0.39	0.14	0.82	0.37	0.57	12
BECY-9	0.67	0.76	0.88	0.30	0.35	1.27	0.27	0.42	0.35	0.42	1.00	0.17	0.57	12
BECY-10	0.33	0.37	0.43	0.71	0.57	0.28	0.22	0.31	0.29	0.38	0.42	0.23	0.38	12
BECY-11	0.69	0.28	0.31	1.43	0.38	0.03	0.97	0.20	0.37	0.77	0.65	0.38	0.54	12
BECY-12	1.43	1.64	2.07	1.80	1.44	1.68	0.52	0.55	0.83	0.69	0.19	0.34	1.10	12
BECY-13	0.28	0.30	0.27	0.35	0.32	2.91	1.08	0.38	0.30	0.35	0.54	0.34	0.62	12
BECY-14	0.84	0.63	1.11	0.35	0.23	0.46	0.49	0.28	0.15	0.15	0.15	0.20	0.42	12

Table 23
Year 1 Data Summary - Total Organic Carbon (TOC)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	2.1	10.3	.	.	.	.	.	3.5	.	.	.	.	5.3	3
BECY-1a Grab	2.2	10.4	.	.	.	.	.	3.6	.	.	.	.	5.4	3
BECY-2a Comp	2.5	.	.	.	.	.	.	.	.	.	.	.	2.5	1
BECY-2a Grab	2.6	.	.	.	.	.	.	.	.	.	.	.	2.6	1
BECY-3a Comp	15.2	.	.	.	.	.	.	.	.	.	.	.	15.2	1
BECY-3a Grab	14.9	.	.	.	.	.	.	.	.	.	.	.	14.9	1
BECY-4a Comp	23.9	7.8	.	.	.	.	25.8	.	.	.	.	.	19.2	3
BECY-4a Grab	23.0	6.3	.	.	.	.	25.8	.	.	.	.	.	18.4	3
BECY-5A Comp	.	.	.	.	.	.	10.2	.	.	.	.	.	10.2	1
BECY-5A Grab	.	.	.	.	.	.	9.4	.	.	.	.	.	9.4	1
BECY-6A Comp	.	.	.	.	.	.	.	2.0	.	.	.	.	2.0	1
BECY-6A Grab	.	.	.	.	.	.	.	2.0	.	.	.	.	2.0	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1	14.4	.	.	7.2	.	.	3.0	.	.	24.9	.	.	12.4	0
BECY-2	25.2	.	.	6.2	.	.	2.9	.	.	12.9	.	.	11.8	0
BECY-3	17.9	.	.	2.7	.	.	2.4	.	.	19.6	.	.	10.6	0
BECY-4	1.5	.	.	1.9	.	.	1.1	.	.	1.9	.	.	1.6	0
BECY-5	.	.	.	2.2	.	.	1.3	.	.	1.8	.	.	1.7	0
BECY-6	14.0	.	.	4.7	.	.	2.2	.	.	3.9	.	.	6.2	0
BECY-7	1.8	.	.	2.2	.	.	1.4	.	.	2.8	.	.	2.1	0
BECY-8	2.1	.	.	2.8	.	.	1.2	.	.	2.5	.	.	2.1	0
BECY-9	1.7	.	.	2.9	.	.	1.3	.	.	3.7	.	.	2.4	0
BECY-10	7.8	.	.	7.6	.	.	5.8	.	.	9.3	.	.	7.6	0
BECY-11	10.7	.	.	17.9	.	.	22.3	.	.	20.3	.	.	17.8	0
BECY-12	6.6	.	.	21.2	.	.	3.6	.	.	16.5	.	.	12.0	0
BECY-13	7.4	.	.	6.1	.	.	11.2	.	.	5.0	.	.	7.4	0
BECY-14	2.6	.	.	3.0	.	.	1.9	.	.	2.9	.	.	2.6	0

Table 24
Year 1 Data Summary - Total Suspended Solids (TSS)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	29.7	38.0	11.2	21.2	77.6	93.7	.	27.4	44.6	19.5	22.2	17.8	36.6	11
BECY-1a Grab	56.5	67.1	16.0	14.1	19.7	19.6	.	24.8	32.5	17.8	28.2	15.8	28.4	11
BECY-2a Comp	232.0	128.0	1.6	.	.	.	.	.	.	.	.	.	120.5	3
BECY-2a Grab	160.0	106.0	2.8	.	.	.	.	.	.	.	.	.	89.6	3
BECY-3a Comp	16.0	.	.	.	.	.	.	.	.	.	.	.	16.0	1
BECY-3a Grab	7.0	.	.	.	.	.	.	.	.	.	.	.	7.0	1
BECY-4a Comp	18.5	15.2	15.0	19.1	33.0	18.8	7.2	17.6	14.1	7.4	7.6	16.4	15.8	12
BECY-4a Grab	18.0	6.9	16.3	24.9	16.8	49.3	11.3	11.6	12.6	4.8	2.7	14.2	15.8	12
BECY-5A Comp	.	.	.	.	.	.	7.6	29.6	.	.	.	.	18.6	2
BECY-5A Grab	.	.	.	.	.	.	22.6	17.4	.	.	.	.	20.0	2
BECY-6A Comp	.	.	.	.	.	.	.	57.0	.	.	.	.	57.0	1
BECY-6A Grab	.	.	.	.	.	.	.	34.6	.	.	.	.	34.6	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	11.6	4.0	.	2
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	14.4	4.2	.	2
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	5.4	9.0	.	2
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	4.2	12.4	.	2
BECY-1	34.5	111.0	15.1	24.1	15.3	19.0	59.5	17.2	13.6	14.2	19.0	68.4	34.2	12
BECY-2	66.0	29.1	36.5	64.3	19.2	16.6	26.4	10.6	14.9	13.5	24.4	41.0	30.2	12
BECY-3	38.8	50.0	53.6	97.0	21.2	43.8	55.6	19.8	24.8	25.6	32.6	35.7	41.5	12
BECY-4	588.0	35.5	133.0	81.0	19.1	16.2	19.9	11.1	13.2	26.1	20.2	.	87.6	11
BECY-5	.	36.7	41.8	218.0	24.2	24.6	18.8	13.0	13.4	45.2	23.2	51.2	46.4	11
BECY-6	23.0	24.4	16.8	22.4	18.9	16.4	16.4	5.8	8.8	12.6	9.8	15.9	15.9	12
BECY-7	33.6	120.0	318.0	29.2	15.5	27.4	16.2	4.7	19.4	9.4	14.5	31.9	53.3	12
BECY-8	32.3	8.4	8.5	45.2	26.5	17.8	44.6	8.4	6.7	12.5	4.1	3.3	18.2	12
BECY-9	27.3	12.4	18.6	44.4	20.8	16.2	13.2	3.1	7.0	10.9	12.6	23.0	17.5	12
BECY-10	8.5	6.7	9.2	22.4	5.7	2.4	2.1	2.9	5.8	4.5	6.5	10.1	7.2	12
BECY-11	12.0	3.8	3.7	5.0	2.4	4.0	77.0	0.6	4.0	3.6	5.0	3.9	10.4	12
BECY-12	85.0	40.7	95.2	26.0	51.5	56.0	23.8	5.1	15.0	5.4	15.6	63.2	40.2	12
BECY-13	24.8	5.6	7.2	1.1	1.2	8.8	61.0	1.4	1.3	3.7	91.5	14.6	18.5	12
BECY-14	70.4	138.0	58.1	37.4	35.3	32.0	42.2	11.9	19.6	38.4	37.3	21.5	45.2	12

Table 25
Year 1 Data Summary - Turbidity

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-2a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-3a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-4a Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-5A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Comp	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-6A Grab	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	0
BECY-1	49.9	90.0	34.0	30.0	19.0	18.0	9.6	7.2	10.9	16.8	12.7	8.6	25.6	12
BECY-2	75.0	39.2	47.0	47.0	24.0	1.0	9.4	6.3	6.6	9.8	15.4	7.2	24.0	12
BECY-3	42.9	61.7	65.0	28.0	23.0	12.0	7.3	7.5	8.1	14.8	11.7	6.2	24.0	12
BECY-4	.	60.2	23.0	24.0	27.0	4.0	5.7	6.1	4.5	11.5	10.6	.	17.7	10
BECY-5	.	32.5	12.0	53.0	37.0	11.0	4.9	5.9	4.5	13.9	7.9	7.4	17.3	11
BECY-6	28.9	81.2	79.0	21.0	13.0	12.0	5.7	6.4	24.1	11.5	11.1	6.3	25.0	12
BECY-7	22.3	94.6	317.0	14.0	11.0	18.0	5.6	5.8	10.2	3.2	10.9	12.2	43.7	12
BECY-8	20.0	37.3	19.0	16.0	17.0	12.0	8.8	6.8	6.0	5.1	9.5	7.2	13.7	12
BECY-9	17.9	83.8	37.0	4.0	7.0	14.0	5.4	6.1	6.4	4.2	23.1	8.3	18.1	12
BECY-10	57.2	87.2	27.0	15.0	12.0	6.0	6.0	5.4	5.1	4.7	12.2	9.6	20.6	12
BECY-11	83.6	55.9	21.0	22.0	18.0	8.0	9.5	5.3	5.2	6.7	17.0	11.9	22.0	12
BECY-12	63.1	116.3	198.0	49.0	42.0	89.0	8.7	9.3	8.2	4.0	22.7	12.3	51.9	12
BECY-13	42.8	248.1	13.0	5.0	5.0	7.0	21.1	5.9	3.9	3.9	14.9	22.6	32.8	12
BECY-14	77.5	94.4	34.0	6.0	5.0	9.0	8.0	26.6	5.1	12.3	8.2	11.2	24.8	12

Table 26
Year 1 Data Summary - Zinc (Total)

Sampling Station	Jun-07 6/13/2007	Jul-07 7/10/2007	Aug-07 8/23/2007	Sep-07 9/12/2007	Oct-07 10/20/2007	Nov-07 11/3/2007	Dec-07 12/16/2007	Jan-08 1/16/2008	Feb-08 2/18/2008	Mar-08 2/26/2008	Apr-08 4/3/2008	May-08 5/21/2008	Average	# of Samples
BECY-1a Comp	61.5	.	.	3.7	.	.	.	2.0	.	.	.	.	22.4	3
BECY-1a Grab	59.9	.	.	8.0	.	.	.	2.0	.	.	.	.	23.3	3
BECY-2a Comp	91.5	.	.	.	.	.	.	.	.	.	.	.	91.5	1
BECY-2a Grab	103.0	.	.	.	.	.	.	.	.	.	.	.	103.0	1
BECY-3a Comp	24.7	.	.	.	.	.	.	.	.	.	.	.	24.7	1
BECY-3a Grab	28.0	.	.	.	.	.	.	.	.	.	.	.	28.0	1
BECY-4a Comp	101.0	.	.	13.6	.	.	41.1	.	.	.	.	.	51.9	3
BECY-4a Grab	90.9	.	.	13.2	.	.	30.5	.	.	.	.	.	44.9	3
BECY-5A Comp	.	.	.	.	.	.	8.0	.	.	.	.	.	8.0	1
BECY-5A Grab	.	.	.	.	.	.	14.7	.	.	.	.	.	14.7	1
BECY-6A Comp	.	.	.	.	.	.	.	10.0	.	.	.	.	10.0	1
BECY-6A Grab	.	.	.	.	.	.	.	26.0	.	.	.	.	26.0	1
BMPep - IN COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - IN GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT COMP	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BMPep - OUT GRAB	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BECY-1	9.3	.	.	10.9	.	.	2.6	.	.	4.9	.	.	6.9	4
BECY-2	7.6	.	.	20.0	.	.	2.0	.	.	3.7	.	.	8.3	4
BECY-3	6.6	.	.	40.0	.	.	10.0	.	.	5.0	.	.	15.4	4
BECY-4	99.9	.	.	40.0	.	.	10.0	.	.	10.0	.	.	40.0	4
BECY-5	.	.	.	40.0	.	.	10.0	.	.	10.0	.	.	20.0	3
BECY-6	2.0	.	.	400.0	.	.	10.0	.	.	2.0	.	.	103.5	4
BECY-7	40.0	.	.	100.0	.	.	10.0	.	.	10.0	.	.	40.0	4
BECY-8	40.0	.	.	40.0	.	.	10.0	.	.	10.0	.	.	25.0	4
BECY-9	50.9	.	.	40.0	.	.	10.0	.	.	2.0	.	.	25.7	4
BECY-10	3.8	.	.	3.1	.	.	7.8	.	.	6.5	.	.	5.3	4
BECY-11	6.4	.	.	3.8	.	.	10.6	.	.	16.4	.	.	9.3	4
BECY-12	175.0	.	.	20.0	.	.	13.8	.	.	10.0	.	.	54.7	4
BECY-13	17.4	.	.	4.3	.	.	32.4	.	.	5.7	.	.	14.9	4
BECY-14	52.7	.	.	40.0	.	.	10.0	.	.	10.0	.	.	28.2	4

APPENDIX I

Bacterial Source Tracking Data Summary

Table A-1
Fecal Contamination: Human

Sampling Location	July 7/12/2007			August 8/14/2007	September	October 10/12/2007	November 11/20/2007			December 12/13/2007			January 1/17/2008		
	Bacteroidetes	Enterococcus	Fecal Coliform				Bacteroidetes	Enterococcus	Fecal Coliform	Bacteroidetes	Enterococcus	Fecal Coliform	Bacteroidetes	Enterococcus	Fecal Coliform
BECY-1	Negative	Negative	500	.	.	.	Negative	Negative	280	.			.		
BECY-2	.			.	.	.	.			Negative	Negative	900	Negative	Negative	240
BECY-3	Negative	Negative	500	.	.	.	Negative	Negative	50	.			.		
BECY-4	.			.	.	.	.			.			.		
BECY-5	.			.	.	.	.			Negative	Detected	300	Negative	Negative	2
BECY-6	.			.	.	.	.			Negative	Negative	900	.		
BECY-7	Negative	Negative	1600	.	.	.	Negative	Negative	3000	.			.		
BECY-8	Negative	Negative	1600	.	.	.	Detected	Negative	5000	Negative	Negative	300	Negative	Negative	900
BECY-9	Negative	Negative	500	.	.	.	Negative	Negative	110	.			.		
BECY-10	.			.	.	.	.			.			.		
BECY-11	Negative	Negative	900	.	.	.	.			Negative	Negative	900	Negative	Negative	2
BECY-12	Negative	Negative	1600	.	.	.	Negative	Negative	240	.			.		
BECY-13	.			.	.	.	Detected	Negative	500	Negative	Negative	380	Negative	Negative	40
BECY-14	.			.	.	.	.			.					

Table A-2
Fecal Contamination: Cow and Dog

Sampling Location	July 7/12/2007	August 8/14/2007			September	October 10/12/2007		November 11/20/2007	December 12/13/2007	January 1/17/2008
		Cow Bacteroidetes	Cow Enterococcus	Fecal Coliform		Dog Bacteroidetes	Fecal Coliform			
BECY-1	.	Negative	Negative	900	.	Negative	500	.	.	.
BECY-2	.	.			.	.		.	.	.
BECY-3	.	Negative	Negative	900	.	Negative	220	.	.	.
BECY-4	.	.			.	.		.	.	.
BECY-5	.	.			.	.		.	.	.
BECY-6	.	.			.	.		.	.	.
BECY-7	.	Negative	Negative	1600	.	Negative	300	.	.	.
BECY-8	.	Negative	Negative	500	.	Negative	700	.	.	.
BECY-9	.	Negative	Negative	1600	.	Negative	800	.	.	.
BECY-10	.	.			.	.		.	.	.
BECY-11	.	.			.	.		.	.	.
BECY-12	.	Negative	Negative	500	.	Negative	3000	.	.	.
BECY-13	.	Negative	Negative	1600	.	Negative	40	.	.	.
BECY-14	.	.			.	.		.	.	.